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Film Practices for the Inclusion of the More than Human in the Representation of Cultural Landscapes

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DISSERTATION

Film Practices for the Inclusion of the More than Human in

the Representation of Cultural Landscapes

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Abstract

In the context of the Anthropocene, there has been a move to bring up to date the relationship between lens-based media and the world. Authors such as Juri Parikka and Sean Cubbit have offered geological and environmental accounts of media art. However, there has been a debt in lens-based media practice regarding the production of methods and aesthetic approaches that respond to the onto-epistemological challenges. Videographers and filmmakers have generally reduced the "real" world by using its image to articulate discourses or create abstract experiences, which are distant from the spatial and temporal dimensions of the world's expressive capacity, reproducing the operative mode of the forces that are being criticized.

This project attempts to address the need for a lens-based media paradigm that considers the influences of the world's expression as an agent in the representation of ecological relations. For this purpose, a *space* of contradiction is defined as a result of audio-visual mediation. In order to attain representations *along-with*, the project adapts and develops methods that detour interpretations of the world and the use of its images to build rhetorical figures or enhanced experiences. This study explores possible methods that consider the "silent speech" of things in spheres beyond the visual. It looks to determine the feasibility of incorporating and problematizing the world as an agent-driven process of meaning creation in the lens-based medium. The aim is to propose answers for one of the most haunting problems for lens-based media at a time when art practices are embracing geo-cultural convergences and eco-political engagement with the world.

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Author's Declaration

I declare that this thesis has been composed solely by myself and that it has not been submitted, in whole or in part, in any previous application for a degree. Except where states otherwise by reference or acknowledgment, the work presented is entirely my own. I declare that all the material contained in this thesis is my own work.

Acknowledgments

Note to the Reader

The aesthetic and theoretical exploration is made through several media focusing on moving image media. Hence, there is a compulsory requirement to understand this text, and it is the viewing of the films *Dune Field*, *Dismembered Land* and *Stone House*.

Preface

The misty rain covers the land like a big blanket. There is no breeze, no movement but the thin raindrops' texture over the mise-en-scène of life. Behind this pattern, the ancient forest emerges from the humid soil. The Pacific Ocean roars in the distance. The masses of water lashed the coastal rocks producing a constant yet always different turmoil. As one gets closer to the sea, the iodine smell of the seaweed ripped off by the force of the tides becomes stronger. Amid these elements, squeezed between hills and the ocean, and bounded by two rivers, lays the hamlet of *Pucatrihue*. There are a couple of shops surrounding a small beach populated by fishers' boats at its centre. A wood figure of Saint Peter, the fisherman of the man looking towards the ocean, protects the cove, which is conveniently behind a massive island of rock that reaches a half kilometre to the open ocean.

Pucatrihue is not far from the urban centres of the province, yet, a mountain range and a thick forest separate the hamlet from populated areas. Currently, the geological formation and the impenetrable green barrier are crossed by a pavemented road, making them an easy obstacle to the traveller. As a result, the place has been slowly occupied by second residences and a rather precarious touristic infrastructure. When the road was not yet paved, I visited *Pucatrihue* during a couple of summers during my childhood. I felt the strength of the Pacific ocean when I almost drowned in its chaotic currents. I perceived the coldness of its water driven by the Humboldt current that comes from the Antarctic. I sensed the presence of the entities in the forest without seeing them. I recognized the mystery of its inhabitants, who, in silence, looked at me with suspicion. *Pucatrihue* contrasted greatly with the snowy peaks and the lakes of the east close to the Andes and its landscape shaped by the German settlers. The Alps-like landscapes, the wooden

architecture and the sweet breeze of cakes and tarts made me think that the coastal mountains divided two worlds. On the one hand, the European world of "civilization". On the other hand, the complete exposition of the strength of the elements and the strange feeling of an impossible communication with the strange other.

The story tells about a *Huilliche* man who was enchanted in *Pucatrihue*, and the rock became his house from which he controls the weather and the sea. For this reason, the rock island is also called *Ruka Kura* in *Tsêdungun*, which can be translated as Stone House. However, the figure of *Wenteyao* is more complex. For the *Huilliche* people, *Wenteyao* adopts many conceptual figures as the rock in which he lives. He is a mediator with the more-than-human world, a syncretic interface between the *Huilliche* culture and the culture of the settlers, an oracle that presents omens and announcements, and ultimately a *Huilliche* christ (p. 57 Foerster, 1985). *Wenteyao* also embodied a prophecy: when *Huilliche* people forget their culture, they will lose their land, that is, their place on earth (Ibid., p. 58-9). To me, *Wenteyao* became part of the mystery I felt when I was a boy, the suspicion, the silence, the force of the elements, the salty smell of its air, and the violent sea. It was a different form of seeing life.

Turning to the formal aspects of the *Wenteyao*'s story, its narrative does not present a unique chain of events. It is neither a fixed sequence of occurrences. Because it has been transmitted orally for many years, the narrative is dynamic and fluid, making it malleable and prone to be sculpted by actual events and become a trace of historical processes. The oral form of transmission also fulfils the events with a mantle of mystery and an ahistorical presence. This characteristic renovates the figure of *Wenteyao* beyond the anthropological one that focuses on its condition as a *Huilliche* deity, mediator, and oracle. Instead, in my mind, *Wenteyao*, as a man, cultural entity, rock and spirit, condensates a multidimensional set of local ecological relations. The dynamic character of *Wenteyao*'s story is political because it "promotes" a rich amount of ecological relations that include the human, the other-than-human, as well as the material and the spiritual. *Pucatrihue* became a complex place where converge and negotiate many of the trajectories that define the region. *Wenteyao*'s story serves as a model for the exploration of

the forms of representing ecological relations from ecological practices. The question the reader must have been asking is what this means. For now, I would say that is an unfixed practice whose questions and the answer to these questions turn up along the way. Like the figure of *Wenteyao*, the practice is a double-side that, on the one hand, manifests upon environmental elements, and on the other, its being "becomes" according to the local material changes.

The reencounter with *Pucatrihue* drove this research to a different science than the western one. Having recognized one of the characteristics of *Huilliche*'s storytelling practice, the story of *Wentayao* slowly started to be a valid model for the representation of multidimensional ecological relations in art practices. This model embedded an ethic that is particularly important in the current climate and ecological crisis. However, adopting a model that does not belong to the way we were taught becomes an impossible endeavour that could take a whole life. As a descendant of German settlers, I represent somehow the land's appropriation and cultural domination. Having said this, I am not foreign to these lands. I have lived amid *Wenteyao* descendants since I was a kid. However, this coexistence had always been out of the magical context in which *Huilliches*'s culture operates. It was clear to me the need for the return, a figure that is repeated in the stories of the *Mapuche* people. However, the return does not mean embracing a different culture but adopting an ethical form of engagement with the world.

In the text *La Religiosidad de San Juan de la Costa* (The Religiousness of San Juan de la Costa), Rolf Foester collects stories that serve to visualize mysterious ethical practices. The stories are about the journeys that *Huilliche* people made through the thick Valdivian jungle, following dangerous mountain trails towards the ocean to collect seafood. These stories tell us about places requiring certain attitudes or performing certain actions. For instance, in a place named *Huachihue*, the travellers stop to plant a little *Maqui* (*Aristotelia chilensis*) stick. Creating the shape of an arch, they introduced both ends into the ground. In the story, travellers who performed this action were very successful in shellfishing, but also, if the sticks were still in the position they had left on their return, the traveller would have a long life. If otherwise, the stick had a raised tip, her or his life would be short. There were also other "sensitive" places (p. 41 Foerster, 1985). For instance, the stone named the *Ngütruntúe*, which means "the land of the

echo", requires to be silent when walking close to the area. It was better for the traveller not to yell, whistle, or do nothing that could be seen as an insult to the *Ngütruntúe* (Ibid., p.42). Because every time someone shouted or laughed, the echo resounds on the cliffs and mountains, having unexpected consequences. These stories reveal an ethic attached to a series of practices that are not driven by productivity but rather by the coexistence of dependence with other ecological agents that operate in the visible and beyond the visible.

The previous stories and narrative relations define a methodology that serves as a model of action to achieve this ethical "return". Among the many methods mentioned in the stories collected by Foester, walking is a recurrent form of engagement with radical otherness. As a method, walking is not only a means to reach one place to another but as a form of material encounter. With this in mind, and despite the epistemological gap being almost unweldable, walking as a method presents the opportunity to explore artistic practices from a dependent position that promotes collaboration with the local agents. Being exposed to the rain, the wind and the sun made us precarious, which asks us to trust and be trustable, to depend on people and entities we meet along the way. However, a relationship of trust requires ethics: to cross the forest without shaking it, to move through as one would float, to travel with caution, not to be entitled to go everywhere, to be curious without letting the curiosity drives our relation with the world, and ultimately, not to capture what does not want to be captured. To sum up, the main point that I wanted to address in the previous text is that the narrative practices of *Huilliche* people present not only a narrative model but also a form of representing ecological relations along with the agencies that populate the locality. These agencies include the productive human interventions in the place. On the other hand, the stories themselves present an ethical methodology pertaining to a science that contrasts with the western scientific method.

The re-encounter with the locality of Pucatrihue through its many "histories" also led the research toward other geographical areas. *Wenteyao* rock is one of the many enchanted rocks that *Mapuche* macro-ethnic group have. This research takes place mainly in four localities: the volcanic system of the Puyehue-Cordón Caulle, the dune field in the locality of Concón, the

Mesa Hill close to the city of Puerto Saavedra, and ultimately the hamlet of Pucatrihue. These places serve to explore the representation of a multi-dimensionality of ever-changing ecological relations that drive the political and environmental spheres of the regions they belong. The aesthetic and theoretical exploration is made through several media focusing on moving image media. Hence, there is a compulsory requirement to understand this text, and it is the viewing of the films *Dune Field*, *Dismembered Land* and *Stone House.* These works attempt to create ecological representations driven by the narratives surrounding these places, the land indexical influence and the encounters promoted by the practice of walking.

The reader must be wondering what connects explicitly the stories and the places I am talking about, considering that not all the subjects of study have the presence of an enchanted rock. The general answer is the influence of the Great Valdivian earthquake that occurred on Sunday, 22 May 1960, which has been the most potent telluric event ever recorded, with a magnitude of 9.5 Richter scale. The influence and repercussions of this geological event are still present in the regions this research is carried on. While in a geological sphere, tremors and volcanic eruptions of the last years are thought to be connected with this massive earthquake, in a cultural sphere, this massive telluric movement still influences beliefs, world views, narratives, and economic and cultural processes. The latter is refereed in the research under the concept of *Semiotical Aftershocks*, that is, the geological influence in local stories. In other words, the more-than-human influence in human conventional semiotical systems.

Changing back to the subject of the reason why I grew interested in the subjects of this research, I would like to stress that I have been somehow led to these places. While my personal experiences in *Pucatrihue* encouraged me to deepen into the historical narratives and interactions within the place, what caught my attention in the other places emerged for a different reason. For instance, the initial interest in the coastal locality *Puerto Saavedra* was the stone of *Mankian* and its similarity to *Wenteyao* as agents. However, the story of the human sacrifice after the Grat Valdivian earthquake that is related to *Mankian* stone was determinant in choosing this place and not other enchanted rocks. I was curious about the landscape in which this event happened

and what the land says about the historical events and the region's current state of conflict. On the other hand, my interest in the *Puyehue-Cordón Caulle* volcanic system and the *Concón* dune system was born from fortuitous circumstances that led me to travel to these places. In a way, I meet these places without looking for them, which reverses the question about the reasons for choosing the study cases to how these places chose me through my history, fortuitous encounters and everyday events.

The fortuitous encounters and making sense of them is something that we all make. However, we generally do not take them seriously. This attitude can be a habit of western science: the disbelief in explanations that do not apply the scientific method. This habit constitutes a different from the science of the subject of study of this research that makes sense with what is at hand, using the words of Claude Levi-Strauss when he defines the bricolage. Thus, I advise the reader to leave aside prejudges. This work needs to be read similarly to the study cases. Many of the critical work's references do not belong to the western tradition, and as such, the text needs to be considered a kind of hybrid, a syncretic text. As such, I would ask the reader not to prejudge the ideas presented in this dissertation. Moreover, I would like the reader not to judge the ideas presented in frameworks of philosophical currents related to the Anthropocene. I will try to be precise with concepts that navigate through different contexts. Some of these concepts that we assume for granted in western European thinking, in other ways of living, these assumptions do not have much sense. This lack of sense made me wonder throughout this research about its validity in the problematics of ecology and colonization. Nonetheless, I assume that these insecurities are part of the work of any researcher, and they are even strong when the subject of the study breaks the framework of the knowledge body from which it is explored. Perhaps this challenge was what I was looking for, and I did not know. Perhaps I was led to it, risking that it would be taken as too deterministic.

Introduction

In this brief introduction, I would like to present the epistemological problem of the man-made ecological crisis, particularly the problem around practices of representation. First, I would like to note that human influence on the earth's systems has become conspicuous to the general public in the twenty-one century. Scientific evidence of human activity shaping geophysical and biological ecosystems has made humans one of the leading forces driving planetary processes. This human condition has led scientists to declare that we are no longer living in the geological period of the *Holocene* but the *Anthropocene*. In the context of this rupture, the visibility of the human footprint in geophysical earth-becoming (Yusoff, 2016) has also updated the philosophical conditions (Ibid., p. 6). Since it is no longer possible to sustain ontological separations between what is human and other-than-human, the epistemological requirements of Western thinking have changed radically. Hence, practices of representation need to be updated.

This research assumed that there is a contradiction in practices of representation in times where the separation between what is human and more-than-human becomes diluted. In short, the philosophical problem is that regardless of the acknowledgement of the "human" and more-than-human as agents that acts *within* ecological systems, there is a prevalence in western thinking of humanist epistemologies to conceptualize this horizontality (Latour, 2011, p. 304). In other words, despite the philosophical recognition that all entities and objects are of the same nature (Harman, 2009), made of the same essential elements under equivalent processes (Deleuze and Guattari, 1987), with similar capacities of affecting (Barad, 2007), Western cultural practices have maintained the privilege of a conventional semiotic as the primary tool in the process of meaning creation. Inspired by the ideas of Eduardo Khon (Kohn, 2013), the project explores how

the dominance of conventional language as a form of communication has masked more-than-human expressions. In other words, the representation becomes exclusively human, diminishing any direct influence of the more-than-human from a process of meaning production.

Having established the epistemological problem that emerged from the conspicuousness of the human action upon the weather and the ecological systems, it is possible to consider that the context of the "Anthropocene" is a paradoxical one for visual arts. This affirmation is because while it is a productive space for artists to conceptualize the human into a broader system of other-than-human agencies, it has not promoted methodologies of making beyond the mere conceptualization of the "immanency". Elizabeth Ellsworth notes that artists have responded to this problem by creating works that do not simply take up the world as a theme but also attempt to "activate formats, methods, models, ideas, and aesthetic experience in ways that seek to recalibrate 'the human'" concerning for instance with 'the geologic' (p. 9 Ellsworth, Kruse, and Beatty, 2013). However, turning to the moving image media practices, questions about the relationship between the image and the world return to the surface, considering the visual's role in the production of separation from the subject in the process of knowledge creation. Consequently, the ubiquitousness of the traces of the human activity in the world's ecosystems requires the exploration of methodological approaches that contest the ethics of the humanist transcendence, an issue that is particularly strong in the moving image practices, as I will explain in Chapter 1.

Related to the problem of representation of ecologies in the period of the Anthropocene, authors such as Elizabeth Ellsworth have recognized that in this period the sensory, linguistic, and imaginative attention have been redirected towards the physical vitality of the earth itself (Ibid., p.21). As a consequence, landscapes are no longer a "view" or an "image" of the land but also a designation of the bare materiality of the land (Ibid.), and "a physical inscription of deep time" (p. 53 Bobbette, 2013). Hence, there has been a radical change in the condition of visuality. Nonetheless, this change has not encouraged questioning the dominance of the use of conventional signs in the process of representation. Later in this dissertation, I will argue that this lack of problematization becomes a form in which the other-than-human agencies are transformed

and possessed through their image in the same token that traditional landscape paintings in the colonial context were used to reinforce land ownership (Mitchell, 2002). Still, there is space to discuss that eco-critical moving image practices that problematize the capitalist destruction of ecosystems weaken if the methodology used reinforces a distant relationship to the world, that is a position that "always involves separation and detachment, objectivizing the world" (p. 22 Malpas, 2011). In other words, despite acknowledging the world's vitality, moving image practices have generally kept the world's expressions silent from the process of meaning creation. Perhaps this exclusion has led authors such as Irmgard Emmelheinz (2015, p. 110) to affirm that "the image of the Anthropocene is yet to come".

The need for updating the relationship between the world and the moving image medium in human more-than-human entanglements has been noted by authors such as Susan Schuppli, who notes that we need to consider aesthetical conceptions that convey a modification in the ways we observe the world to "make sense of such massively entangled nature-culture hybrids" (p.191 Schuppli, 2016). In a more material approach, Adrian Ivakhiv notes that the ecological understanding of the human, including the earth relationship and the evolution of cinema, "have not yet been brought and thought together in a sustained way" (Ivakhiv, 2012, p. 89). Coincidentally, Irmgard Emmelheinz argues that the Anthropocene has not meant a new image of the world, and for this reason, a radical change in the condition of visuality and a transformation in how the world becomes images is needed (p. 131 Emmelheinz, 2015). In sum, there is an acknowledgement that a new contract between the moving image practices and the visible world is needed.

The previous concern was the subject of the extensive program of events that took place in Berlin's *Haus der Kulturen der Welt* named *The Anthropocene Project, A Report* in 2014. The project considered that traditional methods of knowledge acquisition had reached a limit (Kulturen der Welt, 2016); consequently, art practices need to look for an epistemological, political and ethical shift that responds to the requirements of the entanglement between humans and the earth. Gilles Deleuze and Felix Guattari (Deleuze and Guattari, 1987) note this problem in

knowledge practices affirming that western thinking has been able to conceptualize the plane of immanence, but it has lost sight of it. Hence, the problem is not acknowledging the human immanency in the world but acting according to this position. As such, moving image practices need to find forms to make from immanency.

As part of western culture, for art practices to acquire an immanent position requires breaking with deeply incorporated habits that come from the remnants of Cartesian metaphysics. Therefore, perhaps the first approach is to develop strategies that promote an active engagement within the world in meaning production. In other words, methods that upgrade the world's image from a mere lender of presence to discourses or something to be read or analyzed. Furthermore, considering that the world neither has a voice nor subjectivity (Ibid.), the task opens even more questions about the representation of multi-dimensional ecological relations without increasing the separation produced by lens-based media practices.

An early diagnosis of the causes that prevent a representation of local relations along-with the other-than-human is divided into three points. First, the dominant use of conventional semiotics as the primary tool for the (re)creation and (re)presentation of the world grants the world with a discursive and historicity that does not belong to it (Barad, 2007, p. 801). Hence, it mirrors its producer instead of presenting the world's expressive force (Ibid.). The second point, based on Bruno Latour's concept of the *black boxes* in scientific practices (p. 4 Latour, 1987), refers to the politics of keeping circumstances, circulations and affections out of the final aesthetic "object", hence becoming a *black box* in which the world input is transformed by an "unknown" function from which a subjective discourse emerges. Lastly, a third point refers to the current capacity of the digital apparatuses to create experiences that belong to the apparatus rather than the world captured.

To summarize the previous paragraph, we can say that the world's expression is re-articulated through discourses, the apparatus opacity, and ultimately the creation of experiences that do not belong to the world captured. In this dissertation, I will argue that these practices can be

thought of as another form of "subjectivation of the world", that is, the human attempt to achieve complete control over every aspect of our objective reality and establish ourselves as the being "who gives the measure and provides the guidelines for everything that is for everything that is" (p. 134 Heidegger, 1976). This project attempts to address the need for generating art media practices that incorporate the "silent speech" of the world (Ranciere, 2009, pp. 13-14) to the moving image practice in its many spheres.

In the journey of this work, I encountered many contradictions that reflect perhaps the times we are living in. Indeed, the attempt of making along-with the more-than-human in lens-based media is paradoxical. However, this contradictory space presents the potential to propose new balances and relationships between the human and the other-than-human in art practices. Accordingly, to processual theories, the world is a dynamic and fluid field in which signs and meanings are triggered everywhere all the time in all directions intersecting with others, creating unforeseen meaning. This project assumes that a moving image media that responds to the ecological problem needs to explore material and dialectical strategies that propose a model of coexistence. Also, a practice that put forward methods that reveal the process of making as the main point of contact between the world, practitioners and participants of media art experiences. As we shall see, the idea is to establish a community with the world in the making process; to create a communion with the world through its image. Lastly, the aim is to propose answers for one of the most haunting problems for lens-based media at the time when art practices are embracing geo-cultural convergences and eco-political engagement with the world.

The dissertation is divided into four chapters. In the first chapter, the central problem is presented by developing a critical review that examines art practices and theoretical approaches that deal with the problems surrounding the practices of representation of ecological relations. Then, after discussing several forms of making visible that have emerged in the context of the Anthropocene, the contradictions and possibilities they propose are discussed. To conclude the first chapter, alternative epistemologies that serve to introduce the potential practices that will be explained and developed in the following chapters are presented. The second chapter

introduces the methodological approach and a set of methods that attempts to consider the other-than-human through the exploration of how the world's affective and figurative manifestation through two journeys to the *Puyehue-Cordón Caulle* volcanic system in Southern Chile. The third chapter presents the central part of the creative research: moving image practices exploring semiotical aftershocks, and taking them as an ethical and methodological model for making. The chapter orbits around aesthetic-research practices that explore two stories attached to two localities in Southern Chile that present two cases of is identified as semiotical aftershocks: a human sacrifice that occurred in the aftermath of the Great Valdivian earthquake of 1960 and the story of *Wenteyao* Granpa in the locality of *Pucatrihue*. To conclude, the last chapter presents the development of discussions around non-western epistemologies in relation to the moving image practices developed and presented in the previous chapters, along with the contradictions and potentials that emerged from these experiences.

Chapter 1

Critical Review

1.1 Research Questions

Since the nineteen century, technological developments have promoted new ways of seeing the world. Images have become windows to realities otherwise unknown. As a consequence, they have transformed our relationship with the world. This transformation of the visible has also made conspicuous the ecological diminish and the climate change through data visualization, satellite images, and electron microscopes. In this context, art practices have participated in these new realities critically. However, this participation had also revealed contradictions that are evident when the tools used to produce such critiques are only possible due to the land-shaping activities they critique (Parikka, 2015). This paradox is perhaps the "original sin" of aesthetical and critical media practices with ecological and environmental concerns, a violent origin from which it is impossible to escape.

The ontological condition is not the only paradox surrounding art media practices in the current moment of ecological decline. Another contradiction relates to the separation produced by digital image technologies, which have increasingly promoted a groundless reality; bodily impossible perspectives and atmospheric sounds that create fantastic experiences. This reality made of images and sounds proposes the human liberation from physical constraints through the fantasy of technological transcendence (p. 2 L. Bryant, Srnicek, and Harman, 2011). While this tech-

nological liberation promises to surpass our physical constraints, it also separates us from the environment. In other words, by making the world visible from novel perspectives, technology also separates us from the world. This double consequence constitutes a second contradiction; that is, while satellite and drone images allow us to see the world's flows and forces from all-encompassing perspectives, they separate us from the direct experience, promoting a disembodied, transcendental relationship with the world (A. Bryant and Pollock, 2010).

To sum up, the representation of ecological relations through visual media presents two central contradictions: its tainted origin given by the earth engineering that makes possible the media itself, and the separation that produces from the world through disembodies perspectives and enhanced visual experiences that modify our relationship with the physical world and reinforces our separation from the world. This later paradox is at the centre of the inquiry of this project. In this project, the assumption is that there is no escape from either, the apparatus' origin and the separation created by visual mediation. This assumption can lead to the conclusion that any attempt to evoke multiple and entangled ecological relations from an equal position among the world's entities is a lost cause. However, the project attempts to operate within these contradictions so that they form a productive space.

The space defined previously leads to the following research questions: how these contradictory aspects of a lens-based media practice in the context of environmental decline can become productive as a space of transversal engagement with the world? How does this space promote the emergence of multiple entangled human and more-than-human ecological relations? and ultimately in which form a lens-based-media practice becomes part of these sets of relations?.

The research's questions lead to the thesis of this project; that is, because of the impossibility of a direct engagement with the world through visual media, the stress upon aspects of the lens-based media practice beyond the visual becomes the primary form of access to ecological expressions. For this reason, the paradoxical space becomes a field from which are explored forms of encounter beyond the visual. Hence, as will be seen later, the research focuses on

developing lens-based media practices that promote configurations of engagement in which the maker, the apparatus, and viewers become entangled sensorially in the relations of specific ecologies.

Later in this dissertation, we shall also become aware of a profound contradiction that haunts these pages. This paradox refers to the capacity of participating in local ecologies while being an alien. This project is not the only haunted by this problem. It is present in much of contemporary art that operates in a globalized world. From this problem emerges an essential ethical question regarding the artist's involvement in local ecological relations through creative practice: what kind of ethics allows artists to participate in local ecological relations as aliens to those environments? Anthropologists have long been dealing with the problem of observing others in relation to their environment. Among these works, Eduardo Viveiros de Castro's theory of Amerindian Perspectivism offers clues and inspiration to attempt an epistemological leap, to think in forms of adopting an ethic that belongs to the ecological relations aimed to be represented (Viveiros de Castro, 2019). As we shall see later in this dissertation, this ethical adoption is not an appropriation. Instead, it is the political decision of letting to be guided by a system of beliefs that establishes constraints and requirements beyond the Western scientific method and the productive drive.

1.2   Introduction of the problem

Peter Wollen (1997) proposes the *film-text*, as a new ontological condition of moving images that emerges from the reverse of the dominant relationship between cinematic and extra-cinematic codes. He argues that this relationship between codes does not produce an anti-representationalist cinema but one that does not attempt to substitute the reference. In a more concrete form, the film-text is a formal strategy that reverses the dominant relationships between speech, image, and content in cinema through making the signifiers, considering the semiotics system of Ferdinand de Saussure, "to determine, negate, divert, subvert, convert and alter the flow and production of the signified without destroying the processes of signification" (Wollen, 1997, p. 19). For

Wollen, films need to create configurations in which the form alters or interferes the signified of extra-cinematic codes such as conventional language.

Wollen's anti-substitutionist project serves as a starting point to think in terms of a lens-based media that attempts to represent the world's distributed agencies. We can expand the film-text beyond the operation of the formal aspect of the work over the conventional codes, through the consideration of the agencies present at the moment of the production of images and sounds. Using the term of Karen Barad (Barad, 2007), these heterogeneous agencies enact discursive practices that define what can be done and what cannot. Thus, they constantly alter the meaning even before the production of the film actually begins. Supposing that in lens-based media the world is assigned meaning through the linguistic articulation of the visible, why not then assume that the visible also influences conventional semiotic systems such as language. Wollen's search for equal weight between cinematic and extra-cinematic components can be thought of as a search for an equilibrium between the human and the other-than human; between exclusive human systems of communication and expression, and the world material forces that affect the conventional. However, these circuits are more complex as both conventional and non-conventional systems are constantly affecting each other. Hence, somehow the anti-substitutionist idea becomes a problem of communication that form complex affective circuits than in the previous description.

Considering the complexities of the affective circuits, symbolic language has not only been used to produce symbolic representations, but also has had a significant role in the visibility of the material. Language has not only included the material world in a symbolic sphere, but as Jacques Rancière (2009, p. 14,) notes, during the IXX century it has an important role in redirecting the sight away from the narrative, figural and mimetic dimensions of paintings to their brushstrokes that make the image acquire a new meaning. This division between language's function and that which privileges the narrative and materiality respectively has dominated visual media practices and art in general. The first one privileges narration, and therefore, is strongly related to language as a means to make visible and also hide through cultural determinations (Ibid.). On the

other hand, it is the material capacity of the medium and the world to make visible something beyond words. In lens-based art practices, extra-cinematic elements such as language and text have played a significant role in the material qualities of the media and the marks of their production. In other words, the "brushstrokes" of lens-based media practice, which are the primal form of engagement of the agents of the world-reference in the aesthetic practice, are here made invisible.

But what are the brushstrokes of lens-based media practice and how does their transparency play a determinant role in the production of separation, objectivity, identification and the illusion of being in another time and space. As it was problematized by Materialist/structuralist filmmakers, the brushstrokes of the moving image are not only the material qualities of the celluloid, but also the conditions of production (Gidal, 1989). These conditions may leave a trace in the material qualities of the celluloid, the camera movements, or the framing, yet, in all of them are revealed methodologies that somehow render unconcealed the relationship established with the world-captured in their production. The establishment of formal conventions in order to make the production event transparent creates an ontological condition that Peter Wollen (1997, pp. 22-23,) calls *film-representation*. This ontology privileges the cinematic over the "real" world, hence its essence is not in the world that touched the photosensitive surface, but in text, speech, music and visual effects, through which the recorded "reality" is "manipulated" and "adjusted" (Ibid.). In this process, it can be said that the world is assigned with abstract meaning and converted to culture (Barad, 2003).

André Bazin situates the photographic essence in its reference assuming that in the process of capturing there is no intervention of living agents (Bazin, 2004). Considering Bazin's photographic ontology, it can be thought that by avoiding the author subjective intervention, the ecological entangled relations would emerge "pure" without human intervention. However, Bazin's proposition assumes the transparency of the apparatus and its mediation claiming a neutrality that assumes that the world is there to be viewed and filmed (p. 63 Comolli, 2016). This conceptualization does not only make invisible the practice itself, but also makes transparent the

apparatus despite the fact that "man has already passed through it" (Ibid., p. 65). The many autonomous recording apparatuses such as surveillance cameras and computer vision reveal that the human eye is not needed to be present in the recording of the world. The transparent humanity is an illusion. It is not the lack of human presence in the image or its production what unbalances the participation of the world in the process of meaning creation, but the concealed participation of the human in relation to what is captured.

Structuralist/Materialist filmmakers' practices and theories brings the essence of the cinematic image to the apparatus itself. In this way, they present forms in which the moving images, and their process making can be unveiled in relation with the world captured. Hence, these moving image practices reveal certain aspects of the making that positions the apparatus in relation to the world captured in the image. Structuralist/Materialist theoretical works were critical of "realist" documentaries, political films, as well as lyrical and oneiric traditions of experimental films, which "manipulated" the recorded "reality" through language and expressive devices into events that never existed as such (Gidal, 1976). Instead, they attempt to create film-objects that break the mediation through the concept of spatial and temporal equivalences and the demystification of the process of the film (Le Grice, 2001). While for Bazin the essence of film was in the pro-filmic, for Structuralist/Materialist filmmakers, the essence was in the film-process itself (Wollen, 1997). For Structuralist/Materialist filmmakers, the primary access to the world was the cinematic apparatus and the film-process as such, and because of this, they tended to avoid the production of content.

Despite the fact that most of the Structuralist/Materialist films rejects any connection with the world beyond the apparatus, they set a theoretical and practical base that presents a methodological leeway to think transversal forms of connection between the film-process and the world beyond the visible and conventional signs. Peter Gidal argues that Structuralist films aim to create devices and processes "that result in the demystification of the film processes" (Gidal, 1989, p. 1). This demystification does not mean to "represent" or "document" the film's procedures, but that the film form is a record of its own making (Ibid., p, 2). Despite this, these filmmak-

ers produced this "come into presence" (Ibid., p, 2) by minimising content, the demystification of the film process becomes essential when the main access and relation with the world is the process of making. This approach refocuses the sphere of indexical signs in the process of filmmaking because the connection is conceptual-material responding to the production of audio-visual devices or objects. Eduardo Kohn notes that the indexical sphere is where human and the other-than-human intersect (Kohn, 2013). As such, the "come into presence" of the filmmaking process is indexically related with the other-than-human influence, becoming a form in which the film-process relates with the distributed agencies that it captures beyond the visible.

The methodological approaches offered by the purely extra-cinematic and cinematic relationship with the world are incomplete. Wollen's film-text attempts to present a solution to two problems. On one hand, the manipulation of the world through representation and on the other hand the film with no meaning beyond the film itself. Despite the fact that the film-text does not focus on the representation of ecological relations, its concern is with the rebalance of the purely conceptual articulation of the world through conventional language and formal unequivocal devices. From this discussion emerges the need to establish a material-subjective engagement with the world that bond the moving images practice with the ecological relations intended to be depicted. In order to glimpse a lens-based media practice that somehow becomes entangled with the local ecological relations it attempts to represent, in the next section, this will be explored and analysed through particular art practices that present solutions but also in the gaps that surround this problematic. These practices will help to define a contradictory space from which media art operates in the Anthropocene.

1.3 Abstract geology and reconceptualization of ecological entanglements

1.3.1 Brief genealogy of the geological human decentering

This section will discuss the genealogy of the geological turn in contemporary art practices. It discusses the emergence of a geological human decentering, a process in which we recognize ourselves and the systems we create as something whose source and configuration are more than human. Nonetheless, the geological is not the only sphere of thinking that has made women and men move away from their human condition. So why not speak about how biological studies have made us see ourselves differently, considering the ontological entanglements of our beings with bacteria, for instance. As we shall see in the following chapters, the question's answer is the deep connection between the project's study cases and geological processes.There are two reasons for this brief genealogy: first, to provide a glimpse of a specific course that leads to art practices and continental philosophy to think of human structures in geological terms such as strata and sediments. Second, I shall try to open a discussion about the relation between the practices of representation and geological processes, which will be deepened later. Before continuing, I would like to clarify that this research is located on the fringe of a wide range of works that operate under the idea of the geological turn. The reason is that this practice-based research is not about using geological disciplinary methods or diagrams as models for representation, as we will see in this genealogy. Instead, in this project, the geological is sought to become a material force that influences the study's subject and the path of the study itself, as we shall see later in the following chapters. Finally, this introduction serves to define the base of relationships between geology and art practices that are based on an abstract sphere of analogies and metaphors.

Early antecedents of the relationship between geology and representation can be found in the 17th century, at the dawn of the geological discipline. Scholars such as James Hutton already saw profound relationships between the deep past and our human condition. The very definition of geology given by Charles Lyell in the 19th century entangles the organic with the geological,

which produced a struggle to make the empirical findings and religious beliefs compatible. Perhaps the most iconic of these discussions was the attempt to conciliate the history of the biblical deluge with the empirical evidence of the fossils found away from the sea. In the context of this discussion, Lyell acknowledged the influence of the deep time processes in systems of beliefs, describing, for instance, the Mapuches people's foundational myth of *Trentren Vilu* and *Caicai Vilu*[1] that describes a struggle between the land and the sea, he did not give to much attention to the influence of the human activities and production upon the earth (Lyell, 2005). Contemporary with Lyell, the Italian geologist Antonio Stopanni inserts "the human" as part of the wider earth's processes by affirming that the earth's surface is an archive and that humans, through the technological penetration of the earth, shall become a future fossil layer that the earth will carry in its archival constitution (Stoppani, 1871). Stopanni's ideas have become evident from the half of the Twenty Century. Hence, since its inception and as part of a more comprehensive set of cultural and economic changes, the discipline of geology contributed to reinforcing a particular kind of science in Europe and decentering a belief system that had ruled the West for nearly two millennia at the same time that inserted the human as part of deep time processes.

In the XX century, geology was used as a model of explanation of human structures. This can be grasped in Jacques Braudel's exploration of history through the particular geological temporal analogy in his concept of "long dureé" history (Braudel, 1973). Braudel's interest was a slow history that happened under the surface, transcending the ruptures driven by events. Braudel's interest was focused on geography and topography driving human development rather than the news and reports, which are only the visible surface of history. In other words, as the rocks in a landscape, the people who inhabit a particular place become the place themselves; hence the human is part of a long timespan process beyond the human. Braudel's account of "long dureé"

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[1] It is a story centred on a cosmic conflict where water and land are the crucial elements of a primordial order in crisis. These two antagonistic beings come into conflict without a direct explanation, but it becomes clear that *Kai-Kai*'s goal is the destruction of the people on earth by the flooding of their lands. Once the land is flooded, the people drown or turn into stones or fish, which is the loss of humanity or return to nature. Survivers find refuge in the mountains associated with the *Treng-Treng* or serpent that lives there. However, as water continues to rise and the mountain also grows. Then, the mountain reached so high that the heat scorched those who took refuge. The violence threatens the destruction of humanity. Finally, the conflict is resolved by sacrificing a child, an orphan, or the surviving family's son, whose body is dismembered into four parts (a number of cosmic symbolism for the Mapuche), making the waters recede (Díaz, 2007).

history positions human history as something people do not have direct access to, in spite of the fact that it is constantly lived.

Later, Gilles Deleuze and Félix Guattari developed a profound philosophical conceptualization in which geological processes are universal diagrams to describe the articulation of the emergence of biological life alongside the social and cultural structures (Delanda, 2006) (Deleuze and Guattari, 1987). Additionally, following the project of Braudel and Deleuze and Guattari, Manuel Delanda develops further the diagrammatic model by arguing that social and economic systems are not historically consequential but accumulative. In other words, the different systems throughout history coexist in a layered structure (De Landa, 2000). These "geophilosophical" projects attempt to reorient philosophy away from human transcendency by including the systems that had been assumed as uniquely human within the complex processes of earthly life (Deleuze and Guattari, 1987). However, they also point at the creative capacity, which is not of human exclusivity, but that other organic and inorganic entities also have the potential of producing novelty. As we shall see in this chapter, Deleuze and Guattari also recognize an issue that haunts this research and the aesthetic practices reviewed, that is, the constant attempt to capture and articulate the creative forces and flows of the earth by human apparatuses (Deleuze and Guattari, 1987).

The geo-philosophical approach does not separate the world forces and affections from our bodies and social organizations. This approach presents us with urgency for developing methods that consider our immanency to represent the world. Somehow all the previous projects relate to diffractive methods as proposed by Donna Haraway and further developed by Karen Barad; that is, one discipline is read through another, providing novel insights (Barad, 2003). These trans-disciplinary accounts open up a series of questions about humanist practices that provides leeway for reimagining the human entangled with the biological and the geological. In this context, Elisabeth Ellsworth notes that geology is no longer a discipline that studies "the origin, history, and structures of the earth" but also a "source of explanation, motivation, and inspiration for cultural and aesthetic responses to conditions of the present moment" (Ellsworth, Kruse, and

Beatty, 2013, p. 6).

In the 21st century, the contradiction between "beliefs" and empirical thinking that the founders of the geological discipline attempt to conciliate is completely closed. This separation is summarised in Kathryn Yusoff's concept of *Anthrogenesis* (Yusoff, 2016). Yusoff notes that the concept establishes a human origin that contradicts the biblical genesis, therefore the separation of human nature that began in the renaissance. In this genesis, common divisions between the bio and the geo, animate and inanimate, are no longer valid. Therefore, it can be said that the geological turn is a reconceptualization of life from a bio-political notion toward a geophysical understanding of its origin. Nevertheless, as we will see later, the relation between western scientific epistemology and the representation of ecological relations in art practices can also be problematic if representational practices establish a relation with the world that does not consider existential bonds between aesthetic, language, metaphor, history, geology and biology (p. xiv Haraway, 1997).

To conclude with this brief genealogy, the geological turn has sought to decenter the human by questioning the origin and temporality that has yielded the idea of human transcendency and incorporating human spheres as extensions of geological processes. However, this mineral turn has also privileged the empirical separation from the lived experience. Finally, I have explicitly left out the problem of representation from this genealogy, which does not only is about the mineral human origin but also about how the human is the medium of geological forces. The following sections present art practices to intensely discuss methods, glimpses, and blind spots regarding the representation of local entanglements and ecologies of making.

1.3.2 Making visible as relation with the world

The question about how the human body and mind become a medium of the world's agencies and forces is also to ask about the world's influence on the representational practices. In the context of the geological turn. from the second half of the 20th century, artists did not only begin to relate mineral processes as the object of artistic practice and an artistic medium but also as

models of creative practices. Land artists made an essential contribution in the 60s, particularly Robert Smithson, who deeply embedded art in deep geological time. Perhaps most important for this research is Smithson's 1968 essay *A Sedimentation of the Mind: Earth Projects* in which he incorporated the mind as the sphere where geological processes continue. This approach attempts to establish a processual relationship not only with history as well as the social and economic systems but also between the earth's surface and the mind's figment under the concept of "abstract geology" (Smithson, 1996a, p. 100). Smithson's speculative strategy reveals a deep connection between our body and mind and the world's geophysical processes that reveal a leeway to think in our body and mind as a medium of the world agencies. The latter also delivers a political statement by bridging any existing separation between the history of man and the processes driving the earth.

The politics in the texts of Smithson is also present in his attempt to make us rethink the everyday life places and objects, which are generally invisible in deep time terms. In his seminal text *Frederick Law Olmsted and the Dialectical Landscape*, (1996, p. 184,), Smithson asks us to re-imagine our daily material experience by shifting our attention from the visuality of landscape towards its materiality (Ellsworth, Kruse, and Beatty, 2013). He aims to reveal the deep temporal connections from commonly used spaces (Ibid.). Likewise, artists and researchers of the groups *Center for Land use Interpretation* (CLUI) and *Friends of Pleistocene* (FOP) influenced by Smithson embrace the field research as their primary creative form to generate outputs such as reports, tourist guides, photo-travelogues, and exhibitions. These practices propose geological re-imaginations and re-calibrations of cultural landscapes, expanding standard views of historical processes towards depth time. They attempt to make visible what is under the surface in our everyday experience of the matter. They do not attempt to shape the land itself like *Land Artists*, but to shape the way we see and think about the land and the city in an entangled relation between economy, culture and geology (Cotter, 2006).

The groups' works present ecological relations that comprise the production of both human and more-than-human; encounters from which both the human production in the form of buildings

Figure 1.1: "Magnified view of the Indiana Limestone that adorns Rockefeller Center, Friends of the Pleistocene 2015". © Friends pf Pleistocene. (Walking Time n.d.).

Figure 1.2: "Unfurling the Geologic Time Viewer in Central Park, image courtesy Katie Holten. Friends of the Pleistocene, 2015". © Katie Holten. (Walking Time n.d.).

and land engineering and the earth in the forms of minerals emerge become interwoven consequently something else. For instance, *Friends of the Pleistocene*'s work *Geologic City: a Field Guide to the Geo-Architecture of New York* (2011) is a field guide and tour that visit twenty sites in *New York City* inviting to visit them almost as a geologist. The result is a document in which the text accompanying each photograph provides a historical account of the sites and a description of the minerals used to construct the buildings visited. The work is a speculative tool to be used; to walk and rethink the city in a geological dimension; to persuade the use of the imagination and make visible the invisible geological scales and agencies present in the urban space (Ellsworth and Kruse, 2016). As a result, monuments, buildings, and bridges, among many others, are revealed in their cultural and economic dimension and as an extension of minerals, revealing the ecological and political scopes that emerge from their extraction (Ibid.). Thus, the human production is decentered from its humanism and rethought as embedded in deep-time.

Likewise, using similar methods and outputs to FOP, *The Centre for Land Use Interpretation* (CLUI) explores the relationship between human processes and the landscape. CLUI is an organization "dedicated to increasing and diffusion of information about how the nation's lands are apportioned, utilized, and perceived" (Coolidge, 2016). Their works are an inventory of land use, infrastructure, or a particular site; a document of architectures of government or law enforcement; or investigations of representations of the landscape. In both the exhibitions and the books they produce, explanatory texts are next to images. The relationship between text and image assumes the impossibility of an unmediated land experience. Therefore, the land's image alone is not enough because it is already culturally predetermined; hence it needs to be recontextualized. Through intentionally plain and descriptive text and images, CLUI's works reject any representation that installs a romantic idea of nature, which for Timothy Morton impedes encompassing an "ecological" state of human society (p. 2 Morton, 2007). However, in this deromanticization of the land, FOP and CLUI focus almost exclusively on the human manipulation, use and abuse of the places depicted. They risk representing ecological relations unidirectionally, which renders more-than-human agents something inert.

Despite the focus on the human's action upon the land, a CLUI's work is of particular interest for this research project because it uses the topographical feature of the land to structure the narrative. In other words, a formal aspect of the world shapes the works producing a particular ecology of making. The work named *Up River: Man-Made Sites of Interest on the Hudson from the Battery to Troy* (2008) describes a journey by the Hudson River to explore the *United States of America*'s history along and throughout the human alteration of the banks of the *Hudson* (Coolidge, 2008). The accompanying text describes historical anecdotes about the landscape and the hidden processes of monumental scale underneath the surface. Together, pictures and text present the world as a collection of physically discrete and historically dislocated places. In the outcome, which is a book, while the text contextualizes the collection of photographs conferring temporal and spatial coordinates (Green, 2010, p. 46), the order of these dislocated pictures and their description in the sequence of pages is given by the journey down the river. This decision presents a non-chronological journey through the history of the USA. Hence, the topographical structure of the river determines the narrative sequence. In this form, the feature of the world tells us a different history by reordering historical events. The work creates a configuration that interrelates a world's feature with the outcome's narrative producing a relationship between the world and the art piece beyond the visual.

The works of CLUI and FOP open the discussion to methods that suggests weak forms of representation and modes of incorporating the world as an articulator of the art practice, which suggests an ecology of making. On the one hand, descriptive text and un-aesthetic images produce a specific relationship between language, image and world. First, the textual produces descriptions over the presentation of actions depriving speech of its power (p. 118 Ranciere, 2009). Second, the images do not attempt to express or create "fullness" but "merely designates" (Ibid.). On the other hand, the narrative is connected with a material aspect of the world. Hence, the relationship between the practice and the world somehow demystifies itself through the formal structure of the outcome. This characteristic makes visible a sphere of the process of making, which is generally made transparent. Hence, the world's function changes to be an articulator instead of using text and image to articulate a discourse about the world. However, a

*Figure 1.3: "View of the Up River exhibit at the Landscape Information Center in Troy, which is open seasonally. CLUI photo". © The Center for Land Use Interpretation. (*Up River: Points of Interest on the Hudson. *N.d.)*

*Figure 1.4: Quote of the text accompaniying the image 35 "The Haverstraw limestone quarry was part of the extensive holdings of the New York Trap Rock Corporation, which had acquired most of the major quarrying sites along the lower Hudson by 1920 and operated them until the 1960s. At that point the quarry was sold to Martin Marietta. Known as a defense contractor, Martin Marietta, like General Dynamics, diversified into the construction materials business for a while. Tilcon NY, one of the companies of the Irish aggregate multinational CRH, now owns it and many other quarries in the lower Hudson, including North Kingston, Clinton Point/Poughkeepsie, and Tomkins Cove, as well as many inactive former New York Trap Rock sites. Haverstraw Quarry is invisible from the eastern shore of the river, where most of the industrialists' mansions were located and romantic landscape painters had their homes. The contour of the ridge has been preserved". © The Center for Land Use Interpretation. (*Up River: Points of Interest on the Hudson. 2006 CLUI RESEARCH PROJECT. Web Version *n.d.)*

*Figure 1.5: Quote of the text accompaniying the image 54 "The two power plants at Danskammer Point are both operated by Dynegy, a medium-sized utility that operates more than a dozen plants, mostly in the Midwest. The Roseton Plant, on the hill, uses natural gas and oil to generate 1,200 megawatts of electricity. North of Roseton, on the shore, is the Danskammer Plant, a coal-fired plant that is supplemented by gas and oil, which generates 500 megawatts." © The Center for Land Use Interpretation. (*Up River: Points of Interest on the Hudson. 2006 CLUI RESEARCH PROJECT. Web Version *n.d.)*

*Figure 1.6: Quote of the text accompaniying the image 68 "Wanton Island, once a natural island, is now flattened and covered with concrete, remnants of former industrial use. It is located at the intersection of the Greene, Ulster, and Columbia county lines, which meet in the middle of the Hudson River. Wanton Island was said to be the site of an Indian battle where the Iroquois established their power over the Mohicans.". © The Center for Land Use Interpretation. (*Up River: Points of Interest on the Hudson. 2006 CLUI RESEARCH PROJECT. Web Version *n.d.)*

dimension of the journey and the making process is missing: the bodily, affective and subjective experience. The cold and almost scientific form of taxonomical and archival engagement with the land liberates the depiction of the land from romanticism. However, for achieving this liberation, the land is separated from the experience, and the lived. From Timothy Morton's definition of *ecologial thought* (Morton, 2010), we can note that ecological relations are not just about the relationship of human economic activity with the land but also has to do with affections and subjectivity. To sum up, CLUI and FOP's works explore aspects of coexistence that shatter a romantic idea about what is nature not only by including manufactured landscapes but also through the creation of "un-aesthetic" images and texts. Also, CLUI reveals through the relation between geography and narrative an structure that reveals an ecology of making. However, they also left out an affective and subjective dimension that is also part of the ecological relations.

1.3.3   Geological Cinema and the human action on the land

Before getting into the world's effect upon beings and its role in the ecology of making in the representation of ecological entanglements, I would like to focus on two films exploring the geological to denote a problem with the representation of the world's agencies in ecological relations. The choice of these films is for two reasons. First, they explore the relation of the geological and the moving image practice; second, they reveal a formal approach that has emerged from the democratization of immersive technological possibilities, which has dominated the twenty-century moving image practices. The argument is that many of these works create representations of the affective that no longer belong to the entangled entities captured but to the technical apparatus, whose geology of making rather operates at the level of the mineral that makes possible the apparatus instead of the process of making.

Sasha Litvinseva defines *geological filmmaking* as a way to understand the form, content and experience of any film as rooted in the geological materiality (Litvinseva, 2018). This understanding of "film through geology and geology through film" (Ibid.) presents an ecology of making that establishes a particular entanglement between the art practice and the world's trajectories in the representation process. The base of this practice's methodology is Donna Haraway's idea of

diffraction, and consists in reading the cinematographic and geological through each other (p. 3 Litvinseva, 2018). Mainly, it establishes three equivalences: between sound images and land formations, between the materiality of the media and the mineral, and ultimately between the cinema temporality and the ongoing geological processes (Ibid.). In the film *Salarium* (2017), a collaboration between Sasha Litvinseva and Daniel Mann, the artists explore the phenomena of sinkholes that have been produced from the 1980s on the shores of the *Dead Sea* a product of the industrial action allowed by the state of Israel. In the words of Livintseva, *Sallarium* is an oscillation between horizontal and vertical planes (Ibid.). The former are represented through still and coherent landscapes of short duration that remind us of postcards (Ibid.). The latter are represented through unstable underwater shots that create perceptual stylistic interventions that destabilize the previous (Ibid.). The authors note that the transition between these formal approaches embodies the dynamic intersection between capitalism and the geological, infrastructural and environmental violence, and historical and deep time (Ibid.). These strategies attempt to create a dichotomy: the stable objectivization of the land by colonial forces against the visceral action of geological forces.

We have decribed film *Sallarium* because it presents a representation of geological affectivement. The question is whether the affectiveness produced by those formal strategies belong to the reference or the cinematographic apparatus. Whether they represent a sensation that is not present or was present at the moment of filming; something impossible to mediate on such as falling in a sinkhole. In this sense, *Geological cinema* risks to conceive the world as an image and remain in the sphere of the metaphorical. Although some of the images bring a haptic dimension, particularly the underwater images, formalities such as the drone music and jump cuts create experiences no longer belong to the world captured, but to the cinematic. Using Peter Wollen's terms, there exists in some degree a substitution of the world by something else (Wollen, 1997). It is worth to point that the appropriation of the world through moving images is coherent with the subject of the film, because the sinkholes are not problematised as result of an agency, but rather, as the embodiment of the encounter of human and non-human trajectories.

Kathleen Yusoff notes that the Anthropocene represents a moment of acknowledgement of a geological, social, body, and political entanglement (p. 4 Yusoff, 2016). However, the discourses for the critique of power do not take account of this geology. In other words, the geological needs to be considered constitutive of such discourse. By using extra-cinematic and fictional elements, and focusing on the human intervention of the land, *Sallarium* creates a reflection of the human in the geological through the world's appropriation as an image substituting the world for a cinematic experience, even though the diffractive approach is achieved. For the representation of ecological relations, this substitution is problematic; as Timothy Morton notes, the *ecological thought* is thinking about ecology, but it is also ecological thinking (p. 7 Morton, 2010). I would argue that the representation of ecological relations needs an ecological practice: to expose the making to the set of relations that operate in the place influencing content-formal aspects of the work. So in order to practice ecological thinking, it is needed more than conceptualizing relations but also to be affected by the agents of the place depicted. The latter differs from the stylistic strategies employed in *Sallarium* because it does not represent the affects; instead, the world's effect in the film is not present in the image as such. Hence, the question is in which sense these affections influence the process of making and how they are inscribed in the work, so the practice becomes an ecology of making.

There is a tendency in the Anthropocene to reduce the world to the human authoring of rocks, atmospheres and oceans. Lens-based media practices have followed similar paths by re-authoring the expressive capacities of the world in the process of meaning production. The empowered world-shaping formal approach produced by digital audio-visual technologies has facilitated the creation of immersive experiences that do not belong to the swarm of agencies encountered when capturing the images. In this historical context, digital technologies have led to the invisibilization of the world's manifestation, which includes the social, the mineral, the biological, the economic and the geological. The adoption of mannerisms like washed-out images, a product of logarithmic colour spaces rendering a clean decoloured world that fits in the white of the gallery space; drone sounds that give to the world a mantle of synthetic mystery that covers its spiritual affective potential; and the reduction of events to fragments, the product of the non-destructive

nonlinear digital systems that have somehow re-articulated the world's entanglements in something else.

We can identify an ethic of an *ecology of making* that does not only represent through the temporal fragmentation and expressive cinematic strategies but participates in the slow development of the world's becoming. Abbas Kiarostami speaking about the methods he used in his film *Five Dedicated to Ozu* (2003) (BFI, 2020), notes that there were two methods of doing the film: through a team of people and a special effects artist, or a team composed by the elements of the world such as the sea, the wind, and the sun. He chooses the latter. He just needed time and patience to let the world manifest itself, to unfold in front of him and the camera. This methodology is missing in the image of the Anthropocene. The slowness required in Kiarostami's practice is an epistemological, ethical and political approach that does not attempt to explore but rather to be in the presence, be along with, and participate in the coexistence of the trajectories and entities of the place in togetherness.

Timothy Morton notes that Wilderness areas are the unconscious of modern society. They are places in which we travel to keep our dreams undisturbed (p, 6 Morton, 2010). These dreamy places are coherent with the expanded cinematic experiences, which help modern people bear a temporality that is conceptualized but does not want to be lived. Robert Bresson reminds us about the power of the cinematic upon our consciousness. For instance, he notes that music in the film "is a powerful modifier and even destroyer of the real, like alcohol or dope" (p. 41 Bresson, 1997). He realized the capacity of the extra-cinematic elements to transform the "reality". Immersiveness produces a detachment from the world through an alteration of the consciousness. It attenuates the world's action upon us by transforming its subtle force into something that requires no effort. Heidegger warned about the object of art as expression and intensification of a human subject's experience of life, which for him, reinforces and feeds the subjectivist tendency (Heidegger, 1976), that is, the total control of every aspect of the world. In this sense, moving image practices of the Anthropocene risk feeding the very object it is attempting to critique with images.

1.3.4 Affective geology

In the Anthropocene, the ecological's exploration has been focused mainly on how human activities affect the world. However, the account of agencies whose origin are not direct or indirect human actions acting upon human cultural systems has been somehow neglected. Hence, most of the artworks that preach the human ecological entanglements with the other-than-human tend to display how humans transform the world or how the world's expressive forces are a consequence of human activities. However, there are exceptions in which artists, in some form or other, explore how other-than-human agencies affect and divert narratives about the cultural, productive and social aspects of human expression. A continuation, there will be presented some examples of these practices that despite do not problematizes the *ecology of making* as such, they present the empowering of the other-than-human over our cultural system and bodies, revealing our entangled ecological position and togetherness with other beings and entities.

Matthew Buckingham's work *The Six Grandfathers, Paha Sapa, in the Year 502,002 CE* explores the translations between culture-nature as part of a common history, including its past and potential future (Buckingham, 2002). The installation juxtaposes the contested history and uncertain future of an area that includes Mount Rushmore, known in the Sioux language as *Paha Sapa*, in the state of South Dakota. The work presents a graphical and textual timeline "that encompasses the historical and geological and emphasizes key moments in the struggles between the Sioux and the US government over this land." (Buckingham, 2017), accompanied by a picture of Mount Rushmore with the carved US presidents completed eroded. Geologists believe that in 500,000 years, these portraits will be completed eroded and unrecognizable. In this form, Buckingham reverses the human interference in the land by displaying the inevitable return of the "culturized" rock to the domain of the geological. In other words, what embodies exploitation of natural resources, racial inequality, the objectivization of nature, and oppression of non-colonial forms of relationship with the world, is erased, making evident the tiny timespan of humanity on a geological scale. Like FOP, CLUI and Litvinseva, Buckingham explores processes in which the natural (and geological) is appropriated by culture and human production. However, he notes that this process is also reversed by making us think of an inevitable future that erases

the signs of the illusory human transcendence. Buckingham invites us to a conscious return not only to the inevitable death of our bodies but also to the culture.

While Buckingham's work focused on the inevitable return to the geological, The *Otolith Group*'s film *Medium Earth* (2013) explores how geology affects entities. Through the form of the "notebook" essay, the film relates the deep geological time with the unconscious of Southern California. It addresses the vague understanding of both the seismic activity and the material channels through which the Earth communicates through the poetic enquiry of our relationship to seismic activity and its consequences on rock landscapes, human infrastructures and our bodies. This relationship is made explicit through the testimony of Charlotte King, who predicted the major eruption of Washington's Mt. St. Helens in 1980 accurately, and she also foresaw several earthquakes. King's capacity was her sensitivity to low frequencies (Between 2 and 7Hz), which created her migraines that alerted seismic movements or volcanic events even days before these occurred. In *Medium Earth* the frequent subject of the Anthropocene is also reversed. Instead of focusing on the human action on the planet, it explores how the world's geological expression affects the human body and mind through King's story. In other words, this case is a sample of a geological connection with humans beyond the abstraction of universal models explored by Delanda (De Landa, 2000), the equivalence between geological and mind processes of Smithson (Smithson, 1996a), and the diffractive relationship with the media (Litvinseva, 2018). The films problematize geological forces by revealing how cultural objects and our bodies are the very mediums through which the world's forces operate, revealing the entangled ecological relations which affect us in unthinkable forms at many levels and scales.

Medium Earth is an essay film and as such it presents a specific relationship between language and image, which emphasizes the creation of connections through subjective arrangements of the world (Huber, 2003, p. 93). In this form, *Medium Earth* "is not about documenting realities but about organizing complexities" (Biemann, 2003). As such, the preponderance of conventional language to organize the "reality" weakens the presence of an ecology of making since the reflection of the author dominates the intelligibility of the world. This process limits its im-

age to the function of "lender of presence" in the words of jacques Ranciere (Ranciere, 2009). *Medium Earth*, and generally the essay film, presents a problematic regarding the representation of togetherness. However, the world's wordless, non-conventional form of communication is lost. Hence, images are "read", articulated and represented using cinematic and non-cinematic codes. In the next section the main discussion will be developed by discussing ways of ecological making.

Figure 1.7: Photogram film Sallarium. *© Sasha Litvinseva and Daniel Mann.*

Figure 1.8: Photogram film Sallarium. *© Sasha Litvinseva and Daniel Mann,*

Figure 1.9: Photogram film Five. Dedicated to Ozu*. First sequence: A piece of driftwood on the seashore, carried about by the waves. © Abbas Kiarostami.*

Figure 1.10: Photogram film Five. Dedicated to Ozu *Fifth sequence: A pond, at night. Frogs are singing. A storm, then the sunrise. © Abbas Kiarostami.*

Figure 1.11: Matthew Buckingham. Photographic component of The Six Grandfathers, Paha Sapa, In the Year 502,002 C.E. 2002. © Matthew Buckingham.
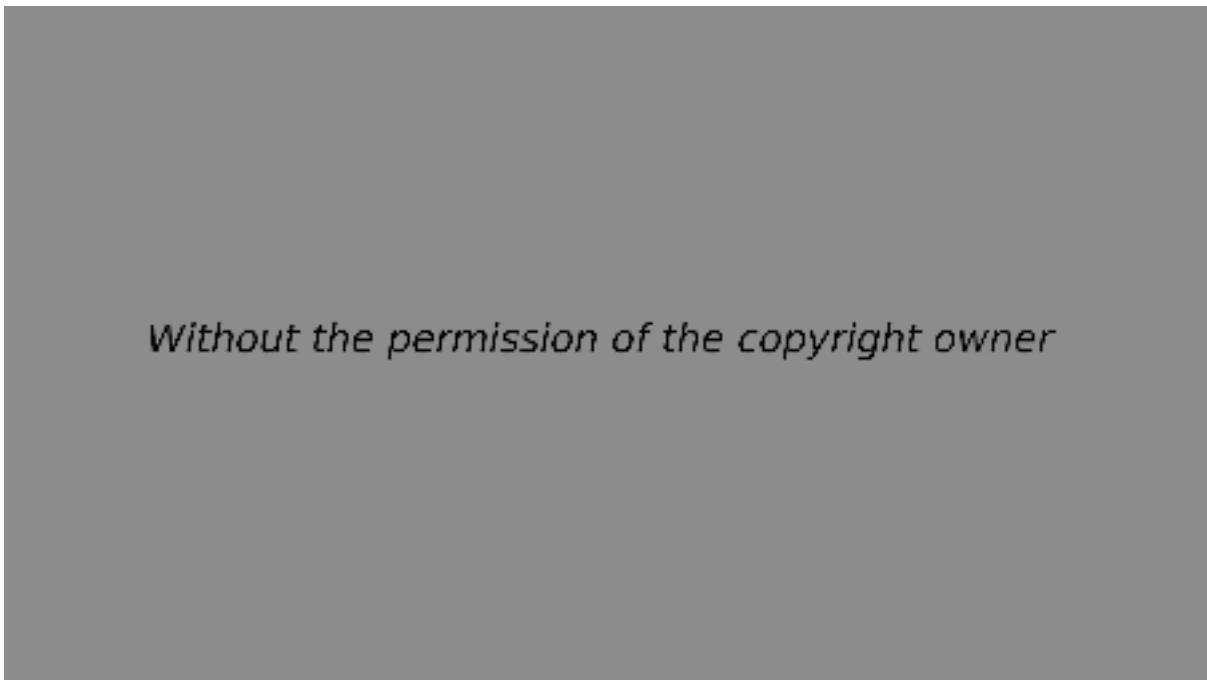
Figure 1.12: Matthew Buckingham. Detail of exhibition. The Six Grandfathers, Paha Sapa, In the Year 502,002 C.E. 2002. © Matthew Buckingham

Figure 1.13: Otholi Group. Detail of exhibition. Medium Earth. © Otholi Group

Figure 1.14: Otholi Group. Detail of exhibition. Medium Earth. © Otholi Group

1.4   Lens-based media practice and ecological relations

In this section, we will get into the main discussion of this project. While the focus' first section was on geological entanglements with art and thinking practices, this section focuses on ecological entanglements with art, which will lead to an idea of what art ecological practices could mean. Finally, we shall finish with a proposition for an ecology of making developed in the following chapters.

Timothy Morton notes that art practices need to adopt a genuinely radical openness. In other words, they need not just to be about the world, but they also need to be ecological in the sense that they relate with otherness (p. 7 Morton, 2010). So why question the ecology of making when all making is ecological. The diagnostic is that despite all art practices being ecological and entangled in wider ecological dimensions, moving image practices have tended to privilege a mode of communication that uses a conventional semiotic exclusively human. Hence, the problem is that If we need a radical openness to represent ecological relations, we need to open our practices to forms of communication that are beyond the human. In this form, the intention is not only to accept the participation of others humans and more-than-human but also to give credit to their participation.

As we have seen, language privilege prevents fully recognising the world's influence in the creative process. However, the meaning of language for this project has not been defined. First, for lens-based media, "Language" is beyond speech or written text. As such, there also exists a cinematic language that bears visual conventions. We have seen in the previous works how the camera work attempts to represent a conscious state, trying to replicate a sensation as if it were occurring. Like language in the form of text, visual language has symbolic constructs that are significant to particular human groups. Considering this expanded idea of language, we can identify along with the history of moving image art practices, the tendency, often criticised, to articulate the world privileging certain and conventional forms of communication; in a word, language. As we shall see later, many authors recognise the problem that this privilege carries, which in the representation of ecological relationships is even more problematic since conven-

tional language is exclusively human (Kohn, 2013). In this regard, Timothy Morton opens the problem with another question: "are nonhumans capable of aesthetic contemplation? Can they enjoy art? [...] do we share this capacity with nonhuman beings?" (p. 13 Morton, 2010). The answer to this question will be explored later in this chapter. However, as a mode of speculation, why do not assume that in this radical otherness, there are equivalences to what we consider aesthetic contemplation?.

Returning to language, authors such as Karen Barad notes that there is an excessive power granted to language to determine what is real in a process that she calls *discoursive practices* (Barad, 2003). Similarly, Jacques Rancière coincides with the idea of the unrestrained power of language. However, he proposes that to break with representation in art is not emancipation from resemblance or pure materiality but emancipation from the speech that organises the visible (Ranciere, 2009, p. 113). From the latter, we can deduce that rebalancing the power of conventional semiotics from art practices is not necessary to eliminate language but to diminish the organisation of the visible through language. Some of the artists seen previously, such as *The Centre for Land Use Interpretation*, deals with the problem through the use of plain description and images that avoid aesthetic expression. However, others embrace language as speech and cinematic forms, which diminishes emergent entanglement that lacks explanation or interpretation of the artwork.

Another approach for diminishing the language power is given by privileging the production of material configurations in which the film is conceptually or physically entangled with some world's feature. This approach is different to the groundless images of drones, virtual reality, automatisms or satellites that decenter the subject (p.137 Emmelheinz, 2015) of works such as Michael Snow's film *La Région Centrale* (Snow, 1971), or more contemporary approaches such as Rosa Barba's film installation *Definition Landfill* (2005) and Lukas Marx's film *Captive Horizon* (Marxt, 2017). These works present a view of the land *as if* were through a microscope; part of a scientific survey based on the idea of objectivity; a disembodied experience rendered by a 'bird's-eye view' of a transcendent consciousness (p. 231 Ingold, 2000). The material con-

figurations we focus on are related to Structuralist/Materialist filmmaking that is centred on the landscape. Particularly configurations that produced mechanical forms of entanglement with the world. Among these filmmakers, Chris Welsby's practice attempts to fill the disconnection between the camera and the land captured by creating structures in which mechanical and formal aspects of the film connect with some aspects of the world. For instance, in his film *The Seven Days*, Welsby takes a photogram every ten seconds throughout the hours of daylight using the camera mounted on an equatorial stand used by astronomers to follow the trajectory of the sun. Hence, the camera's movement and the Earth's axis are synchronized. Another aspect of the work is the establishment of a constrain: if the sun was visible, the camera pointed towards its own shadow. Otherwise, the camera faced the sun. The latter constrain, an aspect of the world that cannot be measured, breaks the monotonous movement of the camera (Welsby, 2017). Welsby's film connects the world's movement with a formal aspect of the film. Ultimately, the constraints become a subjective decision similar to a deterministic belief, in which the movement of the camera concerning the sun covering becomes a ritual that keeps equilibrium.

However, despite the connection between the camera and the world's movement, the "pure" and "clean" ecological relation in the material configuration of Welsby's film, the relation is reduced to a mechanical entanglement. Hence, the centre is not the world as such but the apparatus. On the other hand, the film also contributes to producing a groundless image. Irmgard Emmelheinz argues that in order to make images, vision needs to be grounded by assassinating perception and converting it as a critical activity (p. 138 Emmelheinz, 2015). Groundedness is a determinant to establishing a new ecological relationship with the world through lens-based media, from which the agencies circulating in a locality participate in moving image media practices and vice-versa. However, lens-based media practices need to establish relations beyond mechanical post-human relations with the world to attain this influence. These films "displace the human agent from the subjective centre of operations" (Emmelheinz, 2015, p. 134), as if the human, invisible from the piece, is not part of the world. The focus on a mechanical relationship with the world creates a separation from the material reality (ibid.). However, Welsby's film reveals the potential of creating audiovisual structures to produce an ecological practice.

1.4.1 Theoretical analysis of Duration and rhythms as driver of the world

The unfolding and the unfolded

The previous section's automatism of the post-human film presents an obstinate camera that does not stop at the unfolding aspects of the world. Nevertheless, Andy Warhol and then Structuralist/materialist filmmaking presents duration as a material dimension of filmmaking, which opens the practice to a more profound entanglement with the world. The "real-time" brings to the surface one of the most critical material aspects of the moving image medium, which is particularly meaningful in Kiarostami's film *Five Dedicated to Ozu* (2003) (BFI, 2020). However, as we will see later in this chapter, duration as a material dimension of lens-based media is one of the primary forms in which the world can be manifest in its rawness as an image; as a one-to-one relationship between the world's fragment captured and the viewer (Le Grice, 2001). This equivalence produces a relation between the space-time of the world depicted and the projection event. Hence, the sound images captured form part of the films and the immediate temporal experience of the viewer (Ibid.). This connection between places mediated by duration opens a leeway to let the world's movement emerge through sounds and images and floods the viewer's space.

Before continuing with the analysis of filmmaking practices, I would like to do a parenthesis to analyse the concept of duration and rhythm to reveal the forms it serves to establish ecological practices. The conceptualization of duration and rhythms has a long philosophical tradition. Henri Bergson's critique of the spatialization of time serves as a model for understanding the standardization of the temporal phenomena in film practices and how it mutes the world's rhythmic expression. Bergson critiques the impersonal consciousness produced by the establishment of a universal duration as if "all human consciousnesses are of like nature, perceive in the same way a single experience, unfolding in a single duration" (p. 206 Bergson, 2014). Temporal standardization is part of colonial thinking by assuming that everyone has the same environmental consciousness. This idea coincides with the globalizing idea that all of the world's entities are part of the same trajectory (Massey, 2005), that of the Western world. In other words, the mea-

surement of time assumes a universal world view in relation to the environment under the hood of a universal perception that justifies the application of productive rhythms upon bodies and land.

Bergson defines duration as the continuation of what no longer exists into what does exist (p. 208 Bergson, 2014). In other words, when perceived, the unfolding time becomes an unfolded duration (Ibid.). For Bergson, the marks that leave a line or the movement of our bodies become the unfolded time. Hence the relationship between the unfolding and the unfolded time seems to be visual. Bergson's conceptualization of duration reveals how the world's dynamics manifest. The world expresses and interacts with us through duration and our awareness of simultaneous events. Simultaneity requires at least two external flows that are always in relation to a third one: the ceaseless murmur of our existence. Our attention is what unites the events at the same time that differentiate them (Ibid. p. 210).

Bergson argues that without the measurement of time, a consciousness qualitative duration is always in relation to the inner life (Ibid.), hence it is through duration that we establish relations with the world, becoming symbolic as the world unfolds. Moving image media in general risks the creation of a standardized temporal phenomenon through aesthetic devices such as the process of montage and conventional forms, and hence somehow articulate and transform the unfolding world. The lived time of pure duration differs from the mental articulation of the world that emerge from montage that somehow standardize time to the requirement of the program and discourse. Duration allows viewers to relate with the unfolding events of the world participating in the simultaneity of events presented.

Rhythm-analyst as a model of filmmaking and viewing

Gaston Bachelard suggests that the notion of duration is never as unitary and cohesive as Bergson suggested, but fragmentary and made up of disparate elements (Bachelard, 1994). Martin Lefevbre coincides with Bergson about the reductive representation of time through its measurement, but he also critiques the linear representation of time he suggested (p. xi Lefebvre, 2013).

Lefebvre took much of this critique from Bachelard, but for him, fragmentation does not emerge in views or impressions but rhythms. For Lefevbre, the world's rhythms are always in relation to other rhythms, including ours (Ibid., p. 10).

It is difficult not to think in the process of film montage, and the relationship it establishes with the world presented. Peter Wollen in his discussion of Chris Marker's film *La Jétee* (1964) concludes "movement is not a necessary feature of the film, [...] impression of movement can be created by the jump-cutting of still image" (Wollen, 1997, p. 100). In other words, the impression of animation is rendered by two movements. First, by the movement inside the image itself, which reproduces the conditions of the natural perception; and second by montage, which is the expression of the duration of the image itself (Bellour, 1987, p. 5). If the former belongs to the reference and the latter to the apparatus' specificity, their relationship determines the balance between the cinematic and the "real" world expressive forces. This balance is as determinant as the balance between language and image for a lens-based media practice that attempts to represent "actively" by engaging with the agents and the vibrating liveliness of the ecological relations it wants to depict. The balance is between the world and the cinematic.

Henri Lefevbre defines the figure of the rhythmanalyst as the practice to pay attention and listen to the world; its noises, murmurs and silences, which are generally thought as deprived of meaning (p. 19 Lefebvre, 2013). For Lefevbre, language does not has to be the driver of rhythmanalysis because to be passive and dismiss previous knowledge is part of the rhythmic interpretation (Ibid., p.19). In this sense, Lefrevbre defines the practice as bodily rather than mental, because it is through the body how we relate with rhythms and open ourselves to others' actions and influences. In the context of cinema, this method is contradictory considering the bodily passiveness required by the act of watching images. However, it is precisely the process of montage and the use of extra-cinematic elements what have had a significant influence on this passiveness.

The process of montage and fragmentation drives the articulation of the world on lens-based

media and the production of illusion. Jean Louis Comolli notes that fragmentation and synthesis are characteristics of the process of montage, and even used critically, it has helped to its normalisation (p. 16 Comolli, 2016). Montage articulates the world, and in this process, it diminishes the world's raw like expression and our physical relation with it. This double-bind presents a problem for critical practices in the context of the Anthropocene because they cannot escape from taming the world through its re-articulation. Hence, fragmentation somehow diminishes the slow and silent traces of world expression captured in the image.

Rhythmsanalysis does not claim significant changes or great political declarations, but attempt to bring back "the sensible in consciousness and thought" (Ibid., p. 25). The politics of the small gesture is the rejection of the productive approach of discursive articulations and experience making. Lens-based media practices have been seen as increasingly embracing methods used by the very dehumanising forces they critique. A political response to the increasing fragmented temporality proposed by a techno-capitalist mode is to create apparent unproductive instances that allow us to abandon ourselves to duration (p. 27 Lefebvre, 2013) as a contestation of the productive forces that kills the body and the environment (see Kathleen, 2011). In other words, to let ourselves drift in the swarm of rhythms and in contributing to our own ones.

On the other hand, Lefevbre warns about the aporetic endeavour to become a rhythmanalist through the moving image practice. He notes that no camera, no image or series of images can show all rhythms (Ibid., p. 36). It requires equally attentive eyes and ears, a memory and a heart. The camera is not the perfect rhythmanalyst tool, but it is a medium that produces those little interventions referred to by Lefevbre. The experience of the world's expression through duration is relative to the internal rhythms of the viewer. As such, duration constitutes a time of reflection about the world being projected but also the actuality lived. Through the duration, viewers are to and fro between the world captured, the projection event, their body rhythms and their consciousness. It is the duration that facilitates the reflection upon what we are witnessing in relation to memories of the past and the actual present.

The production of a space-time of reflection detours the constant distraction that mundane contemporary life promotes. Jean-Louis Comolli argues that the current technology has produced certain "passages to the act" through increasing "interactivity", whose primary effect is the suspension of the possibility of thought (p. 54 Comolli, 2016). The interactive new media produce subjectivities that separate us from a material experience of the world to purely narrative and discursive practices that guide us. In this context, durational cinema facilitates a subjective shift that promotes the world as an expressive environment that decenters the human semiotics through its muteness. Duration does not imply the transcendence of an observer, but the subjective engagement with the world as a form of knowledge creation.

1.4.2 Eco-Aesthetics

The question that arises from duration is how the world expression becomes part of the process of signification in lens-based media practices. Silke Panse notes that films that stress impressions and sensations also separate the viewer and maker from the relations of the world (Panse, 2013). To close the gap that separates viewers and authors from the world, Panse defines the concept of *eco-aesthetic* as a kind of cinema in which the image cannot be separated from the material connections with the event captured. In other words, a cinema in which the producer, viewer, and the "context" or "environment" captured "belong to the same plane of *immanence*" (Ibid.). A scene in James Benning's film *Rurh* (2009) presents an excellent example to illustrate how the *eco-aesthetic* operates. The scene consists of a take in which the camera is pointing to the sky. Between the lens and the cloudy backdrop there is a line of trees. Suddenly, a plane takes off cross the frame behind the trees. The video continues and apparently nothing happens until suddenly a subtle movement of the trees' branches and leaves begin being stirred as a consequence of the air displaced by the plane. This video take presents a form in which the human and the natural signs become entangled beyond language bringing to the foreground a common semiotic sphere in which the other-than-human and the human operate together.

In order to grasp how Benning's immanent cinema operates, it is pertinent to review Eduardo Kohn's ethnographical project. Kohn attempts to open up the human representational practice by

revealing the mechanisms in which the human and the other-than-human communicate. Kohn's approach is different from *New Materialist* theories, which assign to representation the episte-mological separation from the subject of study (Haraway, 1997)(Barad, 2003)(Viveiros de Castro, 2014). Instead, Kohn argues that the epistemological problem of representation is not the sys-tem per se, but its definition as exclusively human. Hence, his project dissociates representation with conventional language opening what is human (p. 8 Kohn, 2013). For Kohn, Peirce's "in-dexical" signs are part of a trans-species and trans-material semiotic that is part of a transversal form of communication. This definition provides a framework to establish a connection between the conventional symbolic with other semiotical regimes in the lens-based media practice. These semiotical intersections include not only the raw expression of the world but also its influence in the production of the sound-images. Following these ideas, indexical signs trigger movements, abstract visions of figures, haptic sensations, and sounds that in turn produce reactions, con-straints and the mind's activations. The question is about how the lens-based media represents ecological relations by becoming active within the indexical sphere of such ecologies.

For Charles Sander Peirce the whole universe is perfused with signs (p. 258 Peirce, 2016), and the *indexical* signs refer to a certain material connection, a physical contact between physical entities that act as a footprint in the muddy ground. In film studies, the indexical relationship be-tween the photographic image and world events refers to the physical connection between the light that *touch* the photo-sensible surface. This relationship has served particularly to explain the difference between digital and analogue mediums (Rodowick, 2007). The physical indexical defines how the world participates into its photographic presence (p. xvi Cavell, 1979). However, the indexical relationship between world and image can be considered beyond the physical phe-nomenon of light.

Eco-aesthetic practices diminish subjective accounts by promoting the influence of the world in some aspect of the film. These practices create configurations given by the establishment of particular connections between the filmmaker, some aspect of the world, its image and the viewer. In other words, as in the CLUI's work *Up River*, the work's structure becomes a relation

to the world (Panse, 2013). For instance, in James Benning's film *RR* (2007), the trains passing through the frame determine the take duration, and in *Twenty Cigarettes* (2012), the video-take lasts the time a cigarette is smoked in front of the camera. Hence, the duration of each take is different depending on the pro-filmic event. These examples present human rhythms, and as such, they belong to a "human" temporality. The structural entanglement is more complex when the aim is to grasp the world's expressive relations that defines ecologies beyond the mechanic connection. Nonetheless, the main aspect of this practice is the respect the duration of the world's event and rhythms avoiding their appropiation through the arbitrary or narrative driven process of montage.

1.4.3 Symbolic interference

All the previous works attempt to activate patterns, movements, and forces of the world through duration. However, they also leaves speech aside from the process of meaning creation. This brings the problem of context and politics. Other James Benning's films include speech or text as external information. However, the inclusion of text is made in such a way that language is not above the world's image in the process of meaning production. Instead, in Benning's films the relationship between landscape and text generates ideological and imaginary scopes beyond their direct meaning as separate entities.

In *Utopia* (Benning, 1998), Benning presents landscape images from Death Valley South, with the entire soundtrack of the English-language version of Richard Dindo's 1994 Swiss documentary, *Ernesto Che Guevara, the Bolivian Journal* (Dindo, 1996). With a few ambient sounds from the landscapes, Utopia is two separate movies; the images of one, the soundtrack with the historical document of another running on parallel tracks. Despite this there is no apparent relation between both tracks, the imagination tends to impose a synchronism between images and text. This narrative device transcends the traditional plot by freeing both images and text of its mutually descriptive relationship because it "required a non-linear reading of the film and a more complex perception of time, place and narrative" (Pilchler and Slanar, 2008, p. 8).

This configuration breaks what Jacques Rancière recognizes as the traditional relationships of presence and intelligibility between images and text (Ranciere, 2009). Benning's method is diffractive because it creates ripples from the encounter of two heterogeneous and somehow un-related elements. However, the functioning of this method requires it to meet some conditions. The two streams meet and interact but they also conserve their individuality. Deleuze & Guattari define assemblages as a multiplicity made up of different terms of different natures (Deleuze and Guattari, 1987). Manuel De Landa notes that an assemblage is defined by the alliance and the co-functioning between the elements that compose it, such as symbiosis, sympathy or res-onance. This relationship is opposed to filiation, which determines the identity of the elements (p. 13 Delanda, 2006). In *Utopia*, the relationship between the textual and visual elements is not causal or genealogical, but instead, images and text are two separate elements put together without being yielded together. In *Utopia*, text and sound-images conserve their identity at the same time that they form a new one together, avoiding the creation of a dominant reading that would produce a filial relationship between the elements.

The effect created by such a strategy is what Benning calls *spherical space*, which is a cin-ematographic space that renders a connection between the places depicted, political scopes and personal events (Pilchler and Slanar, 2008). Benning invites the audience to produce their connections between the film elements and relate their personal stories with the place depicted (Ibid.). to Sum up, these connections define a special relationship with the world in the lens-based media experience. Duration transforms the film's function from a medium that facilitates the presentation of ideas about the world to a medium that promotes the emergence of the affective and sensorial presence of the land, which brings lived mental images and personal memories into the (back)ground of this relationship. On the other hand, collecting objects to make an assemblage of heterogeneous elements that do not relate hierarchically creates an ecological practice in the film montage. However, some invisible ecological aspects that operate in different dimensions are not present in these diffractive assemblage configurations. In the following, we shall be reviewed the forms in which an animist dimension could emerge from the ecological moving image practice.

1.4.4   Shamanic Cinema as a strategy of representing beyond visible and material relations

As we have seen previously, the *geological turn* proposes that the earth's processes extend upon our bodies and minds. In this sense, material methodological strategies were reviewed as a form of diminishing the power of language as a *ecology of making*. However, these material approaches beyond the material or the geological, but in an ontological multiplicity that reflects the world's radical otherness. May Adadol Ingawanij, as a definition for Southeast Asian artists' moving image practices, proposes the *animistic cinematic practice*, a concept and a method for regionalizing artists' moving-image practices within the broader problematic of aesthetic practices engaging with the Capitalocene (p. 550 Ingawanij, 2021). Before continuing with the discussion of this moving-image practice, it is essential to clarify the importance of the idea of the Capitalocene in the concept of the animistic cinematic practice. Capitalocene – the "age of capital" – is defined as the historical era shaped by the endless accumulation of capital that relates to how a system of power, profit and reproduction determines the web of life (Moore, 2017). This age proposes an ecology beyond the mere environmentalist conception of nature (Morton, 2007), including within the set of ecological relations a set of "institutions, mechanism and ideologies of developmentalism, patriarchy, racialization and racial hierarchy" (p. 549 Ingawanij, 2021). Hence, Adadol Ingawanij's concept of *animistic cinematic practice* operates in a syncretic space, in which ways of seeing life and the ways of life negotiate, compete and collaborate in heterogeneous spheres with the productive forces of capitalism. On the other hand, Adadol Ingawanij (Ibid., p. 550) definition of animism does not only refer to the notion of objects having soul and agency. Instead, the term refers strongly to the "paradigm of human–spirit sociality and communication that form part of both an ecology of experiencing, relating and existing and a repertoire of speculative future-making practices on the part of the powerless". This idea opens the concept of animism as a threshold in which different visible and invisible spheres communicate, which this research will borrow to conceptualize the representation of the local ecological relations of the case study. Having defined Capitalocene and Animism, *cinematic animism* is a

moving-image practice that tends not explicitly to thematize the consequences and experiences of environmental degradation but to relate or allude to regional histories and realities of the Capitalocene through associative, rhizomatic and atmospheric forms (Ibid. p. 550). This definition takes into account pluriversal worlds in which spirits relate with material processes; relations that are embodied in "tales of entangled ecologies and histories; sociality and communication across beings and species; and the capacity of cinematic aesthetics to assemble and connect multiple temporal scales and duration" (Ibid. p. 550). As we shall see later, this definition is intrinsically related to the case studies of this project; however, the focus is diverted toward geology. Adadol Ingawanij' *cinematic animism* is an essential definition for this project because it presents a framework in which the practice operates. However, there is another dimension in the ecology of making that this concept does not include. That is the form in which the world and the viewer participate in an *ecology of making*.

The filmmaker Raúl Ruiz presents an idea that serves to define the form in which the world affect us through cinema without the mere production of cinematic experiences. He defines the term *shamanic cinema* as a film practice whose sequences or narratives lead "to a region inhabited by ghosts of lost time" (pp. 78-9 Ruiz, 1995). In other words, the filmmaker refers to a cinema that "evoke or conjure up other moments behind the images we actually see" (Ibid., p. 79). Ruiz notes that shamanic cinema makes us believe in events and situations that we have not experienced, and which are in touch with genuine memories (Ibid., p. 80). He notes that through this mechanism we can "pass from our own world into the animal, vegetable, and mineral kingdoms" to then return to humanity again, as part of a poetic system (Ibid.). In order to reach this space, what is needed is combinatorial, that which Ruiz associates with multiple stories (Ibid., p. 88).

In *Shamanic Films*, the internal logic of events is not one of cause and effect as we tend to think about events, but it obeys a logic that modifies the layout of the visual and fictional spaces (Ibid. p. 88). This does not mean the creation of experiences. Ruiz warns us about the hypnotic world of a film, arguing that illusion needs to be delivered in doses giving space to return to the actual (Ibid., p. 88). In other words, the viewer needs space to think, to return to his or her thoughts and

the projection event, which is the actual space. However, durational cinema stresses the material rather than the hidden dimension composed by forces that can be associated with animism.

Shamanic cinema can be rethought as a form of representing ecological relations. This endeavour can be taken by allowing the semiotics in which the other-than-human operates to emerge through duration. How does this semiotic operate? Gilles Deleuze & Felix Guattari notes that the world is constituted by "semiotic chains of every nature [. . .] connected to very diverse modes of coding (biological, political, economical) that bring into play not only different regimes of signs but also states of things of differing status." (p. 7 Deleuze and Guattari, 1987). On the other hand, Donna Haraway argues for an embodied form of semiotics which is always kinetic, perceptual, ongoing, and never finished (p. xxxvii Haraway, 1997). These definitions present multi-dimensional signs whose affective influences cross material boundaries and bodies. This semiotic fluidity also suggests that the world as images can affect beyond the visual, as well as the world affects the practice beyond what is seen in the film.

For Deleuze & Guattari, a sign is an affective agent that triggers reactions. This definition proposes that signs can activate events beyond their sphere. For instance, the conventional symbolic semiotic embodied by language through statutes, decrees and regulations materialize in codes of behaviour, spatial orders, and systemic rules that belong to the non-linguistic semiotical sphere of gestures, spaces and circulations. In the opposite direction, indigenous onto epistemologies studied by post-structuralist anthropological projects, such as Eduardo Viveiros de Castro's Amerindian Perspectivism (Viveiros de Castro, 2014) and Eduardo Kohn's representational project (Kohn, 2013) have shown how non-conventional other-than-human semiotic affects cultural production such as narratives.

From Deleuze's & Guattari's definition of the book as a capable object to affect the world through readers, lens-based media and media in general also triggers reactions in viewers. The process is also valid in the opposite direction: the creative processes of books, photographs or videos are not separated from the affective and material influence of the world. These influences are

not necessarily explicit or articulated in the works, but somehow they are present as a material meta-narrative. They are part of the material quality and the dynamic of the works. In the particular case of media art, the environmental condition of the production is also materially present in the formal aspects of the works.

The sign as a threshold that triggers material processes opens transversal capacities of signification in which the biggest and the smallest of the entities have similar powers. For instance, the human influencing in the planet processes is coherent with microscopic viruses triggering enormous political, economic and cultural changes. This example delineates a myriad of other than-human signs that somehow communicate in non-conventional forms affecting conventional semiotics. In the western world, these semiotical intersections generally emerge only in moments of crisis, and they tend to be conceptualized instead of being put into practice an ethic to understand not only the causes. On the other hand, these semiotical intersections are the basis of many of the Amerindian people's daily activities, stories, and origin narratives that define a radical openness and a pluriverse world in which this project attempts to participate.

Figure 1.15: Michael Snow. Photogram of La Région Centrale. *© Michael Snow.*

Figure 1.16: Seven Days. *Photogram of the camera pointing at the ground at the time the sun was uncovered. © Chris Welsby*
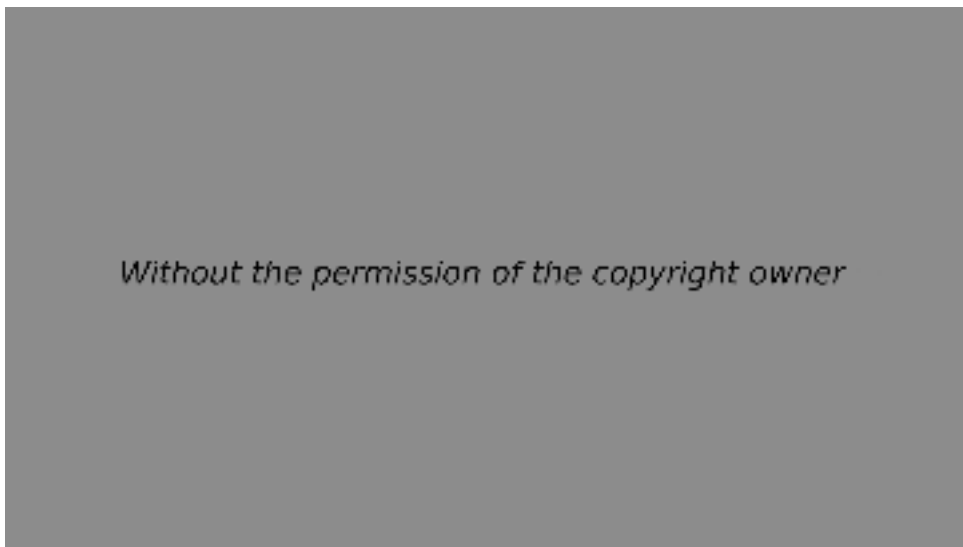
Figure 1.17: Seven Days. *Photogram of the camera pointing at the covered sky. © Chris Welsby*

Figure 1.18: Rurh*. Photogram of trees. © James Benning*

Figure 1.19: Rurh*. Photogram of plane passing by behind the trees. © James Benning*

Figure 1.20: Twenty Cigarettes*. Photogram of the film. © James Benning*

Figure 1.21: Twenty Cigarettes*. Photogram of the film. © James Benning*
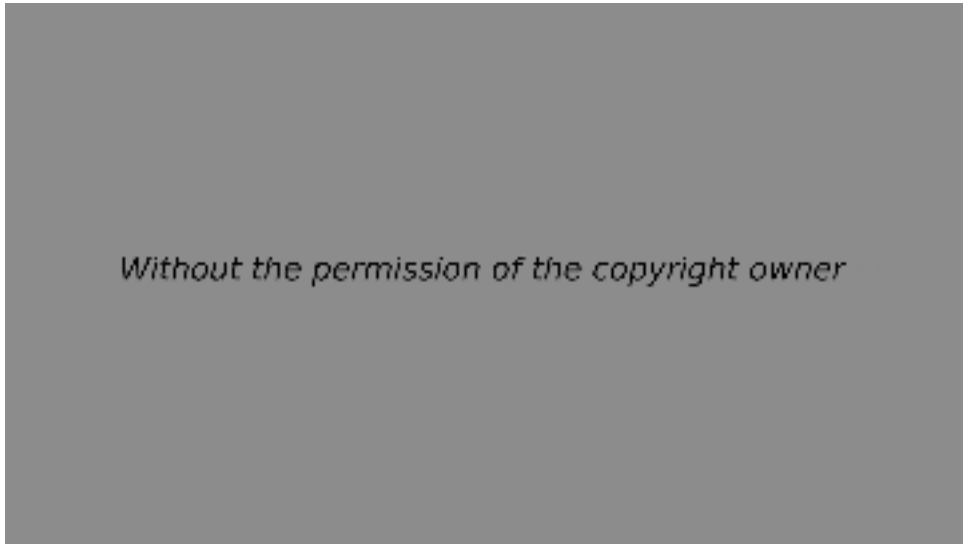
Figure 1.22: Utopia. *Photogram of the film. © James Benning*
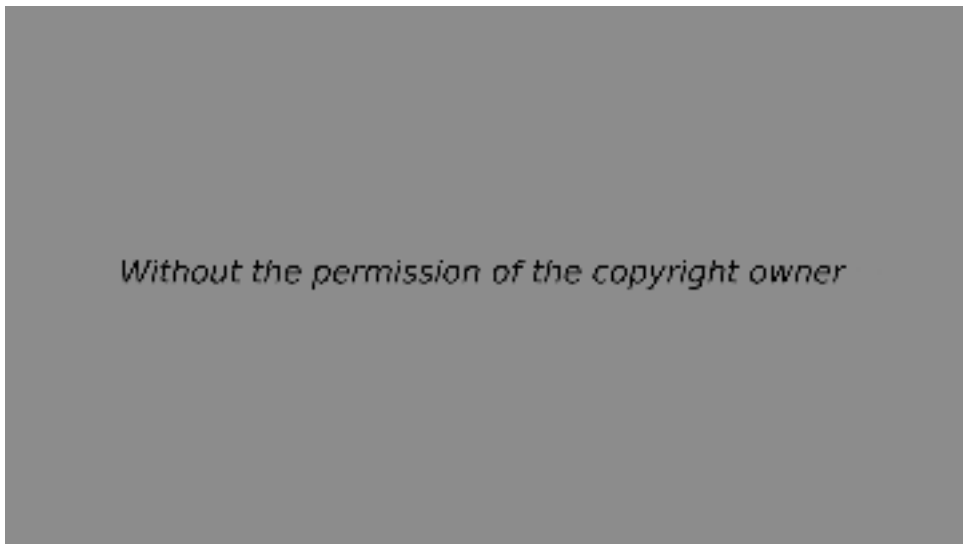
Figure 1.23: Utopia. *Photogram of the film. © James Benning*

1.5   Conclusion of the chapter

Climate change has brought to light the world's matter and forces as fluid agencies that drive the world, from which humans are part. However, the exploration of the interweave of agencies has been generally made from one direction: the human modification of the ecological systems. In other words, the world's marks in the material, bodies, social, cultural and symbolic have been neglected. Despite the new consciousness of dependency on human and natural processes, in the context of lens-based medium practices, there has not been an epistemological shift that problematizes representational methods in which the world's agencies participate in the creative process. On the one hand, essayistic forms that use language at the centre of the meaning production generally articulate and objectivize the world's expressive force like the same activities of its critique. On the other hand, materialist and post-humanist filmmaking have made the world participant through its connection with the materiality of the medium, which tends to diminish content and meaning, preventing any connections with the world beyond the cinematic apparatus.

To make participant the world's expression in the process of meaning creation through lens-based media practice, that is, to produce a truly "ecology of making", presents many contradictions. Perhaps the most important is the fullness of the experience of something that is mediated, which intrinsically produces a separation from the very thing it attempts to bring closer. Hence, the question that emerges is how this contradictory space can become productive in the sense that it promotes inclusive engagements with the world from which a shared semiotic with the other-than-human.

The revision of the artworks in this chapter suggested that to create ecological configurations of making the practice itself needs to be inserted as another dimension in the world's entangled ecologies. For this purpose, it is required to dismantle hierarchies between text, image and sound to recognize the influence of the more-than-human agencies in action. In broader terms, and understanding language as a set of conventions beyond text, including formal manners that have acquired unequivocal readings, there is a need to balance different semiotic spheres to

make the equivocal a crucial part of the process of meaning production. In other words, to modify the hierarchy between the symbolic and indexical.

In practical terms, there is a need for methods that point to the creation of signification processes beyond language and the expressive capacities of the apparatus. Facing this problem, the capture stage of lens-based media becomes the main point of access to the world's expressive force. In this stage, the image's subject, that is, the world as an image, influences the production and leaves marks that are not necessarily visible but equally present in the formal and material aspects of the film. However, this influence needs to be promoted by developing configurations in which the world as an image, the apparatus, the author and the viewers become productive in the process of meaning creation. Therefore, the search for methods that promote the representation of local ecological relations requires a shift in the role of the human from being someone who originates meaning to be an entity that facilitates the expression of human and other-than-human flows and relations that define particular ecologies.

Chapter 2

On modes of representing

2.1   Introduction

In this chapter are explored methods of engagement along-with the world in lens-based media practice in order to create representations of the ecological relations of specific localities. The chapter covers the definition of a methodology and the development of methods in which the world's agencies, flows, figures and events activate the practice in several different dimensions.

The chapter is divided into four sections responding to the problematic revealed in the first chapter. The first section introduces methods of visual and non-visual practices that present forms of making along-with environmental agencies. These methods are analysed as a form to grasp local ecological relations. The second section describes the practices surrounding the ascension to the *Puyehue-Cordón Caulle volcanic complex*, in which is problematized walking as a catalyst for sensing the world's affective force in creative-research. This method is analysed as a form of exposing ourselves to the agencies of specific ecologies in the creative process in order to represent them. In the third section, through the description of the ascension to the *Cordón Caulle* volcanic desert, walking is compared through the prism of the experience of horse riding, and also the affective influence of the world upon minds through the emergence of forms that we as humans recognize as figures. Finally, the fourth section explores the ecological relations in the locality of *Concón*, a dune system of millions of years increasingly under pressure

due to real-estate projects that have diminished the area in which the dune ecosystem has developed. This section explores specifically the subjective speculation of events as a form of inclusion of the world's narrative in film practices, alongside the temporal dimension and the rhythmic transformation associated with productivity and capitalism. This last section serves as an introduction to the artworks developed in the next chapter.

2.2   Methodology

2.2.1   Methodological approach

Before beginning with the description of the research's practice, it is necessary to discuss some methodological aspects relevant to the development of the practices carried on in this work. In the previous chapter most of the lens-based pieces reviewed focused on the effects of human activity in the world. Perhaps with the exception of The Otolith Group's film *Medium earth*, all the practices conceptualize the geo focusing on the human as a transformative environmental force. This unidirectional focus neglects the role of other-than-human agents have in human affairs, including the creative practices. Kathleen Yusoff (p. 8, 2016) recognizes the problem of this uni-directionality by noticing that despite the geological is conceptualized as a dynamic force that infuses the other-than-human with political and social questions, "social theories" and humanist practices have not necessary dealt with inhuman qualities, which "frustrate a straightforward account of power" (Ibid.). The question that arises is whether an account of power without taking into consideration the subtle and equivocal world's "silent speech" is complete or even ethical. Therefore, as a first approach, this project considers the need to develop forms that promote the making alongside environmental agencies.

The main objective of this chapter is to search for the place of the other-than-human in the artistic practice. In this project, the assumption is that in times of ecological disaster, it is fundamental and urgent to let the world's agencies interfere into human structures and practices, including aesthetic practices and creative research in general, in order to grasp ethical forms of relations with other entities of the world. This argument requires novel research methods that

make possible the world's silent speech with no purpose (Ranciere, 2009) to mingle in aesthetic practices. This task requires to re-learn how to grasp signs beyond the human conventional semiotic (Kohn, 2013), to avoid speaking *for* the world, or *as if* the world would speak to us in human terms. In other words, the representation of ecological relations needs methodological tools that present multi-dimensional environmental, social and subjective ecological dimensions (Guattari, 2014) beyond the mere interpretation and reading of the world through language.

2.2.2 Walking as lens-based media method

The introduction of this text discussed the emergence of a space of contradiction, that is, the impossibility of the direct access through visual mediation, which separates us from the direct experience. This space is somehow bridged by what Raul Ruíz named *shamanic cinema*. However, art practices of ecological concerns have focused more and more on ways to subvert the visual, which has become synonymous with representation and objective thinking (Springgay and Truman, 2017). With this purpose, there has been an emergence of methodologies that explore the sonorous, olfactory and haptic sensory dimensions as a mode of access to the more-than-human (Ibid.). These practices attempt to participate from within, instead of the ocular centric methodologies that reinforce the illusion of objectivity and separation (Ibid.). In this context, walking has been increasingly used as a method to detour the visual in creative and humanist qualitative research. Considering the previous use given to walking, it seems counterproductive to its use in lens-based media practices. However, the assumption is that the non-visual is also part of visual practices, as long as this sphere is not made transparent. Hence, walking presents a framework that allows rethinking about lens-based practices from post-visual perspectives. In other words, the aim is to open pluralistic sensorial configurations, and walking is helpful to unify the sensorial phenomena and the environment.

From the previous assumption emerges questions about how the lens-based media practice is affected by the world in the process of walking. Academic works define walking as a form to establish affective relationships within the self and the agencies that populate the land (Wylie, 2005; Springgay and Truman, 2017). However, what is understood by affective relations? The

first step to clarify this kind of relation predicated by non-visual practices is to define the term affect. Brian Massumi separates the terms "affect" and "percept" and relates them as to signal both the non-rational or more-than-rational aspects of life (Massumi, 2002). John Wylie (p. 236, 2005) gives the definition and difference between the terms, "A percept is a style of visibility, of being visible, a configuration of light and matter that exceeds, enters into, and ranges over perceptions of the subject who sees. An affect is an intensity, a field perhaps of awe, irritation or serenity, which exceeds, enters into, and ranges over the sensations and emotions of a subject who feels". For Deleuze & Guatarri, affects and percepts are domains of experiences that are more-than-subjective (Deleuze and Guattari, 1987). In other words, percepts are not perceptions, and affects are not feelings because they go beyond the one who experiences them. They are beyond the relational of the sensorial phenomena (Meillassoux, 2009), because they are independent exceeding any lived experience (Deleuze and Guattari, 1987, p. 194). Hence, from these definitions it can be deduced that walking is an affective practice that goes beyond subjective accounts; a form of doing that operates beyond the symbolic conceptualizations of the world. Therefore, the world forces influence the walker and the creative-research in mysterious and unexpected forms influencing the doing-making of the visual practice.

Walking as a method responds to divert representation through thinking-body-sensory experience of places and environments. However, from Eduardo Khon, we know that humans and more-than-humans share the indexical semiotic sphere (Kohn, 2013). Considering this common form of communication, the world's influence in lens-based media practice is given by an indexical sphere that establishes a relationship between the lens-based media and the environment that includes what is beyond the photo-sensible surface and the culture that produces them. However, this sphere is not activated when the practice is focused uniquely in the subjective and the social if we consider Guattari's ecological triad (Guattari, 2014). Walking as an indexical activity let the elements, topographies, geographies and dynamism of the world influence the body and mind. Therefore, the assumption is that the multi-sensorial and more-than-visual experiences also influence the aesthetic practice conceptually and materially beyond the image produced. This suggestion opens questions such as what form of walking activates these index-

ical, affective and perceptive dimensions.

An example of how walking becomes an index beyond the image is when the pathway, in a similar fashion as the *Center for Land Use Interpretation*'s work *Hudson*, interferes in the narrative thread about something. Tim Ingold's concept of wayfaring suggests that walking is a form of rendering the territory in conjunction with human and more-than-human stories, delivering a non-fixed representation (Ingold, 2000). This form of presenting the territory establishes a relationship with the ecosystem in the process of making beyond its conceptualization or articulation. In relation to the latter, Ingold also relates walking with writing as a path creating practice and reading as a form to be guided by the author (Ingold, 2010). This association between wayfaring with the figure of the writer and reader opens a diffractive methodological leeway, in which the narrative dimension of walking is interwoven with the storytelling of places and subjects of study. Considering that there is a common association between film watching and the act of travelling statically, walking journeys also present a form of structuring the cinematic or still image sequential experience.

Considering the problematic presented in the first chapter, the methodological question is how the percepts and affects produced by lens-based media in viewers are equivalent to the ones produced by the world at the moment of capturing; how visual and non-visual spheres from which we as humans relate to local ecologies can be *re*presented and contextualized beyond and along the conventional. At this point, walking is an activity that present a form to avoid predetermined ideas about the world and the practice that creates a separation from the world; and also a way to reimagine aesthetic formal approaches that diminish the re-articulation of the world.

The following section describes a creative-research that uses walking as a method to focus on local stories and ecological relations. These practices attempt to define forms in which the other-than-human agencies are participants in lens-based media practices. They do so by capturing impressions of the process of making with particular attention to the atmospheric inputs of the

process. Hence, the practice is presented as not separated from the affective circuits of making-walking. The descriptions of the creative-research seek to clearly define out how the expression of the world comes to reside in moments and scenes, haptic experiences, local stories, speculations, landscapes, imaginaries, lived sensory moments, and ultimately the lens-based media practice and the aesthetic objects produced.

2.3   Cases of Study

2.3.1   Introduction

Chile is one of the most seismic countries in the world. On average, every forty years a massive earthquake or a volcanic eruption affects one or more regions of the country. Therefore, geological events mark epochs dividing historical time in cycles of creation and destruction. The geological extends to the social, economic and subjective in a multi-dimensional train of aftershocks. Hence, geological events and processes are intrinsically embedded in the conscious and subconscious of the population. Because of this, it is not rare that geological features such as volcanoes and rocks play an active role in the transformation of the land, urban planning, human structures, beliefs and world views.

The case studies in this chapter are focused on local ecologies surrounded by geological events, mysteries, and human activities. The project is focused on local ecological relations despite the geological events described have had global consequences. The idea is to return to the particularities of the local. That is, to turn to the ground; to explore stories attached to the land around the geological events. The geological influence is explored on a human scale instead of highly technological strategies of global visualization. The interest in the local becomes a critique of the explorations of global aspects of the geological and world processes that somehow homogenize ecological responsibilities (p. 6 Yusoff, 2016). Here, the geo-human relationship is unique and different from the one established in Japan or California, both highly telluric areas.

Figure 2.1: The ice body and the cascade. Images extracted from digital video.

Figure 2.2: Rock close to the top of the volcano. Images extracted from digital video.

2.4   Volcanic trips

2.4.1   Affective and speculative notes on the ascent to *Puyehue* Volcano

In 2011, during London's riots, I received a phone call telling me about the eruption of the *Puyehue - Cordón Caulle* Volcanic system in Sothern Chile ($40°35'25''S\ 72°07'02''W$). The volcano, which is the closest active cone in the region I born, was emitting an ash column of ten thousand meters and this situation last for months. The description of the red sky surrounding the cone during the daytime and the lightning' flashes within the ash's column during the night, were interweaved with the atmosphere of London at that time. This vague experience was dormant for many years. However, after a series of events, bifurcations and perhaps unconscious decisions, it re-emerged while I was ascending the volcanic system six years later.

2.4.2   First Volcanic journey

Ascencion and attunements

The first ascension to the *Puyehue - Cordón Caulle* volcanic system took around 4 hours. The journey was documented using photographs and short field notes. The ascent was quick because the dusk was approaching. The encampment needed to be reached as soon as possible. As a result, the documentation rescues swift impressions contained in pictures and individual words scattered in the white paper. While the words described levels of intensity, a fall, a pain, a part of the body, a thought, the visual documentation depicted quick views of the ground. Yet, the rush was not the only factor for this minimal visual and textual documentation, but also the demands of the environment: the heat, the humidity, the lofty hills, and the slippery ground. Topographical and climatic conditions that determined the visual practice by preventing the establishment of any cause and effect or poetic account of the impressions.

At the end of the journey, this simple documentation comprised the whole climb, from the valleys flatness to the volcanic steepness. While the pictures display a linear evolution of the trip's grounds, from the soft pasture to the rocky mountain, the words are cyclical repetitions that re-

veal nonlinear patterns. They become indexes of a relationship established between land, body and mind through the climbing process. Hence, the conventional value of words becomes secondary. They are rather objects whose periods and rhythms reveal something beyond its conventional meaning. They do not attempt to replace the atmospheres lived, but to (re)call memories about mood, states, smells, haptic feelings, pains, and parts of the body. Using Raúl Ruiz's definition of *Shamanic cinema*, memories of lived places or imaginary yet real experiences (Ruiz, 1995). The documentation is driven by the topography, fears, tiredness and atmospheric conditions. It does not create a complete experience, therefore it prevents the substitution of the experience. However, it neither problematizes the process of becoming an agent in the set of relations nor the representation of ecological relations. An outcome that is a consequence of the short time spent in the place that prevents any deep research and relation with the place.

Atmospheres are an interweaving of affect and percepts ever-changing that like the unfolding time is always gone when their presence is unfolded and visible. Therefore, there is an impossibility to express what they do with words, and generally, their description risks to substitute their fluidity from something fixed. Kathleen Stewart suggests that atmospheric attunements are sensorial, imaginary, material and also abstract, and that these processes have "rhythms, valences, moods, sensations, tempos, and lifespans", pulling "the senses into alert or incite distractions or denial" (p. 445 Kathleen, 2011). Stewart proposes to think and reimagine these processes of calibration through stories and haptic descriptions in order to identify this elusive object of analysis (Ibid.). In this context, the documentation presents the traces of that constant and disruptive atmospheric unfolding. The encounter with the volcanic domains demanded to be receptive and to develop an awareness and to become sentient from which emerged a narrative. However, this awareness seems to remain on the surface due to the short duration given by travel.

The reduced documentation mediates atmospheres through patterns, which somehow are the traces of the condition of its production. The path's muddy segments of confusion, the slippery step slopes of loose gravel of desperation, the solid ground of fluidity and clarity, and the grass patches of sensorial intoxication. The ground and the topography of the place produce moments

of difficulty and also effortless movement that extended through body and mind turning into patterns, repetitions and periods of words. Yet, these traces of the journey represents relations that flow only in one direction. The textual does not articulate discourses about the experience, but mediates superficially the walking-event. Another contextual level is needed to be added; one that dialogues with the direct material experience.

Scales, stillness, dependence and mediations

Once in the volcanic area emerged a potential form in which the world "represents" itself through temporal and spatial scales, that is, how the small becomes an image of a more extensive process that is difficult for us to grasp in its whole dimension. Close to the camp, around 300 meters to the top of the volcano, there was a stream of water emerging from a massive block of ice that was slowly thawing. The melting of the ice produced poly-rhythmic patterns. The view from the place was of two great lakes at the southwest, and a series of volcanic peaks towards the south. The ice melting, the stream of water, and the lakes made tangible the cycle of the water that involves the Andes mountains and the Pacific Ocean. The drops of melting ice were a point of contact with processes whose temporal and spatial dimension are beyond our sensorial capacities. In other words, they were the parts of the processes that were graspable in terms of scale. It was impossible to capture the whole dynamic of the process without thinking of its articulation through language. However, through the camera's eyepiece, the tiny periodic events of the water droplets acquire meaning by becoming metaphors of the incredible process of accumulation and release they are part of.

The small events were part of an uncountable subtle movement in the area. There were no dramatic situations. Instead, the place seemed to be asleep. The volcanic area is a desert with scarce vegetation, an immobile landscape populated by igneous rocks. This fixed land contrasted with the repetitive rhythmic patterns produced by the ice mass. The place was documented through static takes; segments of pure temporality from which the rhythms of the place could emerge in their rawness at the moment of viewing. However, the lack of vegetation and wind produced a moving image that lacked any internal movement. As a result, a sense of the

Figure 2.3: View of the Puyehue *lake from the* Puyehue *Volcano. Digital image.*

Figure 2.4: A drop falling from the ice block. Digital image.

impossibility of a visual mediation of the volcanic environment and its ecological relations arises. Despite its lack of movement, the volcanic landscape displayed and unfolded greater forces that influenced the body and the mind. Despite the lack of movement in the video, the long durational recording of the quiet environment was able to grasp or present the presence of greater forces, like waiting for the volcano to show itself suddenly.

As we have seen in the first chapter, there are two movements in film: the internal and the external given by montage (Bellour, 1987, p. 100). Raymond Bellour (Ibid., p. 102) notes that when internal movement is almost still and the duration long enough, it "act[s] as a support to the relentless search for another time, …". The long durational video shot in the volcano can be thought as the search for this "another time", that in this case belongs to the geological, which only become visible through violent events. Beyond our natural perceptual capacity, the lack of movement presents a temporal dimension that becomes a mystery imprinted in the video. However, the video mediation only suggests the mystery through our expectation of a recognisable event and our concept of what is a film. In other words, the geological temporality is given by questioning the video as such because of its lack of movement. This paradox is particularly relevant with the digital image because it has neither grain nor frame movements that reveal its qualities of movement. It makes us wonder if we are watching a still image.

The static and fixed video contrasts with the movement given by walking. However, like the paradox of the video capturing the non-event, walking also present a paradox. As we have suggested previously, walking extends beyond the moments of physical activity including moments of inactivity. The moments of inactivity became significant because somehow the body and mid, still agitated grasped rhythm, valences, moods, sensations, tempos and lifespans from a different subjective flow of time. The action of the environmental and atmospheric features induces us to be alert during the moments amid activity, in a particular state of openness; the mind liberated by the physical activity diminishing any thought that does not refer to the current moment and the environment. In this sense, the long video takes does not capture the relation with the environment and the ecology of the place produced by walking, but they are a testimony and a trace

of this state promoted by it. Walking drives a hidden and mysterious sequence of influences and events that lead to that specific framing in those particular places; that induce a particular state of currentness.

Perhaps, the enhancement of the currentness was not only promoted by walking, but also by the lack of humanity. From the physical activity and the human absence emerged a separate agreement with the world beyond hard discernment or evaluation. None of these situations are contained in the still moving images. It seems that is impossible to reveals these relations with no use of language, description or visual articulation of the situations. On the other hand, the remotness and the currentness hide a critical approach to the increasing problems that the volcanic area faces, such as tourism and energy projects. It is needed to establish a relation with the political and historical context of the area that expand the material experience of currentness to a wider set of ecological relations beyond the mere environmental sphere.

The ethics of dependence and speculative turn

. Among the tasks required to be in the volcano was to collect water, wood, and stones. The latter used to warm the tent during the cold nights since otherwise, it would be impossible to rest. Through these daily activities I developed a relationship of trust with the environment. This situation of reliance is a condition of dependence. Stacy Alaimo (p. 30, 2016) discusses the concept of inhabitation, which is not occupation, but rather a form of ethical action which arises "from the recognition of one's specific location within a wider, more-than-human kinship network" (Ibid., p. 30). This awareness is an "ethics-in-place" that "counters the unsustainable romance of wilderness fantasies and the lure of ecotourism" (Ibid.). In the volcano, inhabitation emerged from the environmental dependency produced by needs for resources but also for the impossibility to escape from this condition. This state promoted an ethical relationship with the environment. Contrary to touristic or sportive forms of mountaineering that have a heroic ethos, dependency is related with modestness and respect because it requires to "listen" the world around us. The situation of direct dependency defines an ethical relation that demands to be cautious, to be alert and respectful with the place. This ethical thinking define a "manual" for the

establishment of relations and open the ecological to the sphere of the spiritual, the subjective, and the speculative.

This ethic is somehow contradictory with the lens-based media practice since on the one hand there is a tendency to show what is not common; the spectacular and the beauty. However, on the other hand, this ethic(al) approach demands for certain places to not be captured as image because the environment prevents its capture. This contradiction, as well as the contradiction of the still moving image, requests us to re-think the act of not showing as a form to open the practice to ecological relations that are impossible to depict without their reduction by articulating them. The ethic(al) relation renders a lens-based media practice whose lack of movement or images is an indexical relation with the world in which the emptiness also denotes.

Figurative encounters

While collecting firewood in the encampment, I had an encounter that made me think about the images that I was missing because of the situation of dependency and the images that emerge "spontaneously" in the world. These thoughts emerged when I found a branch that had an enigmatic form. It seems like it had been engraved with a red-hot nail. The forms at each end of the stick looked like icons. At one of the ends, the figure consisted in two branches with ten marks in each branch that looked like leaves. On the other end, the figure looked like a lightbulb with eleven lines that also remind one of the form of branches with leaves attached to it. The figures were a sort of representation of the tree from which the branch belonged.

The branch revealed how the world also produces figures. However, the representational value of these figures is given by us. This encounter does not only suggest the world's capacity of producing spontaneous representations, but that its value as sign is given by the entity that grasps and recognizes some "value" out of it. Therefore, the sign does not have an unequivocal interpretation, and for this reason their de-codification says more about the entity that interpret it. These sorts of percepts produce reactions, amusements and introduce a mystery. They are the marks of relations between entities and forces that materializes in the form of images and fig-

ures that emerge from relationally. This unexpected finding revealed a form in which the world's ecological relations can be traced with the direct participation of the researcher, an issue that was going to emerge later in the research.

2.4.3 Cordón Caulle

Journey to the desert

A month after visiting the *Puyehue* Volcano, I had the opportunity to travel by horse to the desert of the *Cordón Caulle* volcanic complex. In this trip, a muleteer named *Don Segundo*, guided a group of us through the volcanic desert. He had been travelling to the mountains for many decades developing a particular relationship with the place. The man influenced the form we would experience in the place by inducing us through/in stories that disrupted our predeterminations about the enviroment. At the beginning of the journey, amid the thick mist of the foliage, the muleteer pointed towards certain spots with no apparent reason. Slowly there came into sight shapes and figures of nonexistence creatures "naturally" formed in the trees. The closeness of the forest and the slowness of the ride let us to see these fantastic shapes populating the forest. Like the icons encountered in the branch of the *Puyehue*, these figures reveal an spontaneous capacity of affecting our imagination through the sensorial. This process also reveals the tendency we have as humans to recognize figurative patterns of living creatures similar to us, that like the material manifestation of spirits populate the domains in which the other-than-human agencies prevails. The world becomes an allure of appearances; a magical expression that can influence realist projects. These shapes denote the equivocal ethos of the visual; always relative to specific perspectives. Despite this ambiguousness, we could share most of the figures among others.

The figurative process worked similarly than those optical illusions in which a figure is contained within another figure. In the first attempts, it is difficult to grasp the hidden figure, but once this concealment is overcome, it becomes hard to see the original shape. Hence, the trees were transformed by their anthropomorphic or zoomorphic shape features. There was no separation between the mysterious abstract figure and its materiality as biological entity. The extension of

Figure 2.5: Figure on the branch. Images extracted from digital video

Figure 2.6: Figure on the branch. Images extracted from digital video

Figure 2.7: Form in a tree during the journey to the Caulle *region. Digital image*

Figure 2.8: A rock that look like a monkey in the Caulle *volcanic desert. Digital image*

trees and rocks to the sphere of the iconic and symbolic creates a semiotic intersection through entities that maintain a duality. This practice brings the problem of the transformation of the world into the culture in something literal. Hence, to figure fantastic entities from the world is not similar to produce discourses from the world's images. While language creates conceptual figures that appropriate the image of the world by attaining meaning, made up figures from the world intersect nature and culture, indexical and symbolic through images. Yet, the exercise proposed by the muleteer was not only a game, it served as a memory device. These figures were coordinates or points of reference to navigate through the forest and the volcanic desert. They function as landmarks amid a homogeneous landscape.

Narratives of the eruption

Another aspect of this journey was the affective dimension of geology that emerged from the muleteer's testimony. This affective dimension was not only present in the figurative layer in the entities of the forest and the volcanic desert, but also in the stories told by the muleteer, which give agency and movement to the apparently immobile place. These narratives covered the volcanic desert with a mantle of mystery, potentiating the sense of a dynamic place that functions beyond the logic of cause and effect. On the other hand, these stories also provided a kind of context that widened the ecological relations beyond the environmental ones.

The first story regards to the muleteer experiences during the volcanic eruption of the *Cordón Caulle* in 2011. He vividly remembered the tremors for month prior the eruption. He recalled that the day before the eruption more than three hundred earthquakes occurred. The ash column suddenly appeared on the horizon. It was frightening because the house was continuously shaking and the low yet loud sound of the eruption during the night generated the sensation that the column was collapsing over him and his family. The testimony describes the influence of the volcanic event in bodies and minds of the inhabitants of the region. The muleteer's description of the volcanic desert and the volcanic eruption creates what Lisa Blackman's calls *affective thresholds*. She notes that these thresholds are "interfaces or intersections of oneself and other, between the material and immaterial, the human and nonhuman, the inside and outside such

Figure 2.9: Two rocks watching the sunset in the Caulle *volcanic desert. Digital image*

Figure 2.10: Detail of the hot water river. Digital image

that processes which might be designated psychological are always trans-subjective, shared, collective, mediated, and always extending bodies beyond themselves" (p. 23 Blackman, 2012). The muleteer was describing forms in which the geological forces are extended upon bodies and minds. In other words, the contagiousness of energies and forces of the geological upon the bodies. However, this testimony was not the only that makes emerge an affective dimension of the geological but also through stories that describe mysterious events in the zone, as we shall see in the following sections.

Inclusion as constrains

The documentation of the journey to the *Caulle* was mainly through photographs because the constrains produced by the horse riding. In the beggining, the ride allowed to observe the environment. However, as the journey continued, the attention turns to the horse. The obstacles along the path demanded us to be focused on the control over the horse. Slowly, this operation diminished any romantic idea of the relationship between the rider and the horse. It was a relation of domination that was made explicit when in some narrow segments of the track, the horses attempted to press my legs against the trunks. The animal was waiting for the opportunity to get rid of me. Somehow, the horse's attitude embodied a resistance to a common relationship between humans and animals, other fellow humans, and the Earth in general.

The previous experience was one of the many forms in which we as humans exert rhythms upon the world. Henri Lefevbre describes these practices as *dressage*. This practice is a learnt behaviour acquired through rites that, as a military model, bodily incorporates rhythms in a sub-conscious way (p. 39 Lefebvre, 2013). This dressage involves oppression through a combination of the linear and the cyclical, innovations and repetitions (Ibid., p. 39). The concept of dressage comes from animal practices, however it can also be applied to land cycles and people. For intance, the colonizer imposes a productive model that enforces rhythms on the inhabitants of the land in such a way that they become under a second class citizen in their own land (p. 2 Harney, 2015). Lefevbre notes that the process of rhythmic dressing alters healthy living bodies producing arrhythmia, and breaking apart the normal functioning of things (p. 67 Lefebvre,

Figure 2.11: View of the volcanic desert. Puyehue-Cordón Caulle *Volcanic system. Digital image*

Figure 2.12: Detail Obsidian River. Digital image

Figure 2.13: Signs in the volcanic area. Puyehue-Cordón Caulle *Volcanic system. Digital image*

Figure 2.14: Obsidian river and one of the volcanic cones. Digital image

2013). To ride a horse is not an agreement but rather an uneven relationship; an unbalance form of interaction that reflects a form of human subjectivity associated with a capitalist and productive paradigm.

This unequal relationship influenced the documentation and the artistic practice. Riding the horse becomes a discursive practice; it determined what was possible and what was not (Barad, 2003). The horse dressage, as a technology of movement, allowed only swift glimpses of the environment. These sequence of views oscillated between the features pointed out by the muleteer and the indexical presence of the horse. The experience of riding-making-images produced on the one hand, the subjectivization of the animal by the author, and on the other, the subjectivization of the aesthetic practices by the horse's movement. The relationship of oppression becomes mutual. In other words, the relationship of authority also controls the entity that exerts it. Thus, the documentation of the Caulle was driven by constraints and frustrations. To observe while ridding is always an actively pushing for and imposing of the will, which somehow becomes a relation from which all other ecological relations of the world get through. The question that emerged from this experience is whether the relationship established through the moving image practice does not produce a similar deal of dominance with the world depicted in general.

Memories of the journey

Ridding the horse was relative to the walking experience. It serves to think about the different forms in which the world relations emerge from both practices. Regarding the creative-research practice, one of the main differences between these forms of "moving" was the difficulty for capturing still images, and the impossibility to record moving images and taking notes while riding the horse. As a consequence, most of the stories and anecdotes emerged from disperse bits of memory, consequent to the images captured from the horse. Hence, the documentation consists in still images of figures and features of the landscape that reveal the extraordinary volcanic forces. However, the context is given by the memories of the journey that are somehow triggered by the pictures of swift sights.

Figure 2.15: Restless horses at night. Puyehue-Coedón Caulle *Volcanic system. Digital image*

Figure 2.16: Restless horses at night. Digital image

Figure 2.17: Horse's detail. hooves. Puyehue-Cordón Caulle *Volcanic system. Digital image*

Figure 2.18: Horse's detail. Looking at us. Digital image

The result of the journey's constrains is a film that consists in a simple structure. The film depict a black tablecloth on which the author is watching the journey's photographies of the *Caulle* journey. From a zenithal perspective, the hands and the pictures passing one after another, meanwhile, a voice narrates experiences, memories and hypothesis about events that ocurred in the volcanic desert. The text is base in the muleteer's testimony, and orbits around the vanishing of a man in the Caulle. Along with the story of the volcanic eruption, this story revealed another affective sphere of the muleteer's testimony. The film attempt to built a coherent experience of the moment of watching the pictures from which emerge a mediated experience that reactivates memories about the journey. As a result, the text is not related directly to the images, but are coincidental to the places in which the stories and commentaries were told. Hence, the relation between the narration and the order of the pictures becomes a meta-film searated from a secuence of images of the film.

Similar use of photographs as memory devices in filmmaking are developed in Hollis Frampton's *Nostalgia* (Frampton, 2019), and Raymond Depardon's *Contacts* (1990) among others. These works are also focused on the memories triggered by the pictures. They somehow focus in the condition, context and stories associated to the moment the pictures were taken. Like in these works, the Caulle film explore the condition of production of the photographs and the stories related to them to reflect and reveal the indexical dimension that belong to what is beyond the visible. However, the film also attempts to reveal an object that evaded the narrator during the journey. The film does not only contextualize the production of images, but it extends an invitation to participate in the search for this elusive object.

Indexical relations with the world and the figures of the media manipulation

During the eruption of the *Caulle*, the muleteer guided a television crew near the volcanic vent to make a reportage. The crew captured the only images that exist at short distance from the vent. The footage, available on Internet, was reformatted through the process of reshoting the screen using a standard and macro lenses. From this process of capturing emerged three dimensions that conform a meta-narrative that suggest an ecological relation with the world.

Figure 2.19: Frame of the film Caulle*. Video HD*

Figure 2.20: Frame of the film Caulle*. Video HD*

Figure 2.21: Frame of the film Caulle*. Video HD*

Figure 2.22: Frame of the film Caulle*. Video HD*

The first dimension refers to the materiality of the media. In the process of capturing the screen through video, the images of the smoke columns of the volcanic eruption became also pixels. Hence, the images' figurative character passed to a secondary plane in favour of the material qualities that compose the images' figures. This apparition of a kind of "substrata" of the images opens an indexical sphere through the image technology, which provides a subtle historical context, which due to the fast technological development, even though the eruption's footage was captured recently, seems different than the current qualities of videos. A second dimension is determined by the form in which the media is captured and reproduced. The former is related with the camera movements, its shake, swift pans and zooms that produce a indexical relation to the world through the affective influence of the event captured in the witness. These movements produce another dimension of the indexical meta-narrative. However, there is another layer given by the form of the video's reproduction that allows it to skip and jump through different points, thus, rendering another layer of the meta-narrative . These two material dimension of the footage presents an indexical relations between the world and the images beyond the content of the images as such, but with the media. They present the affective phenomena of the recording and reproduction of the video. Ultimately, the third dimension is related to the transformation of the images and what emerge from its modification. From the close-up and the extremely slowed down images emerge figures in the ash column of the footage—fantastic creatures, deformed faces that swiftly disappear to then be transformed in something else. The viewing of the footage was an extension of the journey through the place. *Don Segundo*'s practices were haunting the very same images he helps to create. In this sense, the media itself is an extension of the geological. However, this extension does not refer to the minerals that make the image's production possible but to the many indexical and affective dimensions that populate its manipulation and experience, which shall be problematized deeply in the next chapter.

2.4.4 The sound of the tremors

Many tremors ocurred before the Cordón Caulle eruption. From June of 2010 until the 4 of June of 2011 the period between these events shortened. The increase in the number of tremors

Figure 2.23: Frame from the reshooting of the Caulle *eruption's television images. UHD video.*
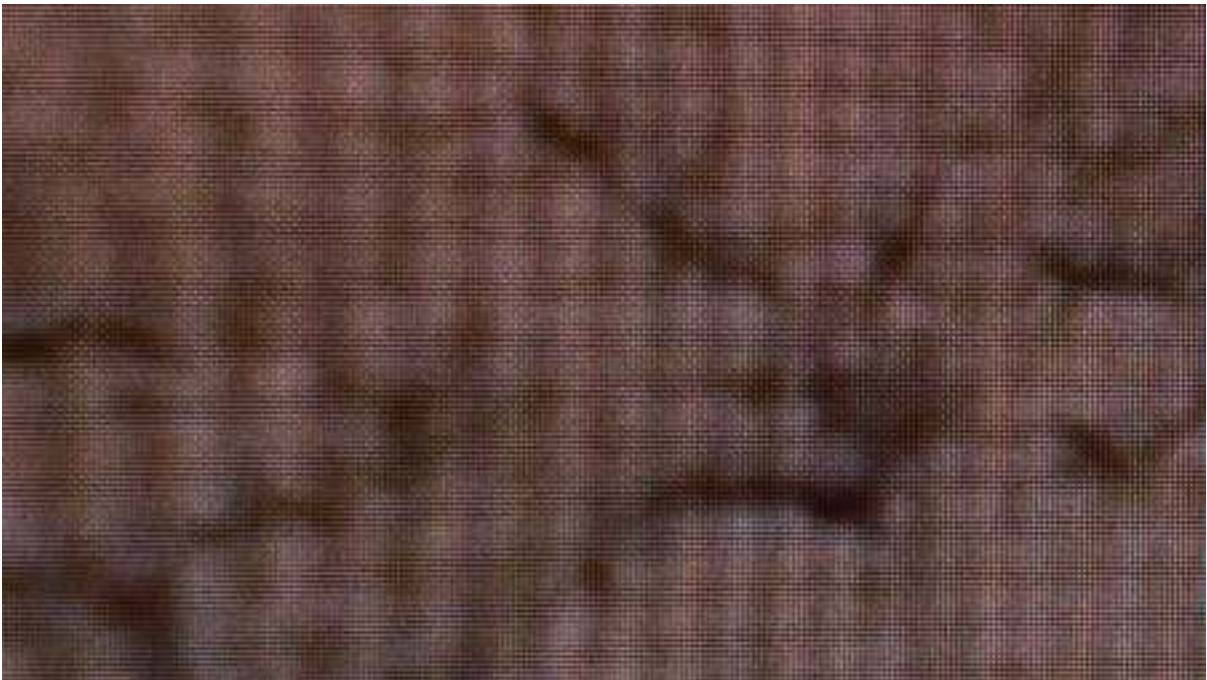
Figure 2.24: Frame from the reshooting of the Caulle *eruption's television images. UHD video.*

activated the alert levels. The description of hese tremors made by the muleteer allows us to explore forms of reproduction of their affective capacities. With this purpose, inspired by Jussi Parikka's concept of the *psycophisical* method and Alvin Lucier's geophysical music, the raw seismic data of the day of the eruption obtained through the National Service of Geology and Mineral of Chile (Sernageomin) was used to create a configuration of mapping and transduction to sound. The difference, it is that in this work, there are not arbitrary transductions, and it also incorporates a visual element.

The method consisted in selecting the perimeter that covered the whole volcanic system, select the closest monitoring station, and download the raw numerical data of the events of that specific day along with the specific time, coordinates and deepness. Specifically, the data was obtained through the *Incorporated Research Institutions for Seismology* (IRIS)[1], who developed an open-source framework for Python programming language named *ObsPy*[2] used by the software of search and visualisation of seismic data *PyWeed*[3].

In the first day of the eruption, the software returned a total of 48 earthquakes of different intensities and deepness. The raw data of a selected period for each seismic event was downloaded. Each set of data was taken from 3 minutes before each event until 3 minutes after. Since seismic events have a waveform shape equivalent to sound, the data could be used to generate equivalent sounds. The long period of the seismic events is inaudible. Hence, each of the events was scaled up. Each set of data was loaded in a data-table in the software *Pure-Data*[4], and read at ten times the original speed producing sound with the help of a sub-woofer. This process is a direct translation of a primary feature of the world, a measurable event into a secondary feature which can be sensed. As a result, there is a sound piece of 24 minutes of duration made out of the data of all the seismic activity received by the specific station the first day of the eruption of the *Cordón Caulle* volcanic complex.

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[1]Incorporated Research Institutions for Seismology

[2]ObsPy, Python framework for processing seismological data

[3]PyWeed, application for retrieving event-based seismic data.

[4]Pure-Data Software

The seismic station through the process of triangulation with other stations localised the coordinates of each event. As a result, it was possible to put in the map each seismic event the day of the eruption. The result is a set of points that produce a constellation of events. The points are presented in a stereo form through two reproductions in order to map them in a virtual third dimension that corresponds to the deep of each seismic events.
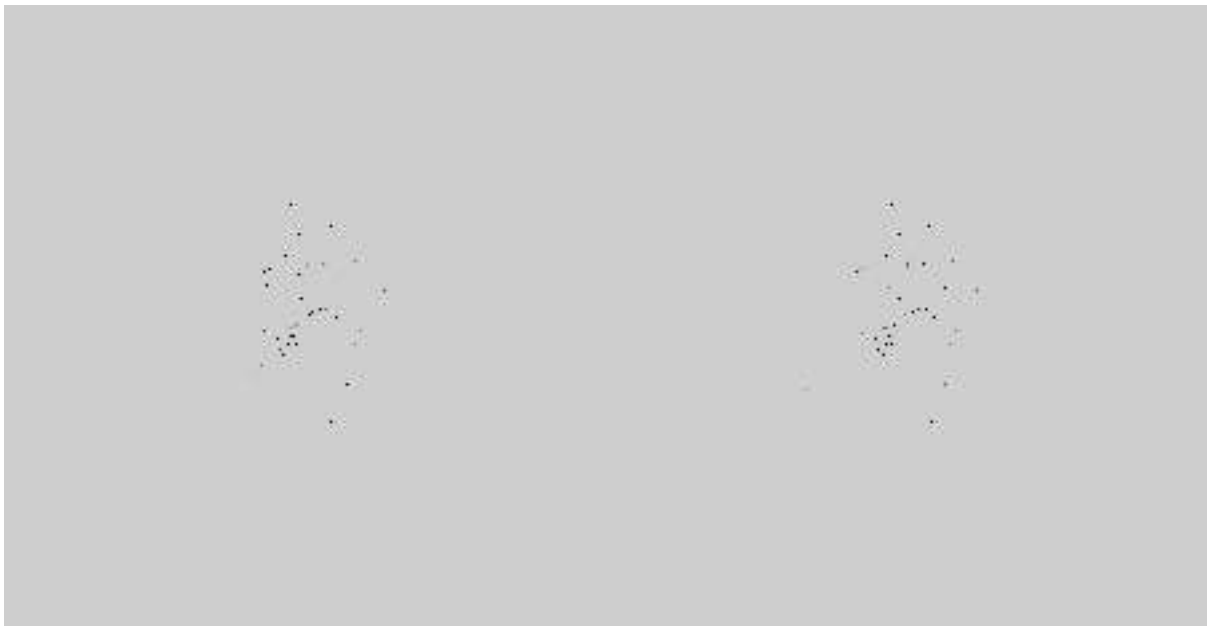
Figure 2.25: The constellation of tremors previously eruption Cordón Caulle. *Stereography Image. The points in the space represent the epicentre's coordinates, and the virtual deep produced by the stereography represents the deep of the epicentre.*

The project transforms the data to the limit of the sensible; the sound is of shallow frequency close to the audible limit. On the other hand, the stereographic image function similar to the figures found in the Caulle because it needs to look at a specific form to a third image emerges out of the two. Only then a new dodge dimension emerges. The attempt is also to recognise patterns from the process of transformation of primary features of the world which can be measured into secondary sensory features. This method serves to question the processes of translation and mediation of affective spheres in order to question our sensorial capacity through its scalar and illusionistic limits. In other words, how we can sense something beyond our sensorial capacities. This piece represents relations of space and time in a graspable form, which involve the geological event. However, in the scalar process the affective dimension of the world, despite the

equivalent transformation of the event, is transformed in something else. The kinaesthetic experience does not means the direct influence of the world expression in the viewer or participant experience. On one hand, in all of the previous experiments there was no contextual information about the ecosystems in which political, economical, cultural, geological and biological entities relate. There is a certain power in the material indexical beyond visual dimension of the lens-based media practice, this however without contextualization risks what Structuralist/Materialist filmmakers produced, that is, a reduction of the world relations to its relation with the apparatus, as if the human was not present.

2.4.5 Dune field

The previous explorations focused in affective material spheres of the practice, however it does not problematize the world's agencies and neither make these agencies participate in the practices of representations. To resume, they skipped an important part of this affective dimension. The first impression in the *Puyehue* volcano was one of being in the presence of a massive entity. The volcanic cone dominated the surrounding area and appears like it was sleepy. The illusion of human reflection in the more-than-human is opposite to what is very clear: the volcano "ignores" without being ignored, it lets us to get closer with no intention to do so, its agency has no reason or purpose, its force is not restrained or applied, yet it is the full expression that affects with its mere presence our bodies, weather changes, geological movements and the atmosphere that surrounds it.

Some months after the journey to the *Puyehue-Cordón Caulle*, I made an exploration of the coastal town of *Concón* in central Chile. This town has grown fast during the last decades because the development of large real estate projects of high-rise towers for second homeowners from the capital Santiago. In Concón there is also an important geological entity: the Concón dune field system. The dunes are located at $32°56'S$ and $71°32'E$ on a rocky terrace of the Chilean coast, around 80-100 m above sea level. The system developed over the crystallized Palaeozoic rock about 10,000 years ago in the early Holocene. The sand was accumulated from the erosion of the Coastal Cordillera, transported by the local rivers, and finally, the sea

Figure 2.26: Frame of the film Dune Field*. Video UHD.*

Figure 2.27: Frame of the film Dune Field*. Video UHD.*

wind swept the sands over existing older dunes of Pleistocene origin. About 6000 years ago the supply of sand from the shore stopped, and the dunes became isolated. Therefore, the dune system is no longer being fed with new sands, becoming a "hanging dunes" and a fossil system (Borsdorf, Hidalgo Datwyler, and Elórtegui Francioli, 2016).

The creative-research explores the encounter between the economic and geological trajectories through video and documentation. The extension of the dune field has been diminished by the real state projects, endangering the ecosystem that the field support. However, on the other hand, the dune field seems to slowly begin to react, feeding itself with the new material provided by the real-state projects. These synchronic events produce a speculative drive to assign capacities to the geological entity, particularly to the dune system. This drive first appears that at the top of the volcano when the glider passed overhead and the thunder stroke at a distance, however, it was not until *Concón* that it becomes a narrative device that reveal local ecological relations in multiple spheres.

The film that explores the encounter between the human and geological productions. Through simple descriptions of the historical sequence of events, it is revealed how the market has increasingly taken on the dune field. On the other hand, this plain description is accompanied with speculative accounts that emerged from the walking-with the dune field and its surroundings. The subjective speculative interpretation of the events and landscapes, become a method to overcome the incapacity of contact with the other-than-human. This method, which contrasts with the plain presentation of the events, attempts to contest the inert conceptualization of the dune field rendered by the economic forces.

The work uses written text to keep the division between the visible and the readable. Gilles Deleuze notes that differently from speech, written text does not make something new visible, or de-naturalize the visible image (p. 236. Deleuze, 2013). In other words, it attempts to not make the landscape as something to be read. This method is a form to avoid what Jean Louis Comolli defines as the fourth dimension of the visual image, which introduced the abandonment of the

depth of field (p. 17. Comolli, 2016) and imposes a form of seen the images. The use of written text seeks not to impose a direct reading of the image. However, this detour does not prevent its influence on what is seen and heard. The reason for diminishing the textual's influence is to let the world's raw expression slips into the film.

In order to let the human and the other-than-human expresses itself materially, the dunes and the human abstract places were documented through long video takes. It was assumed that this method of filming weakening, even more, the influence of the text. The long duration of the shots separates the text segments, which demands the use of memory to follows the narrative. As a result, there is a vague interweaving between text and images. The work is a structure in which all the scenes have equal duration. In this way, the recording apparatus is converted into a tool for exploring perceptual transfiguration of time defined by the different trajectories of the place. The cinema image becomes a form of measurement of how the environment affects our perception of time. The method counterpoises the dune field and the silent of wind, rain and the sea with the noisy machinery of construction building over the sand fields. This contrast reveals the fragility of both the spaces of the simulation produced by capital and the dune environmental ecosystem.

The long takes and the speculative method produce a meditation about the potential responses that the more-than-human has at its disposition to contest the action of human production. Through the slow observation of the construction sites and the dune field, the place embodies the unstable ground in which emerging capitalism is built. The speculative exploration opens a mystery which lies in geological entities, and their unintentional obstinate transformative unfolding, which produces what should not be touched. This last idea takes us to explore epistemologies that consider geological entities as agents that influence materially and affectively human processes and lives, and as such, they need to be respected as they would be humans. However, the speculative approach also present contradictory forms of representing ecological relations, since they are reduced to causes and effects. On the other hand, it attains to the world human characteristics in which agencies has somehow a purpose. Ultimately, the memory

device does not totally liberate the images from the close narrative presented.

2.5 Conclusion

In this chapter, the main methods of the practice were presented. With a documental drive, the creative-research gathered testimonies, images and documents incorporating non-symbolic spheres in the form of atmospheric and speculative accounts, narrative interferences that produce diffractive patterns, and material dimensions from which could emerge what is beyond the visible.

The primary method of moving image practice was walking. Through this activity, a set of material dimensions came out as affective forces of the world's expression. Walking rebalanced the symbolic through the promotion of a condition of dependency that involves an ethic dimension of the activity. The latter appeared as a result of getting exposed to the environmental elements with no immediate escape. These constrain forces to be in an immanent position of dependence and exposition in which slowly a relationship of trust is created. This condition of immanency is not romantic, but it manifests itself in being afraid, tired and disoriented. While the diminishing of the symbolic sphere produced periods of idle freedom, from which emerged visual and haptic thinking, the impossibility of a swift escape along with the coldness reminds us of a human sphere forgotten in the abstract space of human systems.

The exercises developed in the first part of this chapter explored forms for representation ecological relations through impressions, feelings, testimonies and other narrative elements avoiding the linguistic representation of experiences. The exploration is given by collecting pieces. This action presents a form for extracting subjective accounts from the representation. On the other hand, there is a notion that the world leads towards places, influencing decisions and encounters. It questions whether the entities of the world found us or we found them. In this form, the creative practice is not separated from the circulating forces and trajectories that compose the subject of study. However, most of the experiments risk to become works about the medium

because the lack of historical and economical context. There are material connections, equivalent scales and patterns that present relations between the author, the media and the world. However, these exercises does not present any context about the entities that relate in these localities, leaving the works in a vacuum.

Ultimately, the last video developed attempts to include the context in a materiality given by duration which present rhythmic patterns of the different places that define the encounter between the geological and economical spheres. This context lies and is scattered throughout the video, and as such present a counterpoised of the rhythmic experience of the place. However the plain narrative leads towards the generalization of a causal relation between the ecological relations that reduce the place and the entities producing it. A different relation between image and text is needed, and a new narrative form.

Chapter 3

Semiotic Aftershocks

3.1   Introduction

This chapter focuses on the main subject of this project: the development of a method of (moving) image practice that attempts to represent a world of distributed agencies. The methods explored entails the involvement of the apparatus and the practitioner's body in the environment in which these agencies operate. However, this endeavour is assumed as aporetic for two reasons. First, it recognizes the impossibility of grasping local ecological relations when the artist-researcher does not belong to such ecologies. In other words, time is needed to get to know the local ecological relations by establishing relations with the local agencies to become acquaintances. Second, it is assumed the impossibility of the mediation of such experiences without transforming the ecological relations through textual and visual language.

The processes described in this chapter distance us from assumptions that the automatism of image/moving image apparatus is the engine capable of revealing the liveliness of the world to us. Also, as a practice-led mode of research and creation, the project moves away from the basis of thinking about the capacity of moving image to reveal the world in a less anthropocentric sense. The project approaches this fundamental issue as a problematic of creating forms/expressions to come up with a mode of representing a world of entangled ecologies of multiple agencies and relations, through an economy of means and an emplacing of the artist in

that ecology as a vulnerable embodied being. In this sense, the process tends to balance what belongs to the world which expresses indexically in the practice despite being mediated and what belongs to the lens-based media.

In the context of this enquiry, there are developed two audiovisual programs that focus on stories in which the geological has emerged as a narrative agent in the postcolonial context of Southern Chile. In these explorations, the project not only aims to explore the world's influence in human narratives but also how its expression influences the representations that emerge from the creative practice. To summarise, the works explore local ecological relations through the non-human influences in local narratives and the creative practice. It does so by creating configurations that could evoke multiple entangled ecological relations through lens-based media practices that promote making-with, sensing-with and existing with the other-than-human.

Specifically, the historical events and local stories explored are situated in the postcolonial context of Southern Chile. The first case, that corresponds to the first section of this chapter, describes the creative-research that explores the events surrounding the last human sacrifice committed in Chile in the aftermath of the 1960 earthquake in the location of *Puerto Saavedra* (38° 46'59"S, 73° 24'00"W). The second case, which corresponds to the second section, explores the stories surrounding the rock *Grandpa Wenteyao* in *Pucatrihue* (40° 32'38"S, 73° 43'04"W), a very important entity in the systems of beliefs of the *Huilliche* people in Southrn Chile, which have been and still are transformed by the earthquake of 1960. In each of these stories, the geological forces play a role in shaping narratives, which consequently becomes part of the struggle for self-determination of the *Mapuche* people in the region. This affective capacity of the geological is part of geo-philosophical spaces of resistance that contest postcolonial subjectivities in the places studied.

A common characteristic between these stories is that neither of them is fixed because they have an indexical relationship with the world's expressive force and human historical processes. From the geological events emerge a sense of smallness and fragility of the human agency that not

only models the historical processes, beliefs and ways of understanding life, but also their repre-sentations, which include the aesthetic practices explored in this chapter. This affective capacity in enclosed in Luis Rubilar Solís's concept of *semiotic aftershocks*. In his article *Terremotos e Identidad Chilena en la Letra Nerudiana* (Rubilar Solís, 2011) (Earthquakes and Chilean Identity in Neruda's Poetry), Solís analyses the influence of geological events of 1960 in the poetry of the Chilean poet Pablo Neruda. In this project this concept is expanded by exploring the geo-logical influence beyond the poetical practices including its influence in local narratives, myths, foundational stories, historical-material processes and ultimately lens-based aesthetic practices.

The receptive malleability of the stories and testimonies explored in this chapter serve as an epistemological and methodological model for the art practices developed. However, a wide epistemological gap remains between the artist-researcher and the subject of study. The adop-tion of the epistemology of the subject of study is crontradictory in this project, however it em-braces the Amerindian Perspectivism's idea that there is no need for the de-subjectivization of the world in order to be known (Viveiros de Castro, 2014). Moreover, what it is needed is to attribute to the object of study an affective capacity, which shift the onto-epistemology from rep-resentations produced in the mind to ones that located in the body (ibid.). In other words, the body becomes the medium, and the activities performed the methods that facilitate the "action" of the world in the moving-image practice. Thus, the body-mind becomes the primal interface from which a material-subjective dialogue emerges; through which other-than-human "accounts" permeate the aesthetic practice. In this sense, the aim is not to conceptualise immanency, but to produce affective circuits in the process of making by immersing physically in a world of agents, to expose the body in its fragility to the many agential spheres that form relations in these local ecologies.

3.2   Land of Sacrifice

3.2.1   The Sacrifice of the Budi Lake

The first of these films explores the many versions of the last human sacrifice made in Chile and wondering what the other-than-human embodied in the land can tell us about this event. Immediately after the earthquakes of 21-22 of May, 1960, a sea-quake flattened most of the coastal cities of Southern Chile. Thirteen days later, the *Lafkenche*[1] reduction of *Collilufú* was performing the ceremony of the *Nguillatún* (A *Mapuche* rogative) with the purpose of calming down the ocean and avoid more hardships. However, the weather and the sea did not calm down. The tremors continued. The *Machi* (a *Mapuche* sorcerer) Juana Namuncura asked one of the participants of the ceremony to go to the house of José Painecur Paineo to bring his grandson of 5 years-old Luis Painecur, an illegitimate child whose mother was working in the city at that time. The boy was taken to the beach and thrown to the sea in a ceremony (Tierney, 1990).

Figure 3.1: A newspaper cutting published in Santiago de Chile days after the earthquake of 1960 announcing the news of the human sacrifice. Digital photograph

The interest in this event was not only its geological influence but also the many versions of the

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[1] *Mapuche* people from the cost who lives on the coast of the Pacific Ocean between the *Bío-Bio* (36° 48'50"S, 73° 10'14"W) river and *Corral* (39° 53'16"S, 73° 25'43"W), including the *Mocha* island (38° 21'54"S, 73° 54'54"W)

event. The boy's body was dismembered, and its parts were thrown to the sea from the *Mesa hill* (Ibid., p. 109); he was drowned by the tidal waves when he was picking bushes on the coast; the body was never found because he was swallowed by one of the many fissures opened during the earthquake (Ibid.). Immediately after her arrest, the Machi admitted the sacrifice to an anthropologist of the University of Chile, noticing that she was not sorry because the sacrifice was necessary to re-establish the equilibrium and prevent the end of the world. From that research, the event has been mostly studied on their symbolic aspects concerning the Mapuche culture (see (Montesinos, 2011), (Leiva Salamanca, 2013)). Also, most of these studies have been based on contemporary accounts of news, reports, and Patrick Tierney's book *The Highest Altar: The Story of Human Sacrifice* (Tierney, 1990). This lack of first accounts is because most of the people who participated in the event are dead and also because the judiciary documents are lost. This lack of direct information has drawn a very blurred line between the factual and the imaginary, which has created a mystery.

3.2.2 Perspectives on the ritual

Figure 3.2: A newspaper cutting published in Santiago de Chile given an account of the human sacrifice. Digital photograph

There are three main views about the sacrifice. The first argues that the sacrifice accomplishes

its objective of saving the world by re-establishing the equilibrium broken by the increasing Mapuche people's adoption of settler's systems. In this view, the sacrifice as a cultural practice denotes the right of self-determination of the *Mapuche* people. A second view argues that the sacrifice was necessary to re-establish the equilibrium. However, the norms of the universe were transgressed, because it was not done in harmony with the colonial system, which is now part of the Mapuche's world. The third view of the Chilean state argues that the sacrifice was made without free will; the act was done under the control of an irresistible force more significant than the reasoning of the perpetrator (Ibid.). Therefore, the sorcerer and her helpers were liberated. This later view recognizes the affective dimension of the geological event over minds and bodies. However, it leaves the event as something related with causality rather than as complex ecological relations.

Patrick Tierney presents a fourth view in his study about the sacrifice, which reveals not only a blurred boundary between the human body and geological entities but also a faint line between the magical and the actual. Somehow, he embraced the onto-epistemologies of his subject of study. Tierney's version reveals that the rock of *Makian* also known as *La Piedra Alta*, which is a young man transfigured, told to the Machi or the community's chief in a dream what was necessary to recover the world's equilibrium. Tierney's research does not separate places, geological entities and people. For instance, the similarity between the name of the chief, *Domingo Manquián*, and the rock of *Mankian* is not a coincidence, but a suggestion of the relations between the man and the rock. Likewise, the *Machi Juana* confessed to him that she was the *Mesa hill* and vice versa. Tierney's account reveals a metaphysics in which geological entities and people are materially connected and interchangeable, in which humans act as medium of geological entities and forces. However, Tierney focused only on human accounts. This research expands these accounts by attempting to narrate along-with the land. In other words, to consider the land as a narrative agent that has the capacity of giving its version of the events.

The previous experience in the Puyehue and the Caulle showed that to be able to grasp the complexity of uncountable, invisible and mysterious agents, there was a need for immersion

and exposition to these forces. In other words, the creative-research processes needed to be *emplaced*, that is to locate the body "within a wider ecology, allowing to see it as an organism in relation to other organisms and its representations to other representations" (Pink, 2011, p. 354), through the "sensuous interrelationship of body-mind-environment" (p. 7 Howes, 2004). Despite the previous interpretations of the sacrifice recognize a metaphysics in which geological forces and entities are interwoven with human practices, the land has not been considered as a "material witness" of the event. This creative-research addresses the encounter of a narrative along-with the land though a walking journey from *Puerto Saavedra* to the *Mesa Hill*. The assumption is that walking, as a subjective and speculative activity, has the potential to reveal aspects of the events of 1960 and the current postcolonial process *along-with* the land. Walking is thought as a form through which the practice is entangled with local agencias that participate in the ecological relations of the place. In the next section, will be presented the notes of the experience of walking in the search for the *Mesa Hill*. These notes somehow present the form in which the landscape's account emerged, revealing its version of the events through my subjective interpretation, which has been affected by the environmental forces.

3.2.3   Notes on the walking to the Mesa Hill

The land's narrative

The silence in the journey to the *Mesa Hill* was unavoidable. Like in the journey to the volcano, the moments of resting were of personal reflection and observation influenced by the activity. *WalkingLab*'s project *Stones Walks* considers rocks and the landscape as queer archives of feeling and affections to explore spatio-temporal convergences between the human and the more-than-human (P. 32 Springgay and Truman, 2017). Similarly, in the journey to the *Mesa Hill*, the rain, wind, sand dust, and hills; the industrial machinery, the police, and the roads expelled a mist that influenced the mind leading to speculations about the events that occurred 50 years before. While walking in silence to create a relational and intimate experience of "walking-with-place" (Ibid.), or rather, "telling-with-place" since the speculations of the event cannot be separated from the land, I thought about how the aftershocks of the *Great Valdivian* earthquake

are still affecting the area, influencing the deep meaning of the life of the inhabitants of the region.

In the same form as in the *Puyehue-Cordón Caulle*, the formal moving-image strategy emerges from the silent rest amid periods of walking. The video camera was left recording these moments, creating long-duration takes documenting the landscape. This documentation becomes a form of material memory that allows the triggering of memories and haptic impressions of the moment of capture while reviewing the footage. The extended video allows the emergence of the land features that operate metaphorically, in opposition and reaffirming the many stories associated with the geo-cultural event. Ultimately, the long video takes somehow mediate an affective encounter with the land, which has a shamanic potential in terms of Raul Ruiz because it can call memories among the viewers that they have never had.

Figure 3.3: A closed road in the path towards the Budi *lake. Picture extracted UHD video*

Notes from *Puerto Saavedra* to the *Boca Budi*

The first segment of the journey to the *Mesa Hill* began from *Puerto Saavedra* to the *Budi Lake*. The tarmacked road is closed to cars because the cliff had collapsed due to the sea's action. The gales stirred the dust accumulated on the road's surface. The abandoned road yields the

inevitable conflict between progress and natural forces, embodying the conflict between the Chilean government and the Mapuche people in the region. The road ends in a tourist hamlet. Like if it was protecting the community from the brave sea, a small shrine with a statue of the Virgin Mary lays between the houses and the ocean. The last trace of a figurative spirituality. Two hundred meters away, with the ocean on one side and a cliff of pending rocks on the other, lays the drain of the *Budi Lake*. The passage to the south was clear. However, when the weather is stormy, the passage is cut, separating the north from the south. Somehow, this separation is more than physical. The lake's drain separates different forms of living and ways of seeing life. On the beach, right where the lake encounters the ocean, there was an abandoned structure, a hopeless protection against the ocean.

The practice of reading the land features reveals an interpretative habit. A symbolic value emerges from the moving landscape that tends to be associated with 1960's events and the current political situation in the area. This semiotics is particularly strong in the video captured that isolates space-time fragments centring the attention on the specific land's features. From these fragments emerges speculative associations and interpretations that render a geo-poetic dimension. Therefore, the narrative and its metaphoric constructions do not primarily surge from events or situations that occur in front of the lens but through the mere presence mediated by duration as a material aspect of the moving image.

The emergent symbolisms become part of the ecologies of making along with the environment's affective dimension. The association of the hut's frame with fragility, and the road's erosion with the crumbling of the social and cultural cohesion in the region, add a concrete symbolic layer to the mysterious environmental affective sphere. These layers reveal the extent of the local multidimensional ecological relations in the place. *WalkingLab*'s work *Itinerant Reading Salon* explores the relationship between movement, text, and place that emerges from the concept of slowness as a form to think "in the presence of others" (Stengers, 2005). They argue that walking detours the Colonial productive model in knowledge practices by getting to know something slowly becoming a political practice that promotes an ethical coexistence of beings (Ibid.). In

moving images, the long durational video embraces the politics of the slowness by allowing us to think-with the land and be, to some degree, affected through the mediation of rhythms, sounds and events. Duration allows grasping the subtle unfolding and atmospheric variations of the locality and provides time to wander with the sight and the mind. In this form, symbolic metaphors interweave with the land's affective dimension, influencing the maker and viewer. Slowness allows one to return to the actual place, questioning the very mediation of the moving image.

The *Lafkenche land* to the *Mesa Hill*

The encounter's point between the *Budi Lake* and the Pacific ocean defined the line where the settler's world is left behind. The coastal *Lafkenche* territory was sinuous and solitary. The ocean breaks the smooth hills. However, the coast's fragility is not caused uniquely by the ocean but by its action in a deforested land, the *Lafkenche* people's increasing displacement to small reservations near the coast, and the sandy characteristic of the ground. This reactive stability reflects the fragile political, cultural, and economic situation produced by the conflict between the Chilean government and the Mapuche people. The uneasiness produced by the ground's instability also affected the mind beyond the symbolic sphere.

Moreover, the conflict between Mapuche people and settlers affects the process of walking. This conflict is a struggle of subjectivities that tensions the atmosphere. Considering the Mapuche connection with the land, embodied in the connection between the *Machi Juana* and the *Mesa Hill*, the land's productive modification has catastrophic consequences on the wellbeing of the indigenous communities. Hence, the feeling of anxiety produced by the land's potential collapse becomes a trace of a violent history. This affective process reveals a form of relationship between mind, body, land and history in which "the inside and the outside, the self and the land precipitate and fold " (p. 236 Wylie, 2005).

The question lies in the mediation of such relations. They emerge so evidently in the direct experience but how to preserve the land's representational power through mediation. This problem

is beyond the visual and linguistic conventions commonly associated with separation, causality and objectivity. The strategy used to promote the emergence of the world's representational power was the use of the long durational video shoots. The idea is to let the world unfold in front of the camera, incorporating haptic and tactile qualities of the environment to call memories and experiences. This endeavour seems contradictory considering the association of the visual with separation. However, taking into account that the different senses can replace or call others (Deleuze and Guattari, 1987), duration provides visual and aural moments that call the haptic and the tactile producing a sort of "haptic image" (Marks, 2002).

The haptic sphere does not emerge from the images as such but from past experiences and knowledge already internalized. The vivid memories of the ocean's smell and sound, the rain on the face, and the salty atmosphere at the moment of capturing the images were called back by the visual. Considering Raúl Ruíz's concept of *Shamanic Cinema*, these memories may be from places that have never been lived or visited. This paradox of being in the presence of an inexperienced place suggests that the representations of ecological relations are never about one place or moment, but about the interweaving of elements that include the locality captured, personal memories and the knowledge about what is being watched. The latter brings about the context.

The endless rain creates water streams that produce sinuous shapes that look like limbs. The soft texture and dark red colour of the wet clay had skin quality. These impressions accentuated the idea of deep connections between bodies and geological entities. These impressions also produce in the mind representations about the event of the sacrifice. The struggle with the elements increased. They make it impossible to have a rest or shoot any video. The whole situation was confusing; the ground was slippery. The field research seemed to be over. These frictions, resistances and boosts of energy are somehow present in the production of the creative-research. However, it is a dimension related to the precarious form of production. Generally, this dimension is not included in the outcomes of the aesthetic practices. Despite being generally ignored, they produce footprints in images and sounds, which become an index

Figure 3.4: Journey towards the Mesa *hill.* Budi *lake. Picture extracted UHD video*

of the environmental conditions of their creation. Similarly to the *Puyehue volcano*'s journey, in the journey towards the *Mesa Hill*, the influence of the world was enhanced by the conditions of dependency and exposition to the environmental conditions, and ultimately the incapacity to escape from them.

The first view of *Mesa Hill* revealed that it is surrounded by a beach and a wetland. Further south, there were caterpillars and trucks extracting rubble. Police officers were guarding the works. The view offered contrasting worldviews. In the foreground, an entity that embodied the Mapuche people's self-determination, and in the background, the machines scratching the land's surface to extract the material used for building roads. Both planes contribute to reinforce the figure of the sacrifice as part of a deep history of the region.

At the hill's top where the sacrifice occurred, a gust of wind and rain whipped the camera covering the lens with water. I was not able to continue recording. At the bottom of the hill there was no wind and the sun was shining. The weather was very changeable, and coincidentally it grew worse in a second attempt to record with video the place where the sacrifice took place. I made three attempts, but not being able to stay for long I gave up. This synchronicity seemed like a rad-

Figure 3.5: Sinkhole in the journey towards the Mesa *hill. Picture extracted from UHD video*

ical form in which the world's expression participates in the aesthetic practice. Juanita Sundberg notes (2014) that walking is a form of encountering local (hi)stories by capturing "fragmentary land-moments driven by affinities and distancing that emerge affectively in the sequence of incidents and experiences that conform the process of walking. To walk is to encounter with other geological and biological entities, with the elements and views" (Wylie, 2005). The incidents in the *Mesa Hill* become not only part of the walking-narrative, but also an integral part of the stories associated with the land. At this point, the subjective interpretation informed by the connection between the *Mesa Hill* and the *Machi Juana* mentioned by Tierney made me rethink the synchronic events not only as of the expression of the land but also of the *Machi Juana* who "spoke" through the elements as a mediated form of communication. Somehow, I became part of the stories attached to the land by walking.

The return

On the return journey, there was a dead calf laying in the ground amid the bushes. Its limbs were separated from its body. This encounter closed the journey. This finding was interpreted as the account of the land and about the story of the sacrifice, which while coincides with one of the versions told by the participants in the event, at the same time that it delivers a new background

Figure 3.6: At the bottom of the Mesa *hill. Picture extracted from UHD video*

by suggesting that the body was never thrown to the ocean. This encounter revealed that the whole walking trajectory created a multi-dimensional narrative. The weather, the topography and encounters in the process of walking are constitutive of the moving image media practice. The world participates affectively; it creates constraints, and "tells" stories. These narrative aspects are neither present in the representations of the news media nor in the structuralist approaches of ethnographic texts. Likewise, the conflict in the area does not belong only between the Mapuche people and European settlers. The world's forces and agencies also contest the land. The sea, the wind, and the deep latent forces also participate in the encounters, struggles and negotiations that define the place. As such, the land needs to be "heard". Through walking, the body and mind are exposed to the elements, a process in which emerges an affective, haptic and visual sequence of events. These sequences produce, inform, create and suggest metaphors and representations alongside the material interventions that take the form of constraints. Thus, the land, as another actor in the struggle between world views, also has its own representation of events.

Figure 3.7: At the top of the Mesa *hill. Picture extracted from UHD video*

3.2.4   The Film

After the description of the journey, the reader can better understand the outcome of this work. The film collects the experiences of the journey towards the *Mesa Hill* through the audiovisual documentation and notes. The latter presents an affective dimension of the journey, similarly to the use of text in the ascension of the *Puyehue Volcano*. However, this time affects and percepts are extended because they indicate the fragments of the experience and their relation to narrative threads that give a context. The form in which the textual information is presented attempts to avoid creating substitutes for the haptic experience through the segmented and scattered delivery of the information throughout the film. Therefore, avoiding any establishment of an accessible discourse about the events.

The film explores the sacrifice through the affective dimension of the environment in the walking process. However, for these affective dimensions to have a value, they need to be contextualized; otherwise, the interpretation can be irrelevant concerning the different trajectories of the places visited. The land triggers non-conventional representations, but their interpretation needs a context. In other words, the land's representational power is empty of meaning if its affective

power is not historically contextualized. This context can be geological, human or both, such is the case of the human sacrifice of the *Budi Lake*. Hence, an essential film's dimension focuses on the context, which shapes the experience of walking towards the *Mesa Hill* and the interpretation of the land-walking entanglement. The materials composing the context in the film are newspaper cuttings, YouTube videos, historical documents and text describing the walk. To summarize, several layers of information that are indirectly or directly related to the sacrifice of the *Budi Lake* form various narrative threads.

Recollection and diffraction

The film's form presents layers of information that do not attempt to articulate the sequence of events surrounding the sacrifice. Instead, it attempts to present heterogeneous materials in a diffractive form. In this sense, the narrative of the sacrifice is made out of unexpected connections. The narrative threads follow the idea of being in the presence of different places simultaneously through different narratives and dimensions, which somehow represent the multidimensional ecological relations. Hence, the video images are never about one place or a moment but about a mixture of memories and affects. In this sense, the film is a recollection of linguistic and audio-visual elements that do not attempt to describe but present a series of elements that share a region, agencies, concepts, and historical processes.

The film is a collection of images from the field research, and printed material collected from newspapers' accounts about the events of the 1960 earthquake, its aftermath, the sacrifice of the boy, previous cases that served as a legal precedent, laws, recent events of the *Mapuche* conflict, fragments of *Darwin*'s diary, and finally, the account of the walking to the *Mesa Hill*. Some of these fragments are not directly related to the events of the sacrifice. However, the attempt is to actualise and present a distant event concerning self-determination of the *Mapuche* to the current conflict through the presentation of an epistemological conflict. To consider a geo-metaphysical and onto-epistemological question that expands the current struggle beyond land rights to the right to carry on a different form of life produced by a particular environment.

Figure 3.8: Rainbow during the return towards Puerto Saavedra *from the* Mesa *hill. Picture extracted from UHD video*

The film incorporates three sources of textual material. The first group correspond to chronicles, which include accounts of the events surrounding the sacrifice, declarations of the witness, legal documents that define the judges' decision, and ultimately precedents of other legal cases. The second source is *Charles Darwin*'s description of the great earthquake of *Concepción* (estimated M8.1-8.2) of 1835 in *Chile*. This fragment expands the problem of the sacrifice towards an onto-epistemological problem. The addition of Darwin's Beagle diary is because two reasons: first, the account of how the earthquake affected his body and mind, and second and most importantly, the narration of a story about an old *Mapuche* woman that caused the earthquake because two years before she stopped the *Antuco* volcano's eruption. *Darwin* considered the story a silly belief; however, he recognized that experience and observation of lower classes and indigenous people conceive a relation between the action of volcanoes and the trembling of the ground.

Darwin's story reveals the *Mapuche*'s people association between geological mechanisms that are still not well understood by Western geological science, as the *USGS* stresses, papers linking quakes to later eruptions can only be speculations (Andrews, 2019) about their connection.

Claude Lévi-Strauss in his text *La Pensée Sauvage* notes that the enquiry is not *if* the action of the sorcerer did activate the anger of the volcano, and in turn, this triggered the earthquake. Instead, the question is whether there is a point of view from which the sorcerer's act over the volcano and the earthquake can be seen as "going together", and whether this grouping is the product of some order (p. 220 Levi-Strauss, 1966). This knowledge takes a geological shape by being accumulated through generations. Despite the story's "all-embracing determinism" (Ibid., p. 254), which contrasts with the free will praised by the Englishman, it establishes a relationship that anticipates the "science itself, and even the methods or results of the scientific procedures" (Ibid., p. 261).

Levi-Strauss's idea that some events of the world can be seen as "going together" invites us to think of the event of the sacrifice from a different perspective than the one of the sensationalist press, the legal system and the academic ethnographic approach. The attempt at silencing and discrediting the deterministic "magic" articulations of the world prevails in settler subjectivities, revealing one of the aspects of the *Mapuche* conflict. The film somehow embraces the "going together" through the presentation of several narrative threads. *Darwin*'s diary interferes with the stories about the sacrifice at the same time that it relates to them and, in doing so, generates diffractive patterns. *Darwin*'s account is accompanied by aerial images associating *Darwin* with the cartographic and techno-scientific ethos that objectifies the land.

The last group of images corresponds to two fragments about the case of *Danilo Catrillanca*, a young *Mapuche* who was killed by the police in a demonstration in a rural area of the region close to *Mesa Hill*. This act is presented as a different sacrifice in the context of the struggle of *Mapuche* people for self-determination. Symbolically, the case of *Catrillanca* coincides with the story of *Mankian*, since *Catrillanca* re-adopts the *Mapuche* culture, at the same time that in order to save the *Mapuche*' world he is sacrificed. However (in this case), not by the community but by the police.

The interweaving of stories and documents attempts, on the one hand, to unfix meaning and, on

the other hand, through many narrative layers to fix the multi-dimensional ecological relations of the place. In the next section, this aim is explored through a method present in the oral tradition of the *Mapuche*' people. In this method, the stories and descriptions of events are never unequivocal but constantly changing and sometimes contradictory, creating a fluidity and ever-evolving narrative that adapts according to the contingencies. These subjects will be explored deeply in the next section, where the main case study of this project is discussed.

3.3   *Wenteyao*

The last study case is the story of *Wenteyao*. This case study includes most of the methods presented previously. However, it presents a new element in the form of testimonies of people whom this *Wenteyao* has touched. *Pucatrihue* is a small village situated at the coast of the city of *Osorno* in southern Chile. In this place, there is the rocky island named *Wenteyao*, which is one of the most important places for the *Huilliche*[2] people. In *Huilliche* culture, and *Mapuche* in general, rocks, volcanoes, rivers and islands constitute enchanted places inhabited by powerful spirits (p.43 Foerster, 1985). These spirits are ancestors that were transformed or trapped into these entities for one or another reason. Foerster (Ibid.) notes that the power does not come from the stones in itself, but from a numinous presence that can regulate the order of the universe — that can control the environmental elements such as the wind, rain and ocean, and simultaneously act as an oracle (Ibid.).

From a symbolic analysis emerges a figure of *Wenteyao* that is double. On the one hand, a force controls the world's expression. On the other, a mediator in the syncretic post-colonial process. Within this material, symbolic and syncretic context, the earthquake of 1960 had material and semiotical aftershocks influencing the region's topography, culture, narratives, and political processes.

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[2]The Mapuche people who live on the coast of the South of Chile

Walking, narrative and the haptic

The method of walking in this study case gets a new value because it is an activity that has been present as part of the form of knowing attached to the region. For the *Huilliche* families, walking was a seasonal activity performed to collect seafood on the coast. They still travel by foot amid the thick forest of the coastal mountain. However, walking was also a peregrination that had stages (Ibid., p. 38). Enchanted entities populated the paths, and some places demanded offerings, actions and postures in order to assure a good journey (Ibid.). With this in mind, walking as a creative-research method was used as an attempt to reenact this traditional practice. Similarly to *Puyehue*'s climbing and the journey to the *Mesa Hill*, walking becomes a strategy for promoting a creative-research practice "along-with the environment" (Ingold, 2000).

Walking was already explored in the previous section as a narrative device. However, there is a material dimension that was not problematized. The primary filmmaking process' subject of the last study case was the land and landscape as a narrative device. Hence, the film consisted mainly of land's open views, commonly associated with separation. However, in the creative-research carried on in *Pucatrihue*, it emerged a second approach to filmmaking-walking practice. The method, that includes duration as a material dimension of filmmaking, focuses on fragments of the land rather than on open landscapes. Besides, the duration of the video is generally in relation to the events that occur in front of the camera. As in the volcano footage, this form reveals small processes that somehow represent or are representative models of more extensive prominent processes.

3.3.1   The rock and the earthquake

The practice and its outcome gravitate around the testimonies of three people whose lives have been connected with *Pucatrihue* and the *Wenteyao* rock: *Doña Margot*, *Don Isidoro* and *Don Tito*. These testimonies reveal affective connections, historical processes of settlement, and geological events. Also, they describe the convergence of cultural, economic, social, ecological and geological trajectories. Particularly, these testimonies present the base for the creative-research to focus on how the earthquake of 1960 produced what we call "semiotic aftershocks";

in other words, how material geological events modulate the symbolic around the process of post-colonization.

Don Isidoro

I was told about *Don Isidoro* in a corner shop that is right in front of *Wenteyao* island. He was an old man, who was said to have met *Wenteyao*. To reach *Isidoro*'s house, I followed a wide road recently made that cut through the mountainous forest. I met only trucks loaded with logged trunks which slowly went down the road. As I reached the hill's top, it was possible to see logged patches amid the forest. When I arrived at the top, *Don Isidoro* was outside his house. He was a friendly octogenarian man dressed in a thick wool garment and a beanie.

Figure 3.9: Walking towards Don Isidoro house. Photogram extracted UHD video

Don Isidoro told me that *Wenteyao*, like himself, was a peasant originally from *Lafquelmapu*[3]. He has vivid memories of the occasions he accompanied his grandfather to the rocky house of *Wenteyao*. He did not understand the conversation between his grandfather and *Wenteyao*

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[3] *Lafquelmapu* is a place located in the east of commune of *San Juan de la Costa* in the foothills of the *Coastal mountains* range, between the city of *Osorno* and *Pucatrihue*.

Figure 3.10: View in the journey towards Don Isidoro*'s house. Picture extracted from UHD video*

because they spoke in *Tsedungün*[4], the *Huilliche* language. However, *Wenteyao* voice could be heard. *Isidoro* noted that when *Wenteyao* was speaking, a branch of a *Canelo* tree (*Drimys Winteri*) shook. He remembered feeling emotional when he brought a seashell with seawater to *Wenteyao*, and the water of the seashell became a miniature of the ocean.

The encounter of *Don Isidoro* with *Wenteyao* reveals a form of communication through movements and apparitions that operates beyond words. Nevertheless, these apparitions are not fantastic experiences. Instead, they are small re-enchantments with the world. This re-enchantment along-with the unfolding duration is significant to the formal approach in the creative-research of *Pucatrihue*. This interest is embodied in the closeups and the subtle movements that express and reveal mysteries that escape the quick look and our total comprehension.

Don Isidoro's testimony also reveals a narrative whose characteristic is the equivocal repetition of events and dates. The sequence and numbers are swapped continuously. Thus, the meaning of the story emerges beyond the story by revealing a way of life in which the abstract represen-

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[4] *Tsedungün* is a moribund branch of the *Araucanian* language family, which a few elderly speakers only speak. It is spoken between the city of *Valdivia* and the *Chiloé* Archipelago.

tations of time have no sense. *Don Isidoro*'s temporal account suggests an onto-epistemology that rejects the reduction of the temporal phenomena by presenting interwoven events as fragments that connect in a loose sequence. This temporal dimension does not fix either relations or narratives. They are alive and ever-changing.

Don Isidoro's testimony operates between the factual and the imagined, opening a suture in what is thought as objective and subjective, real and fiction. This form of narrative operates in the indeterminate; that which renders the diffused threshold between the "real" and the "magical" and leads to the research to look at the world beyond "ideologies of truth". In other words, to accept as equally valid what can be measured empirically and what seems to be "going together" in Leví-Strauss's terms, which (again) refers back to connections of heterogeneous events of different spheres that relate beyond the empirical. This indeterminacy is not relativist. Instead, it is a statement of ethics that operates beyond the humanist centre. It is a form in which all the agencies, human and other-than-human, material and the abstract, are included as part of the ecological relations of place.

Figure 3.11: Pucatrihue *and* San Pedro *fishermen cove. Picture extracted from UHD video*

Don Isidoro tells of the current lack of interaction of *Wenteyao* with the arrival of tourists to *Pu-*

catrihue. This process began in 1957 when the road reached *Pucatrihue*. Two years later, the earthquake of 1960 not only blocked the road, delaying the normal circulation of people for a couple of years, but also separated *Wenteyao*'s peninsula from the mainland. Therefore, people no longer were able to cross on foot to *Wenteyao* rock. For *Isidoro* is not just the earthquake and seaquake that separate *Wenteyao* rock, but the decision of *Wenteyao* itself. The rock's magical fertility in which *Wenteyao* communicated with the people never returned. He separates himself with the arrival of the western world.

Figure 3.12: Llesquehue *river viewed from* Don Isidoro*'s house. Picture extracted from UHD video*

Don Tito

Don Tito was a fisherman in *Pucatrihue*. He was 12 years old when the 1960 earthquake occurred. He was living at the same spot where he lives now, which is very close to the estuary of the *Contaco* river. And therefore, they were very exposed to the tidal wave. However, they were able to escape and be witnesses of the phenomenon. He describes a massive and "thick" tide that rises three times, taking houses, animals, and plantations. He noted that after the seaquake, the river and the sea were united in complete calm. After a year, the beach and the estuary of the river returned as they were before. However, the sandbank connecting *Wenteyao* rock never

Figure 3.13: Contaco river mouth viewed from Don Tito*'s house. Picture extracted from UHD video*

returned, despite sandbanks appearing and disappearing every year. Differently than *Isidoro*, *Don Tito* rejects any interference of *Wenteyao* in this phenomenon.

Don Tito's testimony provides another coincidence related to the former abundance of seafood before the road's construction. He recalls that before the road, they were able to collect shellfish at low tide. Hundreds of hedgehogs and other species were at hand. It seems to be a correlation between the diminishing of the marine resources, the arrival of tourists and *Wenteyao*'s disappearance. In part because of the recent difficulties that fishermen have experienced regarding the lack of marine resources, a wooden sculpture of Saint Peter was erected facing the rock of *Wenteyao* in 2015. The *Loncos* (the *Huilliche* chiefs) complained to the borough, arguing that this was not acceptable. The fishermen association won the litigation, and Saint Peter is now facing *Wenteyao*'s rock house. The Christian figure representing the colonization of the place imposes a figurative spirituality representing the increasingly broken ecological relations driven by imposed productive rhythms.

Figure 3.14: Contaco river at the Coastal Mountains. *The tidal wave reached this place during the 1960 earthquake. Picture extracted from UHD video.*

Doña Margot

The rock of the tunnel of *Pucatrihue* is a massive layered structure about 20 meters high. This rock formation reaches the ocean; hence, the rock was dynamited to create access to the fisherman's cove. Besides the cave, there is a space that contains two small caverns and a thin stream of water that falls from the top. The place is closed off by a fence in which there is a sign telling visitors that this is a sacred place of the *Pukatrihequenches* (old inhabitants of *Pucatrihue*), and the inhabitants of *Pucatrihue*.

I met three people working in this enclosed space. Amongst them was a middle-aged woman whose name was *Margot*. They were preparing the place to do a "rogativa" (a prayer). They told me that along with the *Lonkos* they decided to clean and close the space because the pollution generated by visitors and the touristic industries were affecting the sacred place, and accordingly, the health of the people of *Pucatrihue* and *Margot* herself.

Margot received "spiritual" gifts given by *Isolina*, an old healer that used to live in the sector of *Puitril*[5] in 1950. *Margot* insists she did not seek to become a healer. Instead, she was led to

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[5]A locality of *San Juan de la Costa* between the city of *Osorno* and *Pucatrihue*

Figure 3.15: Sacred place of the Pucatruhuequeches *and the tunnel of* Pucatrihue*. This tunnel was made using explosives constituting the origin of the* San Pedro *fishermen cove. Picture extracted from UHD video*

Figure 3.16: Sacred place of the Pucatruhuequeches*. Picture extracted from UHD video*

master the arts of healing through a series of events beyond her will or agency. *Margot* worked in the Salmon industry for ten years. Hence, becoming a healer is a return to her "roots", a common figure also seen in the stories of *Wenteyao*, *Mankian*, and *Matías Catrileo*. On this return to her roots, *Margot* got sick. She asked Isolina in a dream what was wrong with her, and *Isolina* told her about a "rock". *Margot* interpreted that the rock was the one of *Piutril* where *Isolina* healed the sick. She had two revelations in *Puitril*. The first one was the position of the sacred place of the enchanted people of *Pucatrihue*, which is connected through the course of water to inland altars such as *Isolina* rock. The second one is her physical connection with *Pucatrihue*, which is somehow similar to the *Machi Juana* and the *Mesa Hill* presented in the previous section. She feels she has the mandate to maintain the equilibrium of *Pucatrihue*.

After the experience of *Puitril*, *Margot* was especially sensitive to the sensory aspects of the environment. From that moment, she understood that her life was linked with *Pucatrihue* and *Puitril*. *Margot*'s journey is the passage from worldviews. A change from a "reality" of causality to one of atmospheres, affections and enchantments. The story of Margot reveals the constant becoming of the stories associated with the place as indexes of geological, economic, cultural and personal trajectories. She becomes a proxy because, through her body, the well-being of the sacred spiritual places becomes visible.

Figure 3.17: Detail of the sacred place of the Pucatruhuequeches. *Picture extracted from UHD video*

Figure 3.18: Detail of the spring water of the sacred place of the Pucatruhuequeches. *Picture extracted from UHD video.*

3.3.2 Semiotic Aftershocks

Material and narrative influences

The previous testimonies reveal influences in two directions. On the one hand, the world's expression interferes in the representations and narratives, and on the other, the stories are transformed back into the surroundings by adjusting the world's events. In other words, there is an indexical relationship between stories and the world that establishes a semiotical-material ecology. On the one hand, the narratives transform the visible, and on the other hand, the narrative threads become indexes of human and more-than-human agencies and expressive forces.

The testimonies drive many of the ideas explored in the creative-research made in *Pucatrihue* and its surroundings. The initial idea was to *make visible* the current transformations to reveal encounters between the different trajectories that populate the region (Massey, 2005). However, walking became a form to explore the territory, haptically opening the activity to find the world expressions in human-transformed territories and almost untouched places. These opposite places, yet never pure of each other, produce a point of rhythmic relative comparison.

The video documentation establishes relationships between the testimonies and the phenomena captured. The stories and narratives become elastic and malleable objects that map local ecological relations and unfolding processes. Influenced and transformed by the expression of the geological, economic and cultural trajectories, the events described become equivalent to the land's features depicted. The ripples in the sand made by the action of the wind, world's traces that form small models at the same part that they are part of more significant local and global processes. This indexical relationship is one of the dimensions that are explored in the film. As we shall see in the following subsection, the film also explores an atmospheric dimension that is part of the visible and invisible agents that form the local ecological relations.

The haptic of the temporal

During the first visit to *Pucatrihue*, the weather was stormy. The wind and the rain made it very difficult to capture video and explore the place. The storm made to emerge the question of how the visual can produce a haptic "contact". The world interpellates us as subjects with its expression. However, since most of these expressions do not belong to the visual, images fail to reconstitute this expression in its whole dimension. The walk through the old road to *Pucatrihue* changed the focus from the landscape to the small materialities of the land that reveal slow geological processes. From the slowness of the fragmented land emerged the patterns of the unfolded time. In order to facilitate the encounter with these material expressions, I used the camera to capture fragmented details of the land that contained its subtle movements and rhythms.

The method was to let the world's small events unfold in front of the camera as a form of *making-with* the world. The slow observation of details facilitated the emergence of visions that otherwise escape from us amid the swarm of stimulus and unfolding events. For instance, these observations revealed how the movement of the river's currents slowly creates the sediment patterns at the bottom of the river or how the sea tide slowly makes the river grow several kilometres away from the coast. On the other hand, the figures on the sand produced by the wind, the signs of an

unfolded duration that, like the video image itself, capture the temporal phenomena in patterns and shapes. The forces that produce the patterns remain a mystery; only its traces are graspable. Their hypnotic movements and shapes drive the viewer to be enchanted, nevertheless, not just by their beauty but by the synchronicities it embodies, their relational character, and their affective and haptic capacity.

Through the focus on the details, the surplus of the world's unfolding is reduced and thereby made visible. The land details reveal ecological relations through the discretization of the world. However, it also promotes a haptic dimension. In the *Haptic Image*, Laura Marks notes that the close-up image has a particular haptic potentiality (p. xi Marks, 2002). Deleuze & Guattari (1987) also associate the "close-range" vision with the "haptic" smooth space, opposite to the "long-distance" vision associated with the geometrical optical space. However, they do not oppose the sensorial organs but assume "that the eye itself may fulfil this non-optical function" (Ibid., 492). In other words, the haptic space may be as much visual or auditory as tactile (Ibid., p. 493). This haptic dimension of the video is determinant for promoting novel forms of representation of local ecological relations in their multidimensionality.

The activation of dormant haptic experiences is not only made through the visual and the sonorous but also the temporal phenomena. Laura Marks (2002, p. ix) considers a helpful mediation between the viewer and the world captured when it attempts to reconstitute the experience that the author has at the moment of observing and listening. Following this idea, the non-manipulation of unfolding time establishes circuits of affection between the expression of the world, the process of making, and the act of viewing. In this form, the film attempts to take the viewer away from a narrative dimension of the landscape toward a shared physical existence (Ibid., p. xi) given by haptic dimension and affective circuits. In the film, the superimposition between the world's expression on the material and the testimonies produces an equivalence between geological entities, humans bodies and the stories, positioning the conventional symbolic and the material in a similar place of affects and affections. The analogy between the material marks in the land and the narrative alteration in the local stories leads us toward the

epistemological opposites revealed where the *Wenteyao* island and the coast meet.

Figure 3.19: Wenteyao *rock in a stormy day. Picture extracted from UHD video.*

Figuration and abstraction

From different perspectives, the *Wenteyao* rock presents a variety of zoomorphic and anthropomorphic forms: a mouse with no tail heading towards the sea, deformed faces and gnome-like shapes, caverns and a gate, among many others populating the island. Figures emerge and vanish in the abstraction according to the perspective from which the rock is seen. This visual complexity makes challenging the completion of the concealed part of the rock. The multiplicity of shapes and narratives denotes that there is no unique description or view. Instead, all is equivocal and all embody a mystery.

Considering the equivocal of the local stories and the abstraction of sacred places, the Christian figures such as the Virgin Mary on top of *Kanillo*[6]'s hill, and Saint Peter facing the *Wenteyao* rock. These plain representations contrast with the *Wenteyao* abstraction that resembles many things

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[6]Kanillo is a negative and destructive force present in nature and, therefore, in man himself (especially in the white man and the Huilliches who forget their tradition). He is associated with the "forces of imbalance", existing in nature. Kanillo and Wuentellao faced each other because Kanillu was burning the *Huilliches*'s crops. From this sttrugle *Wenteyao* jailed *Kanillo* in a hill in *Pucatrihue*.

yet nothing at the same time. The close unequivocal narratives of Christianity also contrasts with the equivocal of the *Wenteyao* figure and story. These contrasts reveal the struggle between the logical and the magical, the objective and the subjective, and between traditional definitions of representation and one that includes the world's expression. Christian figures keep humanity at the centre of the world imposing the human figure at the centre of the *Huilliches* worldview. The rejection of the *Huilliche Lonkos* (chiefs) to the installation of Saint Peter is also the rejection of human centrism. The project responds to this requirement by avoiding the introduction of the human figure in the films as a form of decolonizing the moving image media practice.

The world's constrains as epistemology

The film attempts to return the sight to the world. However, the film's avoidance of the human figure also detours the ethnographical representation. Most films about indigenous worldviews focus on the image of the human body, which opens an ethical problem by risking an exotic representation and their objectification. However, this ethical concern could and should go beyond the human body. Considering the physical connection between the *Mesa Hill* and the *Machi Juana*, and the link between *Pucatrihue* and *Margot*, the ethical problem here becomes beyond the human body. Since there is no separation between geological entities and people, capturing the image of these entities also presents ethical scopes. The response to this ethical problem was to avoid visiting or disturbing numinous places such as the *Piutril* rock in where *Margot* received the gifts or the *Wenteyao* island.

Constraints are relevant in this project because they demand to look askance at that which does not attempt to show but evoke. For centuries the *Huilliche* people have kept places and entities hidden or untouched, which is associated with their practice of enchantment as a warfare tactic. Margot noted that *Pucatruquehueches* were enchanted by the *Huiliches* and live in a spiritual dimension in *Pucatrihue*. They cannot be seen, but like *Wenteyao*, they operate in the place and beyond through the rivers and creeks. An inclusive ethic needs to reject the colonial logic that assumes the right to capture entities without including them as an agent of their practice.

Including the world as an image requires incorporating and participating in specific codes of conduct or rites from which subjective and pre-subjective affective circuits emerge. The method becomes to walk through without touching, to pass by without stirring, and to look for the enchanted in the process of being enchanted. In the context of a moving image practice, enchantment can be translated as making visible without showing. In this sense, to accept the world's ethical constraints, which determine what can be done, which is also to include its mysteries.

Figure 3.20: Wenteyao *rock from the north. Picture extracted from UHD video.*

Relationship between the testimonies and the visual

During the film's making process, there was an attempt to avoid an illustrative association between the spoken and the visual. The reason for this strategy was because the testimonies are not only related to a specific object, entity or place, but to the whole set of ecological relations that populate the region. Margot noted that rivers and creeks connect all the enchanted and sacred places of the inland region to the coast, establishing a constellation of places connected. For the practice and the film's development, the interconnected web of places serves as a model, and a form to avoid fixing relations. This form encourages a free association between the land features and the stories narrated, presenting an active and fluid mesh of relations. Hence, the relationship between the images and text seeks to open what is being told rather than illustrate it

With the previous in mind, the depiction in time of small-form manifestations of the world responds to the creating of fluid narrative meshes. The relationship establishes between text, and the small-events' sound-images produces subtle diffractive structures that open the stories of the *Wenteyao* and the earthquake of 1960 beyond anthropological figures. The testimonies are linked by the segments of moving images. The latter are generally separated by blank spaces reinforcing their individuality. However, the voice is carefully superimposed to avoid strong influences in the small processes depicted. While the human voice breaks the images' haptic sensuality, the sound smooths the transitions between the separate segments of time, producing the sensation of passing from one place to another, which is also reinforced in the multi-screen version of the film that mixed up places producing temporal and spatial associations.

Geography as a temporal dimension

The description of the work's previous affective dimension did not reveal its politics despite its ethics. In the journey to the *Mesa Hill*, the sequences of vistas produced a narrative. However, the political and ecological struggle was rather interpretative because of the homogeneous geography. Instead, in *Pucatrihue*, the practice took place in a broader non-homogeneous ecosystem. Hence, the journey was spatial but also through time. The different places unwrap the historicity of the region: from the millenarian forest to the fields of forest monoculture; from the deep time of the *Wenteyao* as a geological entity to its transformation into a tourist attraction. Using the conceptualization of Manuel DeLanda, the temporalities of the different places that belong to different historical moments, like layers of geological strata, are presented simultaneously in the region. These different historical layers belong to different rhythms and temporalities. The silent forest and its blinking light; the birds in the opened spaces; the chainsaw and voices in the distance, the cars passing by interrupting the continuity and homogeneity; the endless sound of the ocean; the rhythmic and repetitive music tourists bring. History emerges affectively. In other words, we feel the historical layers through the unfolding rhythms presented in front of the camera.

The features of the land also induce to establish a relation between *Pucatrihue* and the *Mesa Hill*. Their difference invites us to speculate whether the latter is the future of the former. In other words, whether the unfolding of one place will be the unfolding of the other. The increasing cultivation of non-native species such as *Eucalyptuses* in the surrounding area of *Pucatrihue*, would eventually encourage the logging of the *Valdivian Forest*[7]. The replacement of slow-growing species and low water consumption for a fast-growing, high hydric resource consumption has started to have consequences. It is not a coincidence that in the region of *Puerto Saavedra*, *Mapuches*'s attacks are focused on the forestry industry infrastructure and machinery. Thus, the connection between the two places is virtual because it is related to potentialities and genuine for the region's traditional inhabitants.

Figure 3.21: Pucatrihue *Bridge. Picture extracted from UHD video.*

Syncronicities and thresholds

The moving image practice was strongly related to observing as an active-passive practice related to walking. Like at the *Puyehue* volcano, the video capture was mainly made in the moments of calm and contemplation amid walking. Both field research revealed no separation

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[7]The Valdivian temperate forests is an ecoregion on the west coast of southern South America, in Chile. The forests are named after the city of Valdivia. It is characterized by its dense understories of bamboos, and ferns and is dominated mainly by evergreen trees with some deciduous specimens, though conifer trees are also common.

Figure 3.22: Old road and bridge to Pucatrihue. *Picture extracted from UHD video.*

between action and inaction in the process of walking; they are only different stages of the process. An important aspect that emerged from the observation and the video captured was the synchronic phenomena. For instance, in *Pucatrihue*, the cars' passing seems synchronized with the clouds that covered the sun or with the force of the rain. Differently from the mechanical determination of Welsby, these synchronic events are produced through the interpretation, a coherent practice regarding the *Pucatrihue* stories. In other words, the agential interpretation of relative events. As such, observation and experience open the world's events to subjective accounts that are built along with the world's experience. Many of these coincidental phenomena emerged in the process of montage, which denotes the capacity of the moving image to make visible relations and synchronic events through the action of "framing".

The framing also reveals *Pucatrihue* as a place of thresholds. These thresholds are related to *Margot*'s concept of enchantment, that is, a space between the material and the spiritual. The testimonies were also navigating in these blurred spaces between facts and fiction, and the virtual and the actual. Besides, during the field research, land and cultural limits also manifested as visual thresholds. Hence, the dynamic line separating ocean and sand, forest and beach, and ultimately geological and human monuments also constituted thresholds. These thresholds

Figure 3.23: Dust ripples formed in the Contaco *river. Picture extracted from UHD video*

represent the in-between spaces where the study cases and the art practice navigate.

The Forest, the virtual and the spectral

Another part of the creative-research was carried on within the area of *Mapu Lahual*, which is the last significant extension of coastal *Valdivian* rainy forest that still exists. To experience the *Valdivian rainy forest* is to have an encounter with pre-colonial times, with ecological relations that have perdured for thousands of years. Being amid the exuberant vegetation presents a boundless and endless world; an interminable *milieu* that produces nervousness and anxiousness (p. 238 Wylie, 2005). On the one hand, the textures, the light flickering over the vegetation, and the carpet of branches and leaves on the grounds are close at hand, rendering a haptic experience. On the other hand, the invisible yet present living beings create disturbing atmospheres. The hidden mysterious otherness affects the imagination. Subtle sounds easily trigger the mind about forces and creatures in the holes of trees and under the ground's thick layer of vegetation. Their tracks can also be traced, their presence smelled, and their sound heard, changing the place with a strong sense of virtuality.

This vertigo generated by the invisible menaces provides an atmosphere and defines another

Figure 3.24: Forms produced by the action of the wind in the sand of Pucatrihue. *Picture extracted from UHD video*

ethical sphere. *Huilliche* people recognize that some places can produce significant harm. Hence, there are places better not to tread. In this context, a forest is a place that is better not to stir. The reason is the presence of *Hanta Virus*, which is an airborne virus, an invisible agent that can contaminate by breathing the dust that contains the mice's dry faeces and urine. The threat is invisible and can be anywhere. These agents can be thought of as a reaction and a self-defence strategy of these isolated environments. The Hantavirus became a spectre that created the virtual atmosphere of the forest and that forced us to adopt codes of conduct like the many enchanted places that required similar attitudes to the *Huilliche*'s people.

The forest's sense of spectrality questioned my own spectrality as a walker, filmmaker and ultimately ours as viewers. The long-durational video shots hide the presence of the silent observer behind the camera, creating fiction since the apparatus is not revealed (Comolli, 2016). On the other hand, the spectral figure is also in the walking video shoots because the walker's presence is between there and non-there, perpetually arriving and departing (Wylie, 2005). For Jhon Wylie (Ibid.), spectralization attempts to disassemble the cultural construction of the coherent masculine narrator subject through a walking narrative made out of a mosaic of moods, incidents, introductions, and speculations about landscape and bodies.

There are situations in which there is no difference between register and engagement. Walking in the forest presented a radical approach to making, which consisted of being exposed, not being able to escape, and ultimately the potentiality of being contaminated and contaminating other humans and other-than-humans. Many video shoots were never made, thus becoming another sphere of spectrality, an invisible trace or index of the experience: the walking becomes increasingly agitated, the sensation of claustrophobia, the breathing, the sense of being lost and disoriented.

3.3.3   The films

The film explores the stories that surround the *Wenteyao* rock through the testimonies of local people. These testimonies reveal how the geological forces have played a role in shaping and activating narratives that respond to the current post-colonial process of the region. Hence, they are the starting point for exploring multi-dimensional, interwoven ecological relations. The testimonies of *Margot*, *Isidoro* and *Tito* reveal a mystery that displaces the thresholds between the human and more-than-human; fact and fantasy; and the material and the affective. The film attempts to present the world's expression in front of the camera using the duration of the video as a material dimension. The extended video lets the world unfold, allowing us to grasp and relate rhythms. This rhythmic comparison reveals the dressage of capitalism, the forms that controls the land and the world's entities. This dressage has arrhythmic consequences on the land, bodies and the process of making itself. In these forms, the film revolves around sensing and existing with the more-than-human as a matter of relations. It tries to evoke multiple, entangled relations within local ecologies.

The film is a multi-screen configuration that presents the dynamic of ecological relationality through immersion, rhythm, and storytelling that reveals the sense of the smallness and fragility of the human agency. The work incorporates the theme of an incommensurable knowledge that takes the form of a "deep past" that affects land, bodies, and spirit beings, which defines the local ecological relations and the entanglement of beings and matter. Amid these relations, the

film presents the conflict between worldviews: on the one hand, the slowness of the geological and biological growth, and on the other, the human-scale growth of the touristic and forestry industry. This conflict is revealed through the rhythmic contrast.

3.4   Conclusion

To resume this chapter, we can remind that the visible is only a tiny part of the processes in action. The world's surface provides incomplete information, and what is visible does convey equivocal information. Geologists and filmmakers have generally used spoken, graphic or mnemonic language to interpret or signify surfaces, translating the traces found from nature to culture. In this process, it is produced the "the intervention of human agency" (Wollen, 1997, p.8), and it is no longer intelligible whether the articulation of the reflection mirrors nature or culture (Barad, 2007, p. 802). This epistemological approach defined by the western tradition becomes problematic when the aim is to represent local ecological relations as multi-dimensional entanglements of different worldviews.

The stories of the sacrifice of *Collileufú* and the *Wenteyao* do not attempt to make visible. Instead, they present unclear thresholds between the visible and the invisible, the factual and the imaginary, the human and the other-than-human. These stories present an oral character that does not fix truths but narratives constantly in a state of deformation, transformation and incorporation of elements in each repetition. In this process, the inclusion of contingent events and contemporary agents in the narratives actualized them fluidly. This practice makes the stories along-with other-than-human and human agencies. Yet, this oral character also adds an indexical meta-narrative in the stories embodied in patterns and variation.

Don Isidoro described how when *Wenteyao* was speaking; a tree moved synchronically with the voice. The works incorporate this figure by relating the voices of the testimonies with movements and shapes of the world. It was assumed that the human figure, like a Christian icon, diminishes the ambiguity and spectrality needed in representations of the entangled ecological relations.

Don Isidoro's story sets the man and the tree at the same level.

In stories such as the one of *Wenteyao*, there is a demand to imagine, have visions, create realities and assign capacities. The methodological approach of the film can be thought of as an anti-cinema because it does not attempt to make it visible. It attempts to create visions rather than views or experiences. The only subject that the author can speak about is the process of making; that is, about the experiences of doing, which involves the travel from one place to another, its exploration, and the elements she or he faced.

There is an epistemological gap between the subject of study and the author that needs to be bridged by adopting an ethical position that prevents disturbances of entities or places. This approach assumes that to show something is also to possess it. Hence, there is a need to gain its trust, to become familiar with the place or entity. In this form, the image-maker is not "stealing" images or "souls" but getting portraits of an acquittance. In this sense, the testimonies become a model of behaviour.

The use of duration as a material dimension becomes a form to let things reveal themselves in front of the camera. It allowed grasping specific dimensions of the world that, through synthesis, would not have been possible. Through the duration and the world's masking by the frame, mysterious relations emerge from synchronic events, unfolding forces, and figures of the unfolded duration. These swift manifestations are magical visions that fill the mind. In the Anthropocene, the comprehension of the temporal phenomena is political because it is determinant to modify the relationship western thinking establishes with the world. Representations of local ecological relationships have to adopt the world temporal cadence and not the contrary, that is, the transformation of the world in order to accomplish the needs of the apparatus and the productive constrains of the temporal phenomena.

The films appeal to establish an encounter with the entangled ecological relations that commonly escape us in synthesised forms. Duration reveals the world's repetitive and layered structure,

opening a mode of perception that allows grasping rhythms, accumulations, changes, encounters, and ultimately stillness. Awareness of the temporal phenomena is relevant to developing an ecological politics that considers other ways of being and seeing life. In this form, the testimonies and narratives presented in the chapter are part of both the world's unfolded and unfolding processes, a place where the symbolic meets the material. In the following chapter, it will be analysed the conclusions of the field research.

Chapter 4

Re-enchantment: a tactic of representation

4.1 Introduction

In 1978-79, after the country's independence, the government of Mozambique invited Jean-Luc Godard to establish the future of a new national television. Godard aimed to liberate the audiovisual production from Western discursive practices to create an independent television and culture that protects the autonomy of the new country, (p. 95 Diawara, 1999). The current ecological crisis has increasingly become a problem of a new subjective autonomy that emerges from the periphery. Hence, the preoccupation of Godard in art practices acquires a new validity. Following Godard's spirit, the project aimed to explore a lens-based media practice that responds to this need. It does so by inquiring about the entangled role of the human and more-than-human in peripherical knowledge creation systems, more-than-human communication semiotic systems, and representation. For this purpose, subjectivities of indigenous world-views become a model of "action", which proposes guidelines for making along-with as a mode to represent multidimensional ecological relationships.

The reader must be asking what it means "make along with the world"?. Firstly, it means to assume that the world is not a mere subject to be captured but an agent that influences the art

practice. This assumption indicates that the function of the world's images is beyond the use to lend presence to discourses, linguistic articulation of the world, its use for the creation of experiences, and ultimately its use in metaphoric constructions. This assumption brings up another question, why avoid these visual uses? The reason for problematizing these common visual's uses is that all of them, to some degree, promote the privilege of the human against the world's raw expression. Hence, similar to the new cinema that Jean-Luc Godard aimed in Mozambique, this project recognized the need for lens-based media practices that subvert this privilege by questioning how to give back to the world space in human practices.

This inclusion required a redefinition of the form of humans and other-than-human related and communicated in the making's process. This redefinition is what in this project is called "ecologies of making", that is, forms of making that promote the influence, dependency and communication with other-than-human agencies and forces. In other words, the project recognizes that the world's ecological diminishing and reduction of ecological relations extends to the limited encounters we have with the radical otherness in human artistic practices. Perhaps this can be associated with our decreasing capacity for *living-with* and *sensing-with* in the immediate environment of our daily lives. For this reason, peripheral epistemologies and world views serve as a model to shape an inclusive, ethical relationship with the world in the lens-based media practice. This project assumes that this actualization is critical to contest dominant passive subjectivities in the face of ecological diminishment.

The furtherance we move and think *along-with* the environment, the more is required polluting western knowledge practices with more holistic approaches that include bodies and subjectivities. In his book "Mapuche philosophy: archaic words to awaken the being", Ziley Mora Penroz notes that the western world has to be re-enchanted, that is, to become filled with mystery and respect, with reverence and magic, with sobriety and harmony (p. 8 Penroz, 2001). This statement reflects almost entirely the encounter with the subject of study in this project. In concordance to the words of *Margot* and the stories of the people who became geological entities, "enchantment" needs to be used as a tactic of warfare. To be re-enchanted and promote this

practice is political. In this context, the world's inclusion in lens-based media means the reintegration of the world's mystery and its affective power; to re-adopt an attitude of respect and sobriety as a form of opening the door to the world's silent indifferent and indifferent *poesis* to the human practices.

4.2   The symbolic of the local

The project's strategies to represent local ecological relations seem contradictory because, on the one hand, the project focuses on the visual, which implies separation. On the other, the visual mediation does not ensure the participation of more-than-human agencies in the moving-image practice. The enactment of the project's conjecture revealed that the expressive capabilities of the lens-based media apparatus tend to overshadow the world's expression by replacing it with something else, which occurs even in the most simple forms of moving-image making. Following the ideas of Manuel Khon, the strategy was to consider non-conventional semiotical spheres in equal terms to conventional ones. In this context, the focus was on how the world agencies act upon the practice beyond its image as a set of affective triggers (Deleuze and Guattari, 1987) that influence paths and ways of seeing and making.

As we have seen previously, the study orbited around four cases. These instances have two main characteristics that made them particularly interesting for this study. On the one hand, the more-than-human agencies influence conventional semiotic systems, and on the other, they are part of epistemological systems that differ from western forms of knowledge production. Each of the cases pollutes traditional western epistemologies because they incorporate the "body" and deterministic interpretations of the world's phenomena. In them, there is not a drive to produce conceptualizations of the world as an agent, but they are an endless mingling with other-than-human agents that need to be subjectively interpreted (Viveiros de Castro, 2014). This characteristic of the stories explored induced us to think that a moving-image practice that operates *along-with* the world requires considering a similar ethical-ecological relationship with the world than the cases studied.

The concept of *provinzialization of language* proposed by Eduardo Khon served as a path for the adoption of an ethic that considers the other-than-human agency in a lens-based media practice. The concept points at the "symbolic domains [...] are always circumscribed by and nested within a broader semiotic field", hence "representation is something both more general and more widely distributed than human language" (p. 38 Kohn, 2013). Kohn notes that these intersections between semiotical spheres require particular awareness and ways of acting in particular contexts (Ibid.). The representation of local ecological relations needs to consider intersections between semiotic spheres beyond the conventional, and these intersections belong to specific locations and ways of being in those localities. In other words, particular surrounding conditions produce particular forms of awareness.

Back to the study cases of this project, the local stories and narratives explored in this project reveal the provinzalization of the language in particular locations of Southern Chile. Inspired by the idea of *Amerindian Perspectivism* theory, the creative-research looked for ways to embrace the epistemology and ethic of the subject of study (Viveiros de Castro and Skafish, 2019). This strategy explores and incorporates the particular provincialized language presented in the places. However, a contradiction lies in the epistemological gap between the practitioner and the subject of study. The question that emerged was how can be adopted an epistemology which requires a different form of seeing life; a different relationship with the world. The strategy was to enact physical activities inspired by the practices of the specific localities explored. Hence, walking became an essential research-process method being a fundamental practice of the inhabitants of this region, not only as a way of moving from one place to another but as a ritual.

As a lens-based method, walking interweaves the practice with local semiotic spheres. Consequently, it was used to facilitate the influence of the particular mysteries that belong to the locality and manifest through affects and percepts in the lens-based media practice. However, an essential part of the epistemological shift was accepting and interpreting the constraints and exclusions that emerge from the local atmosphere, specific geological entities, and particular

places. Ziley Mora Penroz notes that the communion with the world requires a particular ethic (Penroz, 2001), which is interpreted as a reverence to the more-than-human in order to awake to its affective force. In this sense, the fundamental research is about the path towards understanding this ethic.

4.3   Mediation and the language of the world

Provinzalization of language refers to a form of opening up of the symbolic. Considering that the material indexical form of communication between entities is perhaps the broader semiotical system in which all the world's entities participate, the questions that emerged are whether viewers can participate in this communication; and, most important, whether the film produces new ecologies by juxtaposing the ones in which participates at the moment of shooting and the one present at the moment of screening. The first chapter shows that ecological relations expand through many spheres; hence, why not think of sound and images as an interface between spaces and ecologies. This connection is not only through the milieu's image in which ecological relations develop but also by establishing relations between the ecologies present at capturing and screening. For instance, at a subjective level, the ecologies displayed can somehow affect back by the decisions that the images trigger in a viewer. This mutual influence is particularly strong even when the places are far away because of the globalised world. Ultimately, the last question that emerges is whether this juxtaposition is possible through the lens-based media without replacing it with something else that belongs to the cinema. This chapter will attempt to explore possible answers to these questions.

4.3.1   Magical thinking and practices of inclusion

Like in the narrative of *Wenteyao*, the world influences creative production. In this project, environmental events and encounters influenced the lens-based media practice by producing affections, percepts and constraints. In order to make the lens-based media practice become influenced by the local ecological relations, a method of interweaving and immersing the practice within these environmental forces was needed. On the other hand, the mediation required

balancing the affections that emerge from the world and those belonging exclusively to the apparatus.

In the project, the world's affective dimension and the land features participate as meta-stories registered in the formal material aspects of the lens-based media. We can think of these forms of influence as the world's "discursive practices" in terms of Janet Barad, since it is the world that determines what can be done and what cannot (Barad, 2007). However, this enactment is not unequivocal. It requires a subjective interpretation of the events and atmospheres and a specific ethic, which somehow relates to deterministic "magical thinking". Hence, the material meta-stories relate to mysterious forms of expression that manifest in the material world. This consideration of "magical thinking" as a drive of the creative-research practice is an ethical requirement for representing the local ecological relations.

Subjectivity played an essential role in interpreting environmental events and more-than-human expressive forces. The speculative interpretation is the form in which the practice becomes increasingly in *relation-with* and *along-with* the environmental forces. The subjective means taking positions and producing interpretations of signs embodied in small events, movements, and synchronicities. Claude Lévi-Strauss notes that "magical" thinking uses intuitive methods to discover arrangements that involve the senses (Levi-Strauss, 1966, p.12). Hence, instead of using measurements or rhetorical constructions, the "magical thinking" uses sensorial practices that incorporate the agents of the world affectively. The role of subjectivity is determinant in creating these arrangements of the world. Taking this into account, the representation of local ecological relations needs to promote the more-than-human in a subjective and intuitive interpretation of the affective. This strategy renders films that focus on mysteries instead of facts (Ruiz, 1995); fragments instead of wholeness; and impressions instead of truths.

The case studies' stories reflect Lévi-Strauss' ideas about mythical thought. The "bricolage" mode of operating influenced many of the decisions taken during the creative research because the limited repertoire of elements for making the films forced the recombination and interpreta-

tion of what was at hand (pp. 16-7 Levi-Strauss, 1966). Hence, instead of building a discursive arrangement as a form of knowledge creation, the film practice consisted of the arrangement of heterogeneous elements, sometimes with no evident relation. This practice is particularly evident in *Dismembered Land*, in which a different amount of textual and graphic elements alongside the journey's impressions build *along-with* the land's image a different account of the events post the 1960 earthquake. The interest in this formal approach is because of the frugality and ethics it predicates. The limited amount of resources in the filmmaking process induces an economy of means that is aesthetical and an ethical decision.

4.3.2   Lens-based media an semiotic intersections

The ethical, creative practice based on limited means also refers to a formal simplicity. Semiotic intersections are everywhere and every time. The assumption is that lens-based media is somehow capable of mediating these intersections. However, this mediation requires a particular relation between the world's affective power, language and the apparatus. In the first chapter, we have seen how the immersive capacities of digital media have produced the tendency for the increasing diminishing of the world's expression by producing an experience that belongs to the apparatus. This replacement that Peter Wollen names substitutional has become conspicuous with the development of Virtual Reality systems, which completely lessen the world's expression by producing a new "virtual" reality. On the other hand, the chapter also revealed how the expressive's force of the world is appropriated through conventional language by creating an articulated idea of the world.

The project attempted to address this problem by seeking an equilibrium between conventional human language, the indexical other-than-human form of communication, and apparatus affective spheres. This aim is framed within a contradictory space since mediation is other than the direct experience. A logical approach is that if the world's mediation will never be lived through film, why attempt to conserve a world's expression already diminished. However, it is not about mediating the direct experience but instead is about letting the affective and indexical semiotic presence and influence emerge in the film. Daniel Morgan's re-reading of André Bazin's ontol-

ogy of cinema argues that his "realism" is based on the ethical relations between the filmmaker, the world viewed, and the spectator (Morgan, 2006). In a similar form, the project realist endeavour is ethical not only in the sense of the world's captured but in the form how the practice and the formal aspect of the film are presented.

The stories explored have shown an economy of means in the form they present ecological relations. This form promotes an ethic in which the human abstraction capacity is not at the centre of the world but rather part of the world. The increasing abstraction in our understanding of the world's processes and its replacement for technological experiences and formal atmospheric mannerisms have contributed to thinking about the ecological problem from away. As a result, the visual has increased the separation between viewer and world, contributing to the loss of "tangible" relations. This project proposes an ethic that treats the other-than-human as capable of great power, and in order to let this power emerges through the moving image is needed an economy of means.

4.4   Semiotic aftershocks

The stories explored reveal semiotical intersections. The cataclysm of 1960 not only triggered the fear and hopelessness of the inhabitants of *Puerto Saavedra* but also created the need to make a permanent sacrifice that forced the discussion about the pertinence of the Chilean legal system regarding the act. This discussion is intrinsically related to the problem of Mapuche's self-determination, which is an ongoing problem embodied in the conflict between the Mapuche people and the Government of Chile. On the other hand, the telluric event modified the coastal line making *Wenteyao* rock become an island. This material event becomes the self-imposed exile of *Wenteyao* considering the economic and cultural changes of the place. Hence, geological agents influence and "question" the validity of the legal text, historical colonial processes, and the settler relation with the land through the semantic influences. Considering the environmental changes brought by the colonial processes and the increasing productive objectification of the land, the mystery brought up by these semiotical "aftershocks" has political connotations.

From deterministic views, there is no coincidence in that the road's finishing of the road at *Puca-trihue* is followed almost immediately by the Great Valdivian earthquake, neither there is in that the foundation of the fishers cove of *Saint Peter* was followed by the separation of *Wenteyao* from the continent. The telluric event became an agent that somehow delayed the process of extraction that modified the ecological equilibrium of the area.

However, the deterministic explanations simplify more complex geological and cultural entanglements. The stories are beyond the cause and effect presented in the previous paragraph. There is a high degree of mystery and equivocal threads that express the complex dynamic in which they operate. In non-linear and equivocal narratives, the silent and fragmented information about the events set a mantle of mystery that belongs to the oral tradition. In other words, malleable narratives render many versions of an event, which are ready to be transformed by new successes. This characteristic is specific to the semiotical aftershocks explored in this research: an equivocal fluidity opens up to new actors, which trigger the reinterpretation of past events.

4.5   Strategies of frugality

An essential aspect of the creative-research practice tied in with the ways of seeing the life of the Mapuche subjectivities was the experiential frugality. Thes strategies did not attempt to break the illusion or diminish content and meaning beyond the apparatus as Structuralist/Materialist filmmakers attempted. Instead, frugality appeals to the minimum use of arbitrary aesthetic decisions, an economy of means as a form that maintains the expressive balance between the world and the apparatus. This aesthetics opposes the aesthetics of experiential excess or poetic experimentation.

A first step to attain this formal approach consisted in providing space to the world to be an active participant and not only a lender of "presence" to discourses or sensorial experiences. In the four films of the project, "Dune Field", "Caulle", "Dismembered Land" and "Casa de Piedra", the world's expression is incorporated throughout the duration. The sound of these temporal

and spatial fragments are from the recording situations with no addition of music or drone sound textures. This strategy renders an experience that corresponds with the one lived during the production of the works. This "realist" form invites the viewer to develop an awareness *along-with* the world's raw duration as image experienced in the production of the sound-images. In order to contrast this aesthetic of avoiding the surplus of objects, in the film *Dismembered Land*, the fragments of Darwin's diary are accompanied by areal shoots and a drone sound, which associate this practice with objectivity, separation, technological perspectives and synthetic experiences.

The long duration shots invite viewers to cultivate the focus on small events instead of reading the world's image. The formal strategy of fragmentation inspired by Bresson directs the attention to specific world's features from which, through the temporal experience, slowly emerge events and synchronicities that reveal part of the local ecological relations. The frame isolates particularities of the world that otherwise would scape us. This effect is particularly strong in *Casa de Piedra*, the simultaneous sound-images that recreate the multitude of happenings as a condition of the world. On the other hand, this simultaneity produces unavoidable synchronicities between frames that diminish the individuality of each temporal segment by creating juxtaposition. However, viewers have the choice, as we do in the world, to focus on the specific events displayed on one of the screens.

The screen becomes a contact surface between the profilmic and the projection event, an interface that juxtaposes ecologies through film creating new relations. In this circuit of affections, this frugal formal approach avoids the privilege of one space over the other, allowing the subtle world's expressiveness to emerge without radically transforming it through the production of experiences that do not belong to the moment of recording. This strategy attempts to let the world's mysteries emerge with no drama or thrill that replaces its character when filming. In other words, the mystery of the world given by its affective force is supplied by the multitude of elements entangled together that reveal themselves to us as synchronic relative unfolding events in relation to the screening event.

The world's affective forces are indexical signs that trigger reactions, sensations, moods, and ideas, among many others. This semiotic dimension is not only the subject of study of this creative-research, but it is also part of the practice. They triggered formal decisions leading to unforeseen paths. The interweaving of the creative practice in local ecological relations as a means to represent them was not about whether the world influences the practice or not because, to some degree, this is unavoidable, but whether the methods of signification enact this influence. Nevertheless, an expressive artwork requires adding something to the world. This addition jeopardizes the emergence of the world's expressive force in art practices. This contradiction is at the centre of the modern world, specifically ecological critical cinema. An economy of means in lens-based media can be taken as inexpressive. However, the centre of its expressive power is not in the film itself but in the world's elements that make up the artwork.

4.6   Walking and listening with the body

Walking became an essential form of enacting an affective relationship with the world. It activated encounters in which operates a multitude of agencies. Through walking, the aesthetic practice operated and negotiated amid this multitude of interwoven agencies, producing configurations that encompass mind, body, topography, weather, worldviews, economic interests, knowledge institutions, and the legal system. The body was an interface through which the practice became an index of the world's forces. Nevertheless, the question that arises is how to mediate these signs that are not visible; that evaporate in the making process. One of the approaches was the use of conventional signs. However, in order to avoid visual or textual representations of the affective dimension, the formal aesthetic approach followed the doctrine of the "minimum means" in which descriptions become loosely *words* that do not articulate. However, despite the use of small semantic objects, they already belong to the culture, history, and, more importantly, personal stories and experiences that can be activated through these words concerning the visual.

These encounters also influenced decisions and actions that modify the moving-image practice. They both hindered and facilitated the intended, confirming and refusing previous ideas. These world's discursive practices were activated through walking because it exposes us. Waling promoted a forced dependency on the environment walked. This relationship de dependency, the minimum descriptions, and the material encounters with others de-objectified the world. As such, the films themselves become testimonies shaped by these encounters. This materiality is beyond the photo-sensible surface and conventional representation.

Clarified the previous, we can affirm that the focus was not the representation of the walkings. Instead, walking was a catalyzer for creating relations with local ecological agents through dependence, no matter how ephemeral and devoid of meaning they have been. The state of alertness involving the whole sensory system and the direct physical exposure to the land produced deeply encounters with a radical otherness. However, this affective-material dimension of the practice does not mean that walking is deprived of the historical context. The material relationship weakens the paradigm from which the mind and the vision construct the world; therefore, walking distilled the previously known; it brought ideas and concepts back to the ground and the direct experience. Walking makes to relate to an immanent consciousness that pure rational intelligence is capable of conceptualizing but not grasping.

This consciousness about the world reveals dynamic strings that connect entities with ideas. However, this consciousness also brings out constraints that define the practice's ethics, which is based on the idea of ecological dependence entrenched in the study cases.

4.6.1 Mystery as ethics

By opening representation as an other-than-human capacity, Eduardo Kohn contests human exceptionalism. Considering that exceptionalism is one of the ideological bases for the world's subjectivization, opening "the human" practices has an enormous political consequence. This "opening" should include the moving-image media practices. This operation does not mean to assume that the world's expression produces moving images in the same form like us, but that,

like in the stories explored, the world's agencies enact through the lens-based creative process. Thus, the film becomes somehow a trace of the expressiveness of the world. However, a balance between the conventional and the indexical is needed to let this expressiveness flourish. The screen needs to be an interface that juxtaposes ecologies to create novel ecological relations. Peter Wollen notes that there is a habit of reading or deciphering images (Wollen, 1997), and therefore, to attach symbolic value to the world as an image. This habit makes this balance especially difficult and perhaps impossible to achieve. In order to discard certain habits of conventional thinking, the concept of *re-enchantement* was explored as a form of problematizing the world's mysteries which manifest themselves non-linguistically.

Eduardo Viveiros de Castro notes that the *shaman* uses subjectivity for taking the position of the other-than-human through practices that are essentially corporeal (Viveiros de Castro, 2014). The shamanic relationship with the world is also ethical (Ibid.). The stories explored in this project reveal a similar ethical relation with the world than the Viveiros de Castro's shaman. Hence, we can deduce that the development of a similar ethical relation needs to incorporate the body because it is what makes us dependent on all the other entities and living beings. This ethic of dependency was harshly adopted in the *Puyeue* volcano's journey or the hard walking to the *Mesa Hill* for instance. However, the common denominator of dependence of all the experiences of making in the study cases was the constant impossibility of obtaining clean images and sounds or obtaining any image at all. This relation of dependence is political because it reflects a more profound connection like the one revealed in the relationship between the *Machi Juana* and the *Mesa Hill*, and between *Doña Margot* and the sacred place of the *Pucaterhuequeches*. This convergence between the human body and the geological site was the first encounter with enchanted places and transfigured entities that revealed the profound ethic of dependence.

The ethic given by dependency requires being respectful and cautious about going to places where we have not been invited. Besides, it asks us to be patient to know and get to be known. This ethic accuses that it is always better not to visit or touch certain places of great power without an important purpose. Ultimately, the ethics of dependency is open to speculation as a form

to fill the lack of tools and means to look for explanations. Hence, since it was impossible to relate the coincidence of filming the sacrifice site and changing weather patterns, the assumption was that if the "Machi" is the *Mesa* hill, she did not want to be recorded, or perhaps she intended to present the place as it was at the moment of the sacrifice. These conjectures raise ethical questions about the right to capture images of the world, considering that there is no separation between the lands and their inhabitants in a relation of dependence.

The knowledge of the connection between the *Machi* Juana and the *Mesa* hill influences the decisions taken during the research in *Pucatrihue*. Particularly, the encounter with the *Mesa Hill* made me not pursue finding the rock of *Isolina* described by *Margot*, or attempt to cross to the *Wenteyao* island. The former decision was also taken after listening to how *Margot* was affected by the encounter with *Isolina* rock. The only sacred place visited was the site of the *Pucatrokueches* only after the invitation of *Doña Margot* to participate in a healing ceremony. To sum up, these stories and experiences reveal that these entities imply powerful forces that require to be somehow introduced to them.

The previous description of events brought an onto-epistemology that requires a particular behaviour in the world. This worldview becomes increasingly incompatible with the productive colonial model, which recognizes ownership according to its productive value. The Mapuche people's right over the land is their mutual dependency, which is also a form of transcendency considering that the land remains. From this link, in which the place conserves the enchanted spirit even when the body no longer exists, emerges the importance of keeping forms of seeing life whose ethic is based on the mutual trust with the environment. To sum up, the development of an ecological art practice needs to embrace an ethic of dependence. However, achieving this trust requires time to get acquainted with the places.

The acceptance of this mystery required a particular consciousness or awakening that can be seen in all the *Mapuche* stories encountered in this project. *Mankian*, who had not respected his people's beliefs, awakes after being trapped and transfigured into the rock; *Wenteyao* also

awakes when he becomes rock; *Margot* awakes from her western life to return to the *Huilliche* practices. This awaking means to be re-enchanted with the world. In other words, to readopt an ethic of dependence that invites us to return to some basics, to have a conscious comprehension of our dependence on other humans and more-than-humans. Perhaps a cinema of inclusion aspires only to extend the invitation to participate in the world with a different ethic.

4.7   Shamanic Cinema and the invocation of mysteries

The project attempts to operate similar to Raoul Ruiz's *Shamanic Cinema*, that is, calling memories of events that never existed. However, the memories called are not only about events but also about the world's affective manifestations. These memories evoke or conjure something beyond the visual and, therefore, not in the images. These memories make us grasp ecological relations that we have never experienced and relate them with our reality. The focus of the films is to invoke and evoke an enchanted invisible dimension that responds to an immanent relationship with the world, which is always present yet forgotten. However, the idea is not to represent the magical or altered state of consciousness through the creation of "experiences" but instead to let be in the presence of a dynamic that generally escapes us to facilitate an encounter.

The research's films attempt to promote a re-enchantment with the world. The stories of *Wenteyao* and the sacrifice of *Collileufú* present a special relationship between the spoken, the written and the visible, which released them from their traditional function. While Jean Luc Godard gives presence to the fragmented images through text in *Histoires du Cinéma* (Ranciere, 2009), the stories of the films give to the land's images the magical and spiritual presence of the invisible. These stories have a shamanic function in the sense that they evoke and conjure something primal by making us see events and situations from a prism that disrupts the "distribution of the sensible" (Ranciere, 2013) imposed by the settler subjectivity regarding the land and its features.

The works of the project tend to be indifferent to the human figure. Only one scene in all the films shows people. However, this lack of the human body's image does not mean the works

lack human presence. Like in the stories of enchanted entities, the human acquires a spectral form in the films. Among these human spectres is the author. My presence is explicit in the activity of walking or through my hands watching photographs in the film of *Caulle*, but it is also implicit during the silent fixed shots of the landscapes. Another spectre is given by the marks' presence of productive processes in the land. Ultimately, other spectral figures are the enchanted and transfigured people that now are rocks and hills, whose presence is rendered by the testimonies, books, texts and newspaper cuttings. As Raúl Ruíz puts it, the testimonies bring to the front echoes that have faded in nature (Ibid., p. 80); a call to the geological origin which are molten in the present and the future; in the vegetal and the geological. The human spectral figure positions the human as being part of the ghosts and spirits that populate the world captured. It also stresses our passage through the world, our impermanence.

The question that comes from the spectral mystery is what kind of knowledge promotes. There exists a poetic that appears from the temporal, which invites us to revaluate the human position in the temporal logic of capitalism. A logic that is also concerning the projection event. Raúl Ruiz notes that cinema needs to be distinguished between entering a hypnotic world of a film and a cinema in which illusion is dosed to then return to the actual (p. 88 Ruiz, 1995). This project considers duration as a material dimension with two functions or points of contact with the mediated world. On the one hand, it invokes ghosts and spectres that remain hidden from the visibility of the image but nonetheless are conjured through the video duration. On the other hand, it produces an illusory dossification because it produces a viewer constantly toing and froing between the time-space of the image and the time-space of the projection event; between the world being watched and his or her own world and memories. Therefore, the content that emerges from the images is about ourselves facing our position in the world; an ecological relation emerges.

4.8   The inclusion of mysteries as answers

Leonel Lienfal, a Mapuche poet, notes that there are many things that the Mapuche has never tried to explain. Western culture is full of questions, yet for the *Mapuche* people, there is no reason to wonder; it is to waste time. What matters, he continues, is *how* one lives and *how she or he feels* life. Therefore, the answers can be obtained by living and feeling. Things are answering them as we evolve (p. 20 Penroz, 2001). Lienfal's words denote an epistemological approach that, to some degree, is similar to the practice of walking through the land, the books and the archive. When there are no straightforward questions, they emerge through the process of making, and in the same form, through "walking" as a form of living in a physical and conceptual territory, the answers somehow emerge. In other words, one thing leads to the other, and in this form, the world leads to the production of questions and answers. However, they are ambiguous and never presented as questions and answers. The combinatorial of multiple stories that Raul Ruiz notes is "capable of generating new stories" (p. 88 Ruiz, 1995). So, what new stories emerged, or which ones are the hidden subject of the film. Somehow, this audiovisual "collection" of elements does not attempt to unveil a hidden story, but to point at a space in-between, to an indeterminate area product of the encounter of economic, geological and, most important, onto-epistemological assumptions that belong to different worlds.

Through the particular sequence of events and encounters, the films attempt to *present* but not describe the problem. It does so by picking up fragments of stories, reports, laws, diaries, images of the land, and ultimately the affective account of the journey. The recollection of fragments attempts to avoid descriptions because this practice configures the world observed. Instead, it is limited to the collection and ordering of elements, creating a loose configuration that points to the world's unknown, that what cannot be measured. Raul Rúiz was born in the same region where the stories explored in this creative research develop. He perhaps was familiar with the Mapuche expression *Re we lelay tati*, which can be translated as "things are not necessarily what they appear, or things are not what they show, they are instead what they hide" (Ibid., p. 8). Recollection, instead of description, attempts to triangulate what is beneath the surface hence what the things are.

The spectral character points to the return to the mystery, the magic and the ethical relation with the world. This space in-between is not separated from politics. As the story of the human sacrifice is shown and the description of Doña Margot, the enchantment is a warfare tactic, revealing that the political struggles are onto-epistemological. These battles are embodied in the legal interpretation of Mapuches' rites and Darwin's description of the action of the sorcerer in the volcano. These struggles are also present in the equivocal narratives, which create confusion, closing the separation between the factual and the imagined. These strategies create a space in which enchanted entities participate in the political struggles by coproducing narratives and becoming figures that recall the return to the primal, as is the case in the stories of Mankian, Wenteyao, Doña Margot and Matias Catrileo. The common denominator is that they become a force, an agent that returns to a relation of dependence.

Don Tito regards *Wenteyao* story as a myth. Nonetheless, a myth is a fixed story, and the *Wenteyao* narrative is an ongoing process that changes along with the environment. The denomination of local stories as myths responds to colonial and settler strategies to leave indigenous worldviews as death culturally, as something of the past, as if they were archaeological artefacts. Thus, *Don Tito* does not share this relation of dependence, despite he notes that the ocean no longer provides the amount it used to. The ever-changing character of the narratives becomes spaces of representational resistance that detours cultural imposition.

Ultimately, saving these spaces of resistance is essential to not transform the world's expression through representation or the technical apparatus. Ursula Leguin, in the 1972 novel *The Word for World Is Forest* describes the perfect resume of how the colonizing subjectivity function. She describes when Captain Davison, the commander of a logging camp in the logging colony on a planet of the *Hainish* universe that is covered by a vast forest, is asked about the conservation of this unique green world. He answers that his world is the human, and his role is to tame worlds as humans. Similarly, language and immersive practices may have the potential to reduce the richness of the ecological relations they depict through the creation of concepts and experiences

that transform the world into something else.

Ecological filmmaking needs to return to the practices of rhythmanalysis proposed by Henri Lefevbre. In other words, they need to re-consider stones, walls, and trunks in their slowness and interminable rhythms. Objects are not inert; time is not set aside for the subject. It is only slow concerning our time, to our body. An immobile object continuously moves through its molecules and atoms, along with the wind, soil, earth, and sun. We need to practice the attentive ear; all this conjunction of rhythms makes a noise like a seashell (p. 20 Lefebvre, 2013). This undertaking refers not only to relations between elements. The order between the elements is a consequence of another kind of relationship. It is an "eroded" or "fresh" footprint brought about by the form we as walkers, practitioners and viewers relate with the molecules and atoms, with the wind, soil, earth, and celestial objects. Hence, the representation's problem of ecological relations is related to our capacity to be attentive and patient. To associate representation uniquely with the audiovisual is to reduce it to a particular set of ecological relations. If Eduardo Kohn notes that the other-than-human also represents, why not open the moving image practices to a broader set of ecological relations through our bodies and the grubbiness of the ground.

Sarah Ahmed notes that "there is a politics to how we distribute our attention" (Ahmed, 2008, p. 30). Politically, to detour reductionist temporal strategies in the film practice is a form to draw the attention back to immanent encounters. On the other hand, the long static video shoots stress the limits of our perceptive capacities and question our transcendency. It does so by making us face, contrary to what the Anthropocene tends to show through technological apparatuses of vision, a world that surpasses the human capacity to imagine temporal and spatial scales that are beyond our direct capacities; a world that opens its mysteries and is trust in dependency.

4.9   Conclusion

Raúl Ruiz notes that in shamanic filmmaking, the internal logic of the events must be changed and modify how visual and fictional spaces are put together (p. 88 Ruiz, 1995). Ruiz proposes

a system of multiple stories, overlapping according to rules from which emerge other new stories (Ibid.). The works of this project revealed that stories can have many versions and that when a heterogeneous group of them are put together, there emerge new stories, as Raúl Ruíz has pointed out. The unwritten character of the *Mapuche-Huilliche* storytelling tradition presents many and constant variations of the same story. From this fluidity emerges never-ending and ever-changing representations of ecological relations. In which the old ones are rethought, facing new actors. The same stories are yet different, like the views within the forest and the faces of *Wenteyao*. However, they had not been changed so quickly before. The localities' struggle against pollution, the productive forces, and the exploitation of natural resources seems to have speeded up this actualization.

The narrative liveliness promotes the influence of human and non-human agencies in the stories. From this fluidity emerges the concept of semiotical aftershocks as narrative modifications that are indexes of the geological processes. In the project, this concept is broadened beyond the geological to include the world in general, becoming an index of the local ecological relations. In other words, these local stories are not only attuning to atmospheric changes and geological forces but also to the introduction of the European colonial model that becomes part of the world in the region. These attunements are political responses to the imposition of rhythms by the productive colonial model and settler narratives. They are secret codes that operate as a reminder of an ethics that negates the colonial ecological relationship with the world, that praises the intensification of the productive rhythms which has broken the human (p. 2 Harney, 2015) and the ecological equilibrium necessary for life.

In a different form, like the function of Captain Davison in Ursula Leguin story, representation in its traditional definition privilege certain ecological relations through the creation of concepts and experiences in the audiovisual medium, transforming the world into something else. The power of synthesis is the cinematographic ability to make complex processes graspable simultaneously that reduces their complexities. Consequently, film practices use the expression of the world for their own purposes, which leaves unexposed the human finitude (P. 9 Yusoff, 2016).

The creative-research focused on two methods of practice. They take as a model the processes of "semiotical aftershocks" presented in the previous chapter to avoid the reduction of the eco-logical representations in the artworks' production as well as to develop an *ecology of making*. The first and foremost method of the project was the problematization of walking, from which emerged an ethical form of *making-with* filmmaking. The second method used was duration as a material dimension of the practice. As a formal tool, it becomes a way to present the world's unfolding events without articulating them. Hence, walking becomes a catalyst to pro-mote the affective and bodily entanglement with the place and the agencies that populate it; duration was used to promote encounters with the unfolding and the "unfolded", which like a proto-photographic process, the environmental agencies carve and sculpts the world. In this process of encounter that otherwise would have been slowly different, the world materially influ-enced the practice through the interwoven between land, body, mind and apparatus.

The extended video focuses on minuscule events, tiny vibrations and slow movements. This spa-tial fragmentation allows grasping processes that otherwise would be impossible to see. Small waves from the sea began to stir the sand ripples over the muddy bottom of the river, creating oscillations with increasing amplitude. These processes emerge from the duration. However, it also emerges from the visual isolation of a small fragment of the land. This Bressonian form of describing a landscape reveals a longer geological process related to the potential of becoming a sedimentary formation that captures these ripple figures to form a rock, for instance. Through this process of spatial fragmentation but temporal continuity, the attempt was to promote discov-ering an entangled world that cannot be reduced to mere connections or a particular movement because it conceals infinite uncountable, which constitute its mystery.

The mystery is in the spectral character of objects, which is not visible. The world requires in-vesting time and attention to be grasped and lived. Politically, to detour reductionist temporal strategies in the film practice is a form to draw the attention back to immanent encounters. On the other hand, the prolonged static video, almost immobile, questions our transcendency by

stressing the limits of our perceptive capacities. It does so by making us face, contrary to what the Anthropocene tends to show through technological apparatuses of vision, a world that surpasses the human capacity to sense and even to imagine temporal and spatial scales that are beyond our direct capacities.

In film practices, the world's image is generally used for articulating discourses about the world through the temporal fragmentation and its posterior juxtaposition that synthesize events in their temporal dimension. In other words, to leave only the "important" parts that allow describing the movement or the action. On the other hand, there has been a tendency in recent film practices to aim for the creation of immersive experience through extra-cinematic elements. The projects that use these strategies have been essential for generating a critical discourse about capitalist extractivist and productive ecological consequences. However, they have tended to use the same approach as the system they critique, reducing the ecological relations in the cinematic aesthetic practice for discursive and expressive efficiency. To face the ecological diminish is necessary to create moving image practices that juxtapose and participate in ecological relations to establish new relations between otherwise apparently separated ecologies.

In the current moments, aesthetic responses to the Anthropocene have increasingly used the now accessible technology, which allows creating "experiences" instead of invitations to see and listen to the world. Perhaps the increasing distractive nature of the present makes any image itself not enough to grab attention. The creation of experiences is not merely a formal matter but an epistemological one. Igmar Emmelheinz notes an increased use of physical sensations mobilized by the visual and auditory, and thus into affect (p. 137 Emmelheinz, 2015). These strategies transform the world captured in sensations and aesthetic experiences, subduing the expression of the world. The solution of Emmelheinz (Ibid., p. 138) to make images again is to assassinate perception in order to ground back the body and then to perform and think vision as a critical and ethical activity.

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Glossary

A

Abstract Geology: Artist Robert Smithson spoke about "abstract geology", referring to how tectonics and geophysics pertain not only to the Earth but also to the mind; abstract geology is a field where a geological interest is distributed across the organic and nonorganic division (Ellsworth, Kruse, and Beatty, 2013).

Amerindian Perspectivism: Perspectivism is a concept originally coined by the Brazilian anthropologist Eduardo Viveiros de Castro to encapsulate indigenous conceptions that were already present in a range of ethnographies of Amerindian peoples from Lowland South America. Perspectivism refers to recurrent characteristics found in Amerindian mythology and cosmology, but it also relates to war, hunting, kinship, and other social phenomena. These reveal a particular configuration of distinctions between humans and nonhumans, which are irreducible to Western distinctions between nature and culture. This conception of the world is composed of a multiplicity of points of view, in which every existent is a centre of intentionality, apprehending other existents according to their respective characteristics and powers (Viveiros de Castro and Skafish, 2019).

Animistic cinematic practice: This concept coined by May Adadol Ingawanij defines Southeast Asian artists' moving image practices that show a fascination with ontological multiplicity, mythic figures referencing the deep past, and human–spirit relations and communication. These practices navigate in the context of the Capitalocene and are connected to Southeast Asia's geneal-

ogy of animistic praxis. They tend not explicitly to thematize the consequences of environmental degradation. Instead, they relate local and regional stories of the Capitalocene "through associative, rhizomatic and atmospheric forms" (Ingawanij, 2021).

Anthropocene: Unofficial geological Epoch that describes the most recent period in Earth's history characterized by the significant impact of the human activity on the planet's climate and ecosystems.

Anthrogenesis: Kathryn Yusoff calls a new *Anthrogenesis*; a human origin that contradicts the biblical genesis and the separation of human-nature that began in the renaissance. In this genesis, common divisions between the bio and the geo, and between the animate and the inanimate are no longer valid. Hence, the geological turn is a reconceptualization of life from a bio-political notion towards a geophysical understanding of its origin (Yusoff, 2016)

Assemblage: The term refers to Manuel DeLanda's Assemblage Theory, an expansion of ideas from Gilles Deleuze and Félix Guattari in the book, A Thousand Plateaus, where Assemblage is defined as "a multiplicity which is made up of many heterogeneous terms and which establishes liaisons, relations between them, across ages, sexes and reigns – different natures" (Delanda, 2006). For the most part, DeLanda hews fairly closely to the theory of assemblages presented therein, framing this work as an "attempt to bring these different definitions together, introducing and illustrating the terms required to make sense in them" (Ibid., p. 1). In the endeavour to define and explore assemblages across a variety of disciplines, he mostly succeeds, with the exception of a discussion of topics related to the virtual that obfuscates and nearly sinks the whole construction that is presented.

B

Black Box: Bruno Latour describes the black box as "the way scientific and technical work is made invisible by its own success. When a machine runs efficiently, when a matter of fact is

settled, one needs to focus only on its inputs and outputs and not on its internal complexity. Thus, paradoxically, the more science and technology succeed, the more opaque and obscure they become" (Latour, 1987).

C

Capitalocene: The Capitalocene, as articulated by Donna Haraway, points directly to a voracious political and economic system that knows no bounds, one where human lives, the lives of other creatures, and the beauty and wealth of the earth itself are figured as mere resources and externalities. Profit above all else, the logical extension of the surplus-value accumulated through colonialism and slavery, has proven to be the most destructive force the world has ever seen.

Conventional language: In general, conventional language implies a semiotic in which there are conventional connections between signs and objects. In this project, conventional language comes from conventional semiotics as defined by Eduardo Khon, which refers to languages which require knowing the conventions or codes in order to communicate using them (Kohn, 2013). In the project, it is also expanded the use of language beyond the textual understanding that exists in visual conventions understood by habit.

D

Diffraction: Diffraction is a methodology coined by Donna Haraway that takes advantage of the optical metaphors as a different approach from reflexivity as a critical practice. Haraway notes that reflexivity "displaces the same elsewhere", leading the discussion about the copy and original and the search for the authentic and really real, which presents the false choice between realism and relativism. Haraway proposes diffraction as an optical metaphor as a methodology to make a difference in the world, to create interference patterns rather than reflection (p. 16 Haraway, 1997). It attempts to be a methodology that produces diffraction patterns that record the history of interaction between entities, interferences, reinforcements, differences" (Haraway

and Goodeve 102).

Discoursive practices: Karen Barat, in the attempt to propose a posthumanist notion of performativity that incorporates the material and discursive, social and scientific, human and non-human, and natural and cultural factors, in order to call into question the givenness of the differential categories of "human" and "non-human", examines practices through which these differential boundaries are stabilised and destabilised. These practices are discoursive statements and subjects that promote a specific field of possibilities (Barad, 2003). Hence, a discursive practice can be seen in a very reductive form as material or linguistic statements that determine what can be said and whatnot, what can be done and whatnot.

E

Enchantement/re-enchantment: In his book "Mapuche philosophy: archaic words to awaken the being", Ziley Mora Penroz notes that the western world has to be re-enchanted, that is, to become filled with mystery and respect, with reverence and magic, with sobriety and harmony (p.8 Penroz, 2001). Enchantment is a tactic of inclusion or reintegration of the world's mystery and its affective power and to readopt an attitude of respect and sobriety in order to open the door to be recaptive by the world's silent and indifferent *poesis*. As such, the tactic implies an ethic of dependence.

Eco-aesthetic: Silke Panse defines Eco-aesthetics with respect to moving images in which exists a connection between the world and the image that produces an immanent cinematic experience. Eco-aesthetics looks at the plane in which the world (ecology) with that of the image (aesthetics) connect (Panse, 2013).

Ecological Thought: Timoty Morton defines the *Ecological thought* as thinking about ecology and also ecological thinking (p. 7 Morton, 2010). The *ecological thought* is the thinking of interconnectedness and ecology, but it is also a thinking that is ecological. Thinking the ecological

thought is part of an ecological project (Ibid., p. 7)

Ecology of making: It is an ethical, artistic practice and mode of representing a world of entangled ecologies of multiple agencies and relations through an economy of means and an emplacing of the artist in that ecology as a vulnerable embodied being. In this sense, the process balances what belongs to the world and what belongs to the media despite the former's mediation.

Entanglement: The term *entanglemnet* refers to the non-existence of discrete entities that come together through interactions, but the form in which entities are produced through entanglement (Springgay and Truman, 2017, p. X). In ecological terms, the idea of mutual production includes multidimensional dimensions in which new entities emerge and old entities become. Therefore, it is the base of the idea of the ecology of making and dependence.

Extra-cinematic: Ecocritical studies of cinema consider that "cinema produce worlds which interact with extra-cinematic worlds" (Ivakhiv, 2012, p. 89). The overlay of meanings and affects produced by cinema interacts with the extra-cinematic world (Ibid.). For instance, the extra-filmic world can best be understood by examining the circulation of film forms and meanings within three interactive, dynamic, and systemic contexts (Ibi., p. 89). On the other hand, Peter Wollen refers to the extra-cinematic as the elements of the film that does not belong intrinsically to the cinematic such as voice-off and music, among others (Wollen, 1997).

F

Film-text: The film-text is a film practice defined by Peter Wollen that reverse the relations of dominance between non-cinematic and cinematic codes, between signified and signifier. It attempts to avoid "the pitfalls of illusionism, of simply being a substitute for a world, parasitic on ideology, which it reproduces as reality" (p. 22 Wollen, 1997).

G

Geological Cinema: as a way to understand the form, content and experience of any film as rooted in the geological materiality (Litvinseva, 2018). This understanding of "film through geology and geology through film" (Ibid.). The base of this practice's methodology is Donna Haraway's idea of *diffraction*, and consists in reading the cinematographic and geological through each other (Ibid., p.3).

Geological filmmaking: Sasha Litvinseva, defines the concept of *geological filmmaking* as a way to understand the form, content and experience of any film as rooted in the geological materiality (Litvinseva, 2018). This understanding of "film through geology and geology through film" (Ibid.).

Geophilosophy: Katreleen Yusoff notes that in the Anthropocene, the humanist thought, which characterized the inhuman as a dehumanizing force, has moved to a concept of the inhuman as materially constitutive of the possibilities of life (p. 5 Yusoff, 2016), which Yusoff identify as a geophilosophy. This term comes from Deleuze & Guattari book "A Thousands Plateaous", in which the authors attempt to develop a new materialism in which a politically informed philosophy of difference and complexity to rethink the earth.

H

Holocene: Official current geological epoch. It comprehends approximately between 11,650 cal years before the present. The Holocene has been identified with the current warm period.

P

Provinzalization of language: refers to a form of opening up of the symbolic. The material affective communication between entities is perhaps the broader semiotical system in which all the entities of the world participate. "symbolic domains [. . .] are always circumscribed by and

nested within a broader semiotic field", hence "representation is something both more general and more widely distributed than human language" (p.38 Kohn, 2013). Kohn notes that these intersections between semiotical spheres require a particular awareness and ways of acting in particular contexts (Ibid.).

R

Rhythmanalysis: Henri Lefevbre defines *rhythmanalysis* as "a method and a theory pursues this time-honoured labour in a systematic and theoretical manner, by bringing together very diverse practices and very different types of knowledge: medicine, history, climatology, cosmology, poetry (the poetic). Not forgetting, of course, sociology and psychology, which occupy the front line and supply the essentials" (p. 16 Lefebvre, 2013).

S

Semiotical Aftershock: Semiotical aftershocks refer to conventional textual narratives modified and transformed by the earth's events; indexes of geological forces. Local stories are constantly attuning to the atmospheric variations produced by the geological, the vegetal and the animal. The latter includes the human, the social, and the cultural.

Shamanic cinema: Raúl Ruiz defines the term *shamanic cinema* as a film practice whose sequences or narratives lead "to a region inhabited by ghosts of lost time" (p. 78-9 Ruiz, 1995). In other words, the filmmaker refers to a cinema that "evokes or conjure up other moments behind the images we actually see" (Ibid., p. 79). Ruiz notes that shamanic cinema makes us believe in events and situations that we have not experienced and which are in touch with genuine memories (Ibid., p. 80). He notes that through this mechanism, we can "pass from our own world into the animal, vegetable, and mineral kingdoms" to then return to humanity again as part of a poetic system (Ibid.). In order to reach this space, what is needed is combinatorial, that which Ruiz associates with multiple stories (Ibid., p. 88).

Structuralist/Materialist filmmaking: Structural/Materialist filmmaking encompasses a loose group of American and British filmmakers that attempts to be non-illusionistic. One of the main characteristics of Structuralist/Materialist filmmaking is that the film processes demystification or attempted demystification of itself. The film "deals with" does not mean "represents" or "documents". In structural/Materialist film, the material relations of the film apparatus and form are primary to any representational content. Structuralist/Materialist films tend to minimise the content. The real content s the form, which becomes content. The form is meant as formal operation, not as composition (Gidal, 1976).

Appendices

Annex

Portfolio

Resume of the reserach

In the context of the Anthropocene has been an update of the relationship between lens-based media and the world. Authors such as Juri Parikka and Sean Cubbit have offered geological and environmental accounts of media art. However, in lens-based media practice has been a debt regarding the production of methods and aesthetical approaches that respond to the onto-epistemological challenges of the Anthropocene. Videographers and filmmakers have generally tamed the "real" world by using its image to articulate discourses or create abstract experiences, which are distant from the spatial and temporal dimensions of the world's expressive capacity. This taming somehow reproduces the individual colonial requirements that are criticized.

This project attempts to address the need for a new lens-based media paradigm that takes into account the other-than-human in creative practices. This objective requires to consider the world's expression as an agent in the process of meaning's production. In order to attain a real inclusion, there is a need for adapting and developing methods that detour interpretations of the world, the use of its images to build rhetorical figures or enhanced experiences. This study explores possible methods that take into account the "silent speech" of things in its many levels. It looks to determine the feasibility of the incorporation and problematization of the world as a driven agent in the process of meaning creation in the lens-based medium. The aim is to propose answers for one of the most haunting problems for lens-based media at the time when art practices are embracing geo-cultural convergences and eco-political engagement with the world.

Description of the Works

Ruka Kura (Stone House)

Mono or multi-channel digital video UHD 4K

Quadraphic sound.

20 min.

watch online

This piece is a multi-channel video piece that also has a single screen version about the events occurred in a place called *Pucatrihue* ($40°32'38''S, 73°43'04''W$) around the rock the *Grandpa Wenteyao*. This enchanted rock-island is very important in the systems of beliefs of the *Huilliche* people of southern Chile.

The film explores the stories that surround this rock through the testimonies of local people which reveal how the geological forces have played a role in shaping and activating narratives that respond to the current post-colonial process of the region. Through the testimony of three people that have been touched or living close to the island of *Wenteyao*, it is unveiled a mystery that constantly displaces the thresholds between what is commonly thought as humans and more-than-human, fact or fantasy, material and affective. *Ruka Kura* explores the world's expression in front of the camera and the development of methods of influence of this expressive force in the video practice. Thus, the long video takes lets the world unfolds and let its raw expression manifest upon itself, which allows to grasp and to compare, in Henri Lefevbre terms, its rhythms, the dressage of capitalism, their taming and ultimately the arhythmic consequences in the land and bodies.

The film is a multi-screen configuration that replicates the geography of the region captured. Each screen is associated with one of the testimonies. The film required viewers to walk through the different screens and hence the different places of the region surrounding *Wenteyao*. Walking through the screens alongside the long takes, that present the duration as a material dimension of the land configures a coherent space between the filmmaking and the projection event. The film also has a mono channel configuration which is divided into three sections defined by each of the testimonies given by the three characters.

Sacrificed Land

Video UHD 4K

20 min

watch online

The film *Sacrificed Land* focuses on the case of *Luis Painecur*. This boy was sacrificed to reestablish the equilibrium in the aftermath of the Great Valdivian Earthquake in 1960, which is the biggest ever recorded in history (around 9.5 Richter scale). Despite that there is an official version given by the judicial declaration at the time, the circumstances surrounding the disappearing of the boy are mysterious.

A long walk to the place of the sacrifice structures the film. The event of the sacrifice is a starting point to explore geological influences in cultural practices, which is embraced in the concept of *semiotical aftershocks* embodied in the more-than-human production of narratives, laws and ultimately the process of filmmaking-walking. Hence, walking allows the land, though affections and encounters, gave its version of the events of May of 1960.

The film triangulates the subject of the sacrifice through the recollection and presentation of diverse materials such as legal documents, magazine, newspapers cuts, accounts of the participants, book fragments, and ultimately the affective influence of the land. The film takes the form of the assemblage that open the sacrifice of *Luis Painecur* to the problematic of self-determination of the *Mapuche* people and their current struggle. In this context, the figure of the sacrifice acquired a multi-dimensional geological, cultural and political character.

Footnotes

prints + photographs + objects

The entire project required the revision of several archival materials and geological books. Although some of these materials are used in this project's films, there is a large number not present in them. These graphical and textual materials contextualize the audiovisual pieces geologically, geographically, historically and politically through a series of prints and drawings. Considering them as footnotes, they are not part of the experience of viewing, but they are considered as part of the films. Among these materials are photographs, geological definitions, rocks analysis, borough meetings, magazines cuts narrating the events, newspaper cuts of the nineteen century revealing historical precedents, and colonial treaties. These heterogeneous elements are presented to promote the emergence of the political and geological scopes about the places depicted in the films.

Dune Field

Vídeo UHD 4K

21 min.

watch online

Dune Field explores the encounter between human, economic and geological trajectories. Through the use of description and subjective speculation, the work examines how our inability to establish contact with the non-human has historically induced to take geological monuments as passive entities, ready to be occupied or used. The work explores the subjective interpretation of events as a method to overcome the incapacity of contact and to speculate on the geological agencies in action. In the film, all the scenes have equal duration. In this way, the recording apparatus is converted into a tool for measuring to explore perceptual transfigurations of time as a result of the encounter between the different trajectories that define the place.

Can you see?

mixed media

Can you see? is a set of three pieces that explore the affective influence of the world upon our semiotical tendency of creating figures and reflecting ourselves in the world. The project is based on the trips to the *Puyehue-Cordón Caulle* volcanic complex and the other-than-human geological encounters in their context.

Untitled

HD video projected over a table.

Monophonic sound.

20 min video loop.

watch online

The outcome of the trip to the Caulle was a film made with the documentation. The film is a simple structure that reanimates the pictures taken in the journey. It consists of a black table-cloth on which someone is watching the journey's photographies to the *Caulle* from the zenithal perspective. The scene shows the table, the hands and the pictures passing one after another, meanwhile, a voice narrates experiences, memories and theories of the trip. The base of the text is the testimonies and stories of the trip's guider, but it orbits around the vanishing of a man in the Caulle volcanic desert.

The film reconstructs the journey conserving the constrained experience of the process of capturing. The simple constrained structure functions as a way to give movement to images that have no internal movement. This strategy provides movement through real-time, which is equivalent to the temporal dimension of the projection event. The film invites viewers to adopt a physical posture associated with the perspective of the person who is watching the pictures and making us see through his voice. The images are no correlated with the narration; they are not coincidental in time. However, the text insists on making the viewer see in the images, something that is not visible. These strategies attempt to brings some coherency between the process of capturing and the projection event.

The narration based in *Don Segundo* focused on making see the animated and dynamism in the geological as a safety measurement but also to consider the geological as a living entity.

Volcanic Figures

SD Video

no sound

5 min video loop

This piece emerges from the recapturing of web material about the Caulle eruption in 2011. The close-up video images of the audiovisual make visible the materiality of the media. The focus in the spatial and temporal "substrata" of the media, through the process of macro video and slowing down the images, brings to mind the geologist's practice who investigates rocks and its composition through a loupe revealing somehow the environmental conditions of its creation. In this sense, the film attempt to deconstruct the formation of the images.

A second dimension that emerges from the process of recapturing is the moving images as indexes of the affective capacities of the geological event. In this sphere, the gestures of the cameraman reveal patterns of repetitions and periodical movements that reveal a meta-narrative.

Ultimately, from the process of slowing down the images emerges figurative shapes in the ash column. These phenomena extend to the media the influence of the guider that made us see human, animal and fantastic creatures shapes in rocks and geological entities.
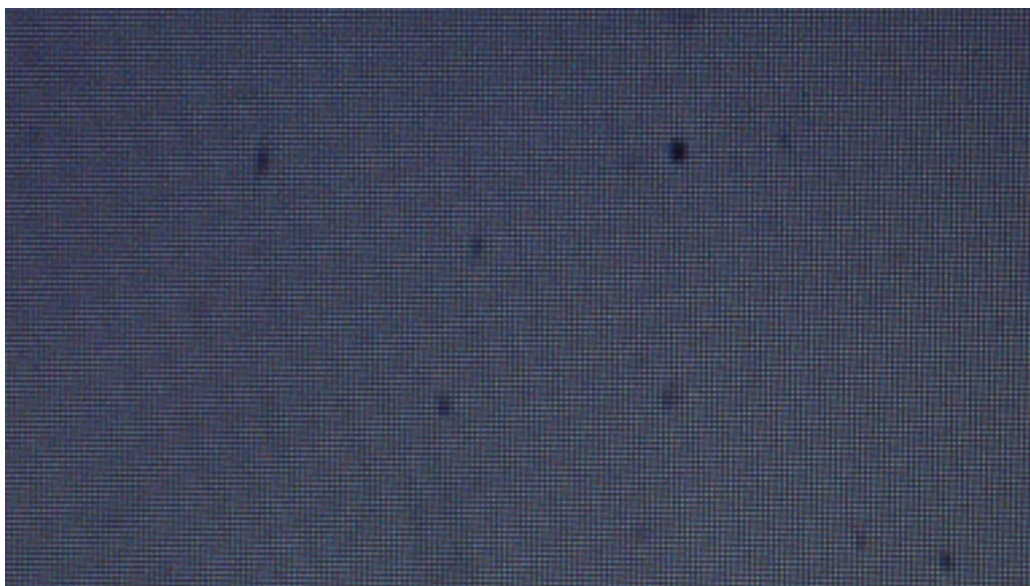
The world's self image

Ink drawings

This work complements with the previous two pieces because it is based on an encounter with the iconic production of the world. Hence, it is a testimony of the affective capacities of the world through the production of shapes that we recognize as figures. The piece consists of the ink-drawings of two enigmatic figures that emerged within wood sticks that were picked up in the volcanic area. They looked like being done by a red hot nail in the wood. On one of its ends, there was a kind of icon of two branches with a series of leaves. There were precisely ten leaves in each branch. On the other end, there was the figure of a kind of bulb with eleven lines that remind the form of leaves attached to it. The figures were a sort of representation of the tree from which the branch belonged. While it is impossible to know whether this figure represented, we as humans recognize the shape iconically despite the figure was not made by humans. In this sense, the figures become the iconic tangible expression of the world.

**Measurements**

Stereographic ink draw

Monophonic sound

10 min.

watch online

This piece explores the affective capacities of the translation and reproduction of the primary features of the geological. With this purpose, the raw seismic data of the day of the eruption, obtained through the National Service of Geology and Mineral of Chile (Sernageomin), was sonified and represented spatially through a series of points positioned in the coordinates where each event happened. Through stereography, the points are positioned in a third axis that represents the deep of the events.

This piece focused on the data from the tremors produced on the first day of the eruption of the Caulle Cordon Volcanic Complex. The project transforms the data to the limit of the sensible, the sound is of shallow frequency close to the audible limit. On the other hand, the stereographic image function similar to the figures found in the Caulle because it needs to look at a specific form to a third image emerges out of the two. Only them a new dodge dimension emerges. The attempt is also to recognise patterns from the process of transformation of primary features of the world which can be measured into secondary sensory features.

This work attempt to produce material and affective experiences in order to question our sensorial capacity through scalar and illusionistic process.
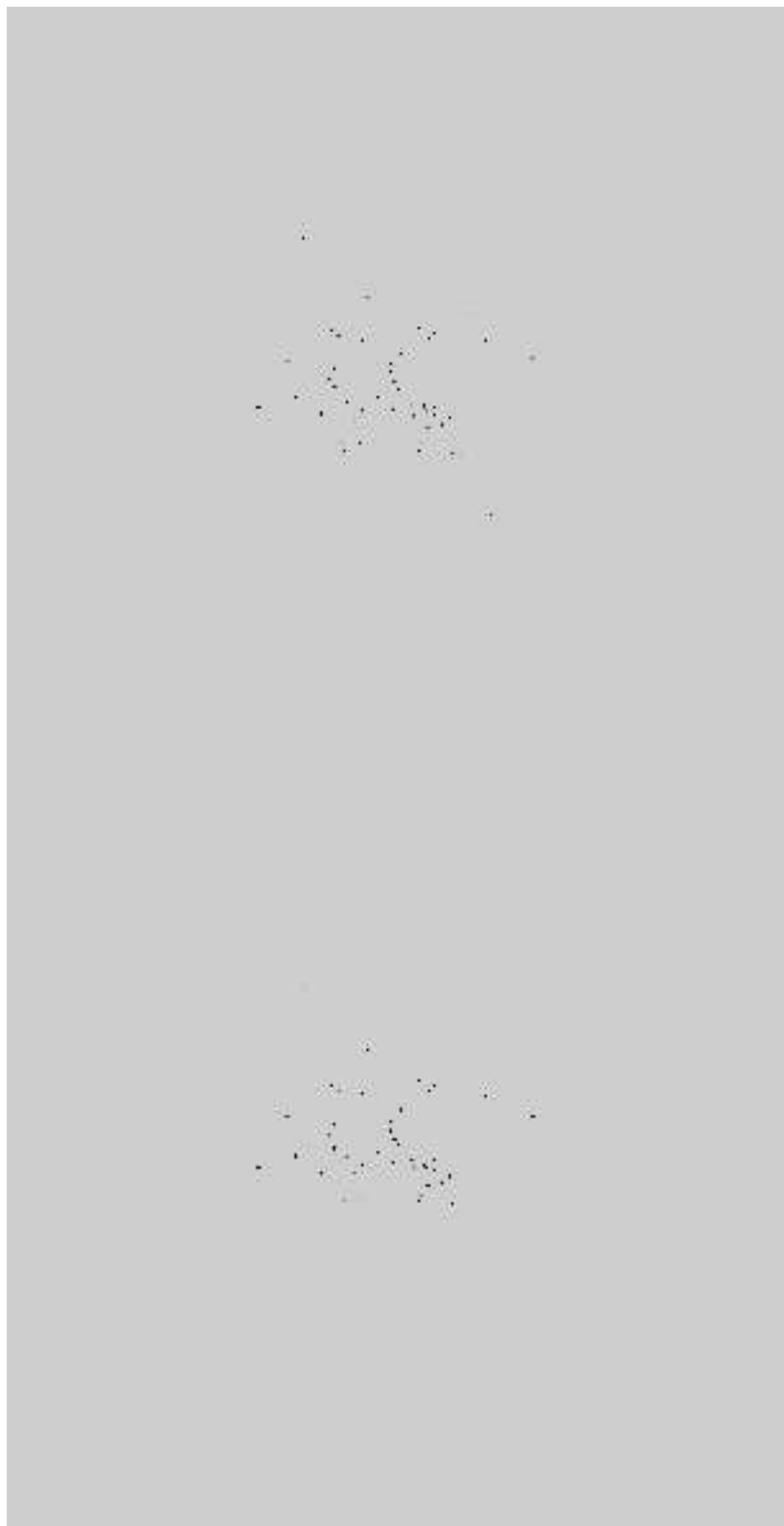
Regrounding

4 prints, photograph and text.

This piece explores an affective-material connection that emerged from the Puyehue volcano climbing. Through scattered words that describe an impression, a fell, a pain, or thought, whose vertical position reveals their level of intensity, the piece attempt to avoid the representation of the affective. This process began in the flat land of the valley and finished in the top of the volcano, and while the different ground tends to presents a constant linear transformation of the material, the words create patterns and repetitions that are indexes.

The textual also describe the nonlinear process of attunement. From this simple documentation of the path emerged a connection between the land's topography, the body and the mind. The muddy segments of the path were moments of confusion, the slippery step slopes of loose gravel of desperation, the solid ground of fluidity and clarity, and the grass patches of sensorial intoxication. The ground and the topography of the place influence the perception and moods. Through the ground, the land extended to the mind. In this form, there is generated a process of *becoming* the place.

cow dung   enemy   enthusiasm   hay   vigour
             shoe   chance   sweat
  hitchhike bees   cow dung   knees   dust
sweet   hazard   dust

beauty

breaking

vehemence

whittle

clouded

weariness

shoulders

knees

shoulders

drops

slowness

workload

pleasure

mysteries

hidden

solitude

solitude   solitude

mysteries

slippery

hidden   slippery   slippery

slippery

slippery

gravel   dry

satal nation

dry

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