

Environmental Conflicts and Historical Political Ecology: A Genealogy of the Construction of Dams in Chilean Patagonia

A thesis submitted to the University of Manchester for the degree of
PhD in Human Geography
In the Faculty of Humanities

2013

Hugo Ivan Romero
Department of Geography
School of Environment and Development

CONTENTS

ABSTRACT	v
DECLARATION.....	vi
COPYRIGHT STATEMENT	vi
Dedication	vii
Acknowledgment.....	viii
Abbreviations	ix
Introduction	1
Chapter 1. Environmental Conflicts in Historical Political Ecology	7
1.1. Introduction.....	7
1.2. Research Scope: <i>Socio-Nature Relations</i>	10
1.3. Environmental Conflicts	15
1.3.1. <i>Apolitical environmental conflicts</i>	16
1.3.2. <i>Political ecology</i>	17
1.4. Historical Political Ecology	20
1.5. A Historical Political Ecology Approach to the Construction of Dams in Patagonia	26
1.5.1. <i>Discourse and discursive formation: framing dams</i>	26
1.5.2. <i>Discursive ecological formations: framing Patagonia</i>	31
1.5.3. <i>Territorialisation: discursive and material practices</i>	36
1.5.4. <i>Governmentality and environmentality:</i>	41
Summary	43
Chapter 2. Research Design and Methodology	46
2.1. Research Questions and Objectives	46
2.2. Genealogy and Critical Discourse Analysis	46
2.3. Grounded Theory and Situation Analysis	49
2.4. Model of Analysis	52
Summary	57
Chapter 3. Imagination and Liberation of Patagonia: the Territorialisation of the Colonial State	58
3.1. The Processes of Imagining Patagonia.....	61
3.1.1. <i>Actors, subjects and objects</i>	63
3.1.2. <i>Normalisation of places and subjects</i>	69
3.1.3. <i>The City of Caesars</i>	71
3.2. The Process of Liberating Patagonia.....	75
3.2.1. <i>Liberation by the Church</i>	75
3.2.2. <i>Liberation by Science</i>	79
Summary	82
Chapter 4. Occupation and Circulation of Patagonia	85

<i>The Social Movement of Aysén</i>	85
4.1. The Transition from Imagination to Occupation.....	88
4.2. “ <i>Damn Patagonia</i> ” (<i>Patagonia Maldita</i>)	93
4.3. The Pioneers and the “Discovery” of Western Patagonia	96
4.5. Territorialisations	102
4.5.1. <i>The Market</i>	102
4.5.2. <i>Spontaneous territorialisation</i>	112
4.5.3. “ <i>Chileanisation</i> ”	116
4.5.4. <i>Intervention of the state</i>	119
Summary	123
Chapter 5. The Territorialisation of <i>Hydropower</i> in Patagonia	130
5.1. A Genealogy of Neoliberal <i>Hydropower</i> in Chile.....	132
5.1.1. <i>Destabilisation of the modernisation myth</i>	136
5.1.2. <i>The Construction of state “otherness”</i>	139
5.1.3. <i>The “purification” of water: The construction of water as a commodity</i>	141
5.1.4. <i>Regulating the Deregulation: The Creation of the SIC</i>	144
5.1.5. <i>Deconcentration, deregulation and privatisation</i>	149
5.1.6. <i>The physical expansion of hydroelectricity</i>	153
5.2. “ <i>Hydropower</i> ”	159
5.2.1. <i>Hydroelectricity</i>	165
5.2.2. <i>The HidroAysén Project</i>	170
Summary	176
Chapter 6. Counter-territorialisations in Chilean Patagonia	180
6.1. The Emergence of “ <i>Ecopower</i> ”	184
6.1.1. <i>Institutional construction</i>	186
6.1.2. <i>The environmentalist organizations</i>	189
6.1.3. <i>Ecopower and Patagonian discourse</i>	198
6.1.4. <i>The contradictions of Chilean public policy according to ecopower</i>	203
6.1.5. <i>The commodification of the Patagonian landscape</i>	205
6.2. The Discourse of Inequalities.....	212
6.2.1. <i>Discourses of the occupation process</i>	216
6.2.2. <i>Discourses related to tourism</i>	221
6.2.3. <i>Discourses in semi-urban areas</i>	225
6.2.4. <i>Polarisation</i>	229
Summary	231
CONCLUSION	235
Findings	236

Implications.....	245
-------------------	-----

Word Count: 85,398

FIGURES

FIGURE N°1. LOCATION OF AYSÉN REGION AND HYDROELECTRICITY PROJECTS WITHIN CHILE.....	6
FIGURE N° 2. CAVALCADE PATAGONIA WITHOUT DAMS, COYHAIQUE (2007).....	8
FIGURE N° 3. ICONIC POSTER OF THE CAMPAIGN “PATAGONIA WITHOUT DAMS”.....	10
FIGURE N° 4. PROTECTED AREAS IN AYSÉN REGION	38
FIGURE N° 5. DEMONSTRATION AGAINST THE HIDROAYSEN PROJECT, SANTIAGO 28 TH MAY, 2011	59
FIGURE N° 6. EARLIEST REPRESENTATIONS OF AMERICA,	66
THE WESTERN PART OF THE CONTINENT REMAINS INVISIBLE.....	66
FIGURE N° 7. REPRESENTATIONS OF PATAGONIA POPULATED BY GIANTS BETWEEN THE 16 th AND 17 th CENTURIES.....	67
FIGURE N° 8. THE PATAGONIANS BETWEEN THE 16 TH AND THE 18 TH CENTURY	68
FIGURE N° 9. CLASH BETWEEN THE EXPEDITION OF VAN NOORT	70
AND THE SELK’NAM, 1599	70
FIGURE N° 10. THE CITY OF CAESARS	73
FIGURE N° 11. LOCATION OF THE CITY OF CAESARS	74
FIGURE N° 13. CHILOÉ ISLAND, PLACE FROM WHERE THE JESUITS EXPLORED PATAGONIA	78
FIGURE N° 12. FROM CHILOÉ ISLAND TO NAHUELHUAPI (in red).....	78
FIGURE N° 14. SOUTH AMERICA, BETWEEN THE 18 th AND 19 th CENTURIES,.....	84
SHOWING PATAGONIA AS A COUNTRY	84
FIGURE N° 15. IMAGES OF THE SOCIAL CONFLICT OF AYSEN, FEBRUARY-MARCH 2012	86
FIGURE N° 16. REPRESENTATIONS OF PATAGONIA BY BYRON	92
FIGURE N° 17. REPRESENTATIONS OF PATAGONIA BY MUSTERS	92
FIGURE N°18. PATAGONIA IN THE 19 th CENTURY	100
FIGURE N° 19. IMAGES OF HANS STEFFEN’S EXPLORATIONS (1910).....	101
FIGURE N° 20. OCCUPATION OF AYSEN BY CATTLE COMPANIES BETWEEN 1900-1940	104
FIGURE N° 21. THE CATTLE COMPANIES: THE INDUSTRIAL SOCIETY OF AYSEN, BAKER EXPLOITER COMPANY, AND CISNES CATTLE SOCIETY.....	111
FIGURE N° 22. SPONTANEOUS SETTLERS IN BAKER (1930s)	115
FIGURE N° 23. GERMAN SETTLERS IN PUYUHUAPI (1930s)	115
FIGURE N° 24. REGION OF AYSÉN OF THE GENERAL CARLOS IBAÑEZ DEL CAMPO	122
FIGURE N° 25. THE BALMACEDA SCHOOL (1929)	127
FIGURE N° 26. COYHAIQUE (1940s).....	127
FIGURE N° 27. THE AUSTRAL ROAD	128
FIGURE N° 28. CALETA TORTEL.....	129
FIGURE N° 29. VILLA O’HIGGINS	129
FIGURE N° 30. ELECTRIC GRID IN CHILE	147
FIGURE N° 32. INTERCONNECTED CENTRAL SYSTEM (SIC)	156
FIGURE N° 33. HYDROPOWER PROJECTS IN PATAGONIA	169
FIGURE N° 34. THE HIDROAYSÉN PROJECT: LOCALISATION OF THE FIVE DAMS	172
FIGURE N° 35. HIDROAYSEN CAMPAIGN:	173

CLEAN, RENEWABLE AND CHILEAN	173
FIGURE N° 36. PRICE OF RESIDENTIAL ENERGY CHILE AND OCDE	178
FIGURE N° 37. DEMONSTRATIONS AGAINST THE HIDROAYSÉN PROJECT IN SANTIAGO	196
FIGURE N° 38. HIDROAYSEN’S PROPAGANDA IN REGIONAL NEWSPAPERS	197
FIGURE N° 39. CAMPAIGN “PATAGONIA SIN REPRESAS”	210
FIGURE N° 40. PATAGONIAN TOURIST LANDSCAPE	211
FIGURE N° 41. PATAGONIANS ACCORDING TO THE DOMINANT DISCOURSES	215

CHARTS

CHART N°1. THE OPENING UP AND PRIVATISATION OF ENDESA AND COLBÚN	152
CHART N° 2. PERCENT OF COMPANIES’ PARTICIPATION	157
IN THE INTERCONNECTED CENTRAL SYSTEM (SIC).....	157
CHART N° 3. ENDESA’S ELECTRIC PLANTS (AT DECEMBER 2012).....	157
CHART N° 4. COLBÚN’S ELECTRIC PLANTS (at December 2012).....	158
CHART N° 5. GENER’S ELECTRIC PLANTS (at December 2012).....	158
CHART N° 6. PARTICIPATION OF THE MAIN CHILEAN ECONOMIC GROUPS BY SECTOR	160
CHART N° 7. PART OF THE POLITICAL AND ECONOMIC STRUCTURE IN THE ELECTRICITY SECTOR.....	165
CHART N° 8. ORGANISATIONS TAKING PART IN PATAGONIA SIN REPRESAS.....	193
CHART N° 9. LOCAL ORGANISATIONS IN AYSÉN AGAINST DAMS.....	194

ABSTRACT

This research aims to understand environmental conflicts generated by large investment projects. Theoretically, this research locates itself within the historical political ecology perspective. It seeks to understand environmental conflicts as a clash of historical representations over the environment that can be traced from the process of dispossession by colonialism and the consolidation of the national state. It is argued that certain places have been constructed as specific socio-natural entities for the reproduction of power relations over nature and people through environmental transformations by discourses and frameworks about environment and society, the establishment of material practices, and the collapsing of biophysical features within political-economy.

The case under analysis is the construction of dams in Chilean Patagonia through the HidroAysén project. This project belongs to the transnational company ENDESA and the Chilean private company Colbún. HidroAysén aims to build five dams across two rivers located in the Aysén region in Western Patagonia, a region that has been a scene for the territorialisation of the colonial and postcolonial state over the last four hundred years.

The research questions to understand this environmental conflict are: *How has Chilean Patagonia been socially constructed in the past? What political economic conditions and discourses enable dams to be built in Chilean Patagonia? Which discourses are in conflict regarding the HidroAysén Project?*

This research follows a qualitative approach focused on Foucauldian genealogy to understand discourses and representations about the environment. Data have been collected through secondary sources about the history of Patagonia, including accounts from explorations, government reports, scholarly articles, information from the HidroAysén company, and information from the anti-dam campaign *Patagonia without Dams*. I have also used fifty interviews conducted in Patagonia with people who live in the places that could be affected by the construction of dams. Data have been analysed through the constructionist approach of grounded theory and critical discourse analysis.

The main findings are that environmental conflicts have historical and cultural content. Patagonia is a cultural landscape created through the territorialisation of the colonial and postcolonial state, and at the same time, through a process of counter-territorialisation spontaneously performed by settlers. Elites have used Patagonia to increase their power in a material and symbolic way through the mobilization of pre-existing discourses. Therefore, Patagonia does not pre-exist its construction: there is nothing natural about Patagonia but a revisited history of otherness and dispossession. Consequently, environmental conflict over HidroAysén is not only about the hydroelectricity project, but about how territories are constructed and socially and environmentally transformed through the mobilization of representations. The conclusion is that the environmental transformations are one of the most severe forms of inequality.

DECLARATION

I, Hugo Ivan Romero, declare that no portion of the work referred to in the thesis has been submitted in support of an application for another degree or qualification of this or any other university or other institute of learning.

COPYRIGHT STATEMENT

The ownership of certain Copyright, patents, designs, trademarks and other intellectual property (the “Intellectual Property”) and any reproductions of copyright works in the thesis, for example graphs and tables (“Reproductions”), which may be described in this thesis, may not be owned by the author and may be owned by third parties. Such Intellectual Property and Reproductions cannot and must not be made available for use without the prior written permission of the owner(s) of the relevant Intellectual Property and/or Reproductions.

Dedication

This research is dedicated to my “large family”, all of them excellent people and researchers who have left their countries to study in England. And it is also dedicated to my son or daughter that could not make it, but for a while made me feel like a father. In that sad moment I realised that all of us are working to build a better world.

Acknowledgment

I would like to acknowledge my supervisors, Professor Gavin Bridge and Professor Anthony Bebbington who oriented my work and gave me personal support in difficult moments, showing that they are not just good academics but also excellent persons. At the same time, I would like to thank Maria Kaika and Erik Swyngedouw who integrated me to different academic activities that allowed me to be involved in a vibrant group of critical researchers. I think that it is also necessary to thank the people of the Department of Geography who help me to travel to my country during the Chilean earthquake and who were always worried about me and my family.

I also want to thank my sponsor, the Chilean government through the scholarship program Becas Chile, which gave me the big opportunity to study in one of the most exciting departments of geography in the world. I would like to thank the Royal Geographical Society and the Dudley Stamp Memorial Award for the research grant that I received in 2011.

This experience has helped me to meet a lot of young professional from different parts of the world, who are researching many interesting things that gave me a broad sense of the world. I would like to thank all my friends, because my thesis is the result of the cooperation of different professionals through hundreds of hours of conversation. In this sense, I would like to thank Lazaro, Brian and Sampson, and especially my Latin American friends Félix, Germán, Matías, Alejandro, Angélica and Tania and to all the members of the Collective Political Learning.

I would like to thank my family. To my mother, grandmother and little sister who suffered the earthquake of 2010; they are brave women. I would like to thank my father who visited me in two occasions and who is always an inspiration. Finally, I want to thank Aurora, my partner and friend, who everyday gives me love and support to be a better professional and human being, and who is now working for our future.

This research belongs to everyone.

Abbreviations

AFP:	Asociación de Fondos de Pensiones (<i>Pension Fund Management Company</i>)
CDEC:	Centro de Despacho Económico de Carga (<i>Economic Load Dispatching Centre</i>)
CNE:	Comisión Nacional de Energía (<i>National Commission of Energy</i>)
CODELCO:	Corporación Nacional del Cobre (<i>National Copper Corporation</i>)
CONARA:	Comisión Nacional de Reforma Administrativa (<i>National Administrative Reform Commission</i>)
CORFO:	Corporación de Fomento de la Producción (<i>State Corporation of Production Promotion</i>)
ECLAC:	<i>Economic Commission for Latin America</i>
ENDESA:	Empresa Nacional de Electricidad Sociedad Anónima (<i>Public Limited National Electricity Company</i>)
DGA:	Dirección General de Agua (<i>Water Directorate</i>)
ISI:	Industrialización por Sustitución de Importaciones (<i>Import Substitution Industrialization</i>)
SEC:	Superintendencia de Electricidad y Combustible (<i>Superintendence of Electricity and Fuels</i>)
SIC	Sistema Interconectado Central (<i>Interconnected Central System</i>)
SING	Sistema Interconectado del Norte Grande (<i>Interconnected System of the Great North</i>)

Introduction

This dissertation aims to provide an explanation for large environmentalist conflicts. It focuses on how large investment projects drive social and political conflicts and how these conflicts can change public policies towards nature. My analysis is located within the field of historical political ecology, through the critical approach of historical and cultural geography. Thus, I understand environmental conflicts as social and political tensions over space, which create and produce territories through often contradictory discourses and socio-ecological power relationships over nature.

Large regions in Latin America, among them the Amazon, the Andes and Patagonia, are facing socio-ecological transformations by large public and private investment in extraction and cultivation. These transformations are related to the way in which territories were originally created by the *territorialisation* of colonialism and uneven geographical power relations, supported by particular discourses and practices of land distribution, resource extraction and environmental management. These transformations are historically embedded in inequalities about race, gender, class and geographical allocation and roots, generating a variety of conflicts which emerge by these processes of material and symbolic exclusion. These territories appear as a complex and multiple assemblage of people, biophysical landscapes and technologies, from where and about which, social and political contestation is created.

In the case of Chile, there is a social and environmental conflict over the construction of dams in Patagonia which has started a very significant discussion about the strategies of growth that the country has implemented in the last four decades. At issue is the role of the state, the private sector and civil society over the control, exploitation and management of natural resources. My case study is the *HidroAysén* hydroelectric project which aims to build five dams in the region of Aysén in Chilean Patagonia. The HidroAysén project, which belongs to the transnational company ENDESA/ENEL and the Chilean private company Colbún, aims to build two dams in the Baker River and three dams in the Pascua River, located in Aysén in Western Patagonia (figure N° 1) a region known around the world for its exceptional nature, unique ecosystem and dramatic landscapes. HidroAysén could flood about 14, 830 acres and would include an electricity transmission line of 1,250 kilometres in length, one of the largest electricity lines in the world. If built, the project will have an installed power of 2,750 MW

and will be incorporated into the Interconnected Central System (*Sistema Interconectado Central*, SIC) which supplies energy for 90% of the Chilean population.

On May 9th 2011, the Aysén Regional Environmental Assessment Service, a public commission of the Chilean government, approved the installation of the HidroAysén project, after six years of studies, observations and corrections. This decision has caused unusual resistance among the Chilean population. Different social groups and people, from environmentalists, the left and even from the right-wing, to individuals without a particular ideology or political affiliation, have participated in demonstrations against the HidroAysén project. According to some surveys 75% of Chileans rejected the construction of dams in Patagonia. Dozens of demonstrations took place in the main Chilean cities, even in the north of country located almost 3,000 kilometres from the location of the HidroAysén project. The biggest one, with more or less 100,000 people in the streets of Santiago, is considered one of the largest demonstrations since the return of democracy in 1989.

These national demonstrations against the HidroAysén project have to be understood with other social movements which emerged during 2011: the student movement claiming high quality free state education and protesting against profiteering in the educational system, the gay movement for the recognition of rights and gay marriage, and the regional movements in the extreme geographical zones of Chile (three of them located in Patagonia) for state investment and improvements in the quality of life. These movements are demanding a new democratic process, with the state to play a major role in planning and investment, the end of neoliberal authoritarian framework, and the end of privilege for a high class which has benefited greatly after forty years of neoliberalism.

However, the cause of environmental conflicts could be traced from a history of uneven social, territorial and ecological distribution of power, which has been deepened by the neoliberal model. In the case of Chile, there are historical patterns of spatial allocation of the political, economic and cultural power in Santiago, the capital. The possibility to transform and represent territories and landscapes is within the capability of political groups in the capital, without any real attempt at the decentralization and democratisation of the decision making process.

Nevertheless, there are other elements than can help to understand the HidroAysén conflict which are more related to the politics and the politicisation of nature in the Latin American context. A specific society/nature relationship has been constructed and produced through

historical socio-ecological relations based on exclusion and characterized by an uneven history of conquest, imperialism, ethnicity and geographical transformation. After decades of authoritarian governments, Latin America is living through a long democratic transition, which is clashing with the ecological pressures as a consequence of rapid modernization and the globalization of extraction and cultivation.

The aim of this research is to understand the environmental conflict concerning HidroAysén using a historical political-ecological perspective. I will develop a genealogy of the history of Patagonia, looking for meanings and representations for Chilean society and how they are mobilised in the creation of social and political contestation. At the same time, I will research the public policies toward nature and the environment that support the construction of dams in Patagonia. Thus, I am seeking to establish which kinds of social, political and environmental dominant narratives and legal arrangements have been created to expand hydroelectric production in the south of Chile. Finally, I will explore how Patagonia has been transformed into a cultural landscape which embodies the social, political, and economic tensions of Chilean society. In this dissertation, Patagonia is a cultural artefact in which power is exercised by different actors with contradictory meanings about the environment and the possibilities surrounding the government of nature and society. My argument is that this discourse about Patagonia already existed in Chilean society as a cultural landscape generated by the territorialisation of the state, promoted mainly by the government and also by the economic and environmentalist elite.

I will understand nature as the result of cultural construction and biophysical features, through which struggles over the transformation of environments are shaped. The social construction of nature is the result of knowledge and power relationships that are represented in scientific, political, and cultural discourse. These discourses order, rationalise, and naturalise the relationship between society and nature, resulting in the material and symbolic transformation of human groups and ecological systems through different forms of power. These discourses clash with the massive transformation of nature into a commodity, which rejects other possible representations of space.

Citizens, government, private companies, NGOs, think tanks and scholars, among others, create, use and defend contradictory meanings about the land, its landscapes and environments. Thus, a socio-environmental conflict has a historical cultural content based on the way in which nature has been socially constructed, and how different groups and

individuals perform those constructions. The social construction of nature is not neutral or apolitical, but corresponds to the way in which power and knowledge are generated and exercised.

My approach seeks to understand the content of claims about the environment, and the way in which the environment is culturally created and used for political contestation. It is not about a nature that is fixed, but a dynamic conceptualisation of “natural conditions” and “conditions of possibility” used by different social groups and individuals. In my thesis, nature is not the patrimony of local groups, but a concept that embodies the uneven distribution of power in society.

The structure of the thesis is as follows: In Chapter One, I provide my scope and theoretical approach for analysing environmental conflicts from historical political ecology. I will provide conceptual definitions of concepts such as discourse, genealogy, discursive formation and governmentality, and the application of these to political and ecological analysis, especially discursive ecological formation and territorialisation.

In Chapter Two I discuss my methodology, explaining data collection techniques (secondary sources and semi-structured interviews) and the data analysis procedure based on genealogy, the constructivist application of grounded theory and critical discourse analysis. I am proposing a model for analysing *territorialisations* in order to explain the conformation of dominant narratives and discursive formations.

Chapters Three and Four are a genealogy of Patagonia through the analysis of the processes of imagination and liberation (Chapter Three) and occupation and circulation (Chapter Four) in order to understand dominant and prevailing discourses about Patagonia and how they have been exercised. Chapter Three is focused on the imperial narratives of the transition between medieval and modern times, and the process of territorialisation of the colonial state through the Jesuits and the imperial soldiers and sailors. Chapter Four reconstructs the process of territorialisation of the postcolonial state, and the dispossession and environmental degradation of Patagonia to provide land for cattle production.

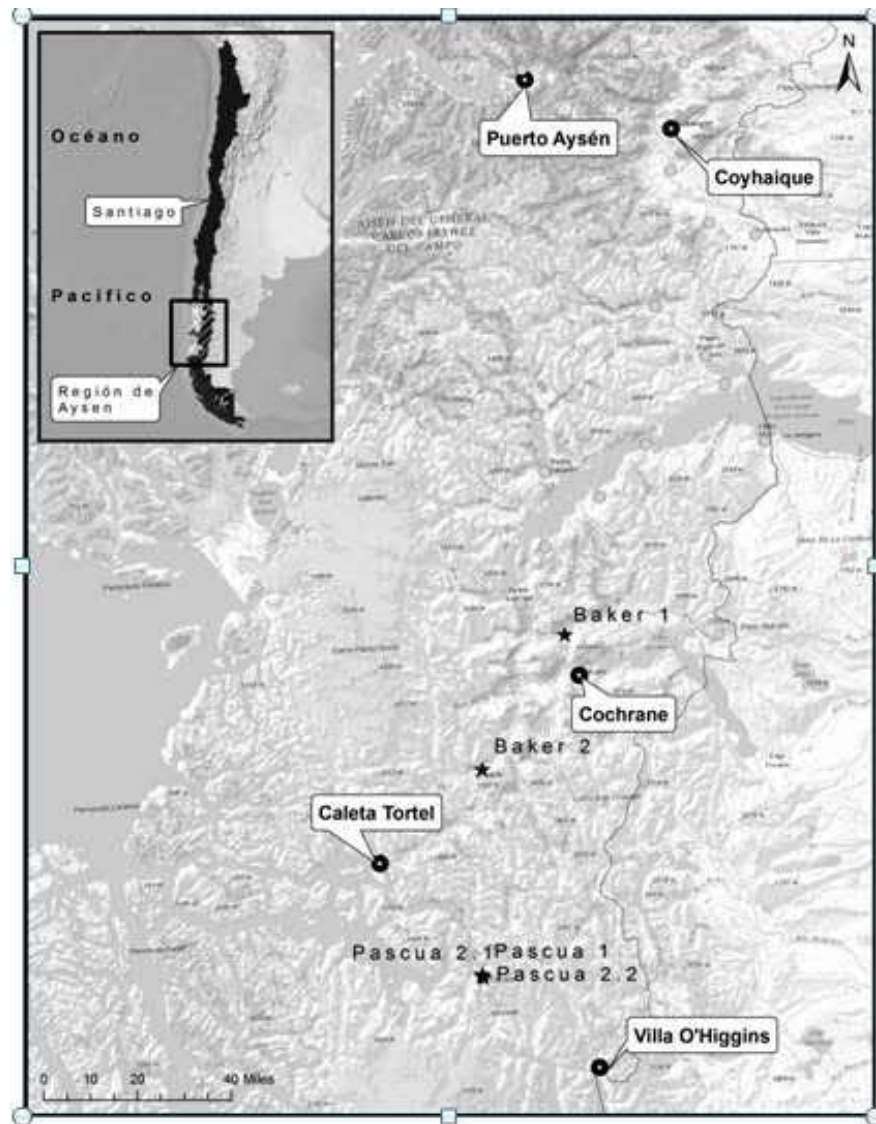
Chapter Five is about reconstructing the Chilean electricity sector, from the years of state control to the period of neoliberal reforms. The aim is to analyse the creation of a specific dominant narrative based on dams, which I call *hydropower*, which is leading the geographical transformation for hydroelectricity in the south of Chile. In this chapter are

analysed the neoliberal reforms to water and the electricity sector in Chile, and how the neoliberal territorialisation of the large hydroelectric project in Patagonia is leading to clashes within the environment.

Chapter Six is about the reconstruction of the second dominant narrative, which I call *ecopower*. I will reconstruct the institutional and environmental conceptualisation of Patagonia as a “Reserve of Life” as part of the natural heritage for the future of Chile and the world. Also, in Chapter Six, I will provide examples of “counter-territorialisation” associated with oral histories of the occupation in Patagonia, and the current social tensions that exist in the region as a consequence of the HidroAysén project.

In the Conclusion the findings and arguments are summarised; show how governmentality and environmentality are in tension and how, after forty years of neoliberalism, a “consensus” about environmental transformations is losing legitimacy, opening new possibilities for both the politics of nature and the nature of politics.

FIGURE N°1. LOCATION OF AYSÉN REGION AND HYDROELECTRICITY PROJECTS WITHIN CHILE



Source: My own.

Chapter 1. Environmental Conflicts in Historical Political Ecology

“Reading a book about Patagonia will probably affect how we experience that place when we travel there even if we experience considerable cognitive dissonance between expectations generated by the written word and how it actually feels upon the ground” (David Harvey, 2006: 280).

1.1. Introduction

I visited Patagonia for the very first time during the summer of 2006 as part of a research project studying the urban centres of the Aysén region. In this context, I went to Cochrane, a small town located in the south of the region with no more than 3,000 inhabitants. I was there to interview local authorities and social organisations with the aim of understanding the economic activities as well as the principal social issues that they identified. In the square of Cochrane there was an incipient campaign of opposition to a hydroelectricity project headed by two young neighbours, who were in charge of the group *“Defenders of the Patagonian Spirit”* (*“Defensores del Espíritu de la Patagonia”*). Through them I knew that a social movement against the construction of dams in Patagonia was taking form in Aysén, with the support of several international and national NGOs.

I returned to Patagonia at the end of 2007 when the social movement *“Patagonia without Dams”* (see Chapter 6) organised a cavalcade to demonstrate their rejection of this hydroelectricity project (figure N° 2). The cavalcade brought together settlers (*colonos*), peasants, environmentalists, and representatives of local organisations and entrepreneurs, who travelled by horse 320 kilometres from Cochrane to Coyhaique over a period of nine days. On November 27th 2007 more than a hundred horsemen arrived to Coyhaique and transformed this activity in the first large demonstration against the *“HidroAysén Project”*. The Governor of Aysén did not receive the leaders of the social movement who waited for several hours in the main square of Coyhaique. In front of the Government Hall one of the leaders declared: *“You have to know that if our call is not heard, we will return with our horses and flag, and with our rifle if necessary”*. For me, there was no doubt that the HidroAysén conflict had generated an environmental conflict, and deep inside me I felt that I was watching something important for Chile.

FIGURE N° 2. CAVALCADE PATAGONIA WITHOUT DAMS, COYHAIQUE (2007)



Source: My own.

Four years later, in May 2011, I was in Santiago (the capital of Chile) when the Environmental Assessment Service of the Aysén Region decided to approve the construction of the hydroelectricity project. Thousands went to the streets in the main cities of the country to reject the approval. During the following days, several other demonstrations occurred in Chile with thousands of people in the main streets of the country. In Santiago, the demonstrations were violently repressed by the police at the beginning, using water cannon vehicles and tear gas. In this context, a new demonstration took place in Santiago on Saturday the 28th of May, with more than 50,000 people, among them families, political parties, environmentalist organisations, student unions, indigenous people's organisations, intellectuals and artists. It was a peaceful demonstration, with a lot of banners and flags, live music and songs, children with traditional clothes, and different social, environmentalist, regionalist and indigenous demands on display.

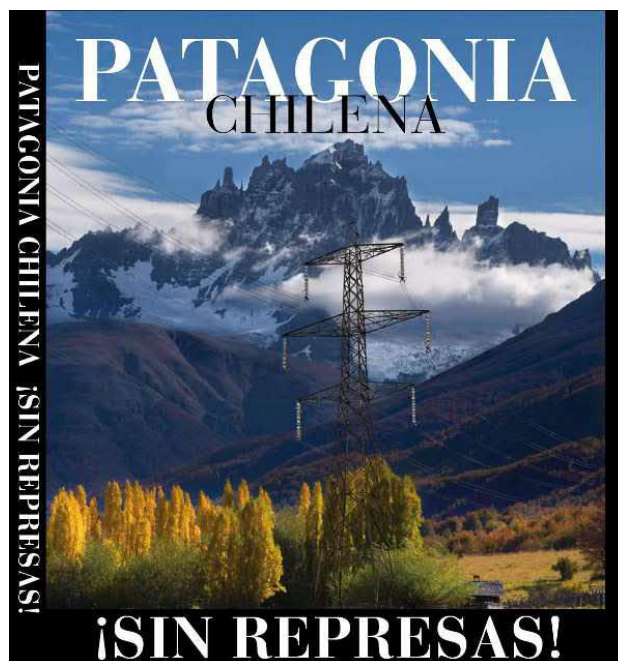
Nobody was expecting this kind of social reaction. At that moment, the main political issue of the day was the student movement and their demands for public and free education. Suddenly, the government was facing the rejection of the HidroAysén project, a full-on criticism of the decision-making process regarding large investment projects, especially regarding the lack of autonomy of the region in these processes, and the close relationship between politics and

business. But also, the government was facing something new: the citizens' defence of a territory located 1,500 kilometres to the South: Patagonia.

Banners and songs were talking about Patagonia, a distant land physically disconnected from Chile: isolated and expensive, that just a few people have had the opportunity to know first-hand. A banner said *"I want my child to have the possibility to know Patagonia"*, while in others it was possible to read *"Patagonia belongs to the Chileans"*, *"Say no to the destruction of Patagonia"*, *"ENDESA and Colbún (the two main electricity companies in Chile) are messing up Patagonia"*, *"ENDESA and Piñera (the current President of Chile) are working for the same wallet"*, *"Patagonia is not for sale"*. Through virtual social networks, such as Facebook and Twitter, the opposition to HidroAysén started to show videos, pictures, songs and flyers about Patagonia and the HidroAysén project. In this way, the image of a "natural" landscape disturbed by electricity towers circulated on a massive scale within Chilean society with the slogan *"Patagonia without Dams"* (*"Patagonia Sin Represas"*, figure N° 3). Meanwhile the media started to talk about the *HidroAysén conflict*.

Since I learned about the possible construction of dams in Patagonia, I had begun to study the nature of environmental conflict, how the construction of dams have generated environmental conflicts in other parts of the world, how conflicts and dams are explained in the literature, and why the construction of dams in Patagonia generated a massive rejection. My hypotheses were about the characteristics of the project, but also about the characteristics of Patagonia. My first explanation was: the conflict has been generated because the construction of dams does not have any relation to the natural landscapes of Patagonia. However, during the first phase of my research I found information about the dramatic environmental transformations that occurred in Patagonia at the beginning of the 20th century and about the extermination of indigenous groups. My interviewees started to talk about colonisation, settlements, fires, large haciendas, and former mining camps. I realised that Patagonia had a history, a long history of environmental and human degradation.

FIGURE N° 3. ICONIC POSTER OF THE CAMPAIGN “PATAGONIA WITHOUT DAMS”



Source: www.patagosinrepresas.cl

1.2. Research Scope: Socio-Nature Relations

“Many years ago, I asked my father if he knew some legend or myth about this land. He looked at me and said: “I was the first man in this land; there was nothing here, just nature. So I worked every day and every moment of each day...Therefore, I had no time to create stories” (Old man, inhabitant of the Baker; my own).

“...I reach to love Patagonia and I have deepest respect for its people and its wilderness” (Robert Kennedy Jr., Natural Resources Defense Council).

“Patagonia is THE symbol of nature in the world” (Aaron Sanger, International Rivers Network).

“...A thought about Patagonia; why is it untouchable? Who said that it is untouchable? (Daniel Fernández, Vice-president of HidroAysén)

If you do a search for “Patagonia” in Google Images you will see pictures of a natural, wild and pristine landscape with large bodies of fresh water and mountains covered by ice. But also, it is possible to view images of an immense grassland populated by sheep and masculine figures on horses. Is Patagonia natural? “It was!”, said the old man, “It is!”, argued the environmentalist, “It is not!”, claimed the company official. How can this situation be possible? How can the same place be identified by different actors in such radically different ways?

In order to research this tension about nature, I began to study debates in human geography and the emergence of political ecology studies. Since the 1980s, there has been a serious debate about the concept of nature and its relationship with society. Emergent arguments suggested that nature is not an entity that is external to society, but that it has been shaped by historical-ecological processes. Different scholars started to research how nature and society are in a dialectical relationship, which is based on an exchange of matter, energy and information, mobilised by a set of economic, cultural and technical factors, which depend on the biophysical characteristics of nature and that define how society uses it (Castree, 2005). In this debate, human geographers focused their work on interrogating the ontological and epistemological presuppositions in conceptualizations of nature and society, questioning their conceptual stability, supposed neutrality and non-historical construction (Braun, 2004). In these discussions, at least three bodies of thought have emerged, each departing from the argument that nature has never been just natural and that it is inherently social.

The first approach is the *production of nature*, which has been developed by Marxist scholars, inspired by Harvey and Smith, who have argued that nature has been produced by human labour through determined modes of production and social relations. The most extensive and intensive form of production of nature is capitalism through a historical process of environmental and human transformation founded in oppression and exploitation. These transformations have been made possible by the existence of an "ideology of nature" that serves specific social interests according to the capitalist mode of production (Smith, 1984; Harvey, 1996; Braun & Castree, 1998; Castree, 2000; Swyngedouw, 2004). Capitalism is constantly producing "new nature", forcing the emergence of ecosystems, shaping landscapes and conditioning specific social and material relations (Mitchell, 1998, 2003). Today it is almost impossible to think about places that have not been intervened in and many things that we take for natural -such as the Patagonian landscapes- are in fact historically fabricated environments for the reproduction of capitalism (Peet, *et al*, 2011; Swyngedouw, 2003, 2007).

Marxist inspired scholars have developed complementary approaches to understand how capitalist modes of production create new nature as an integral part of its *metabolism* which needs increasingly more materials and energy (Martínez-Alier, 2004), thereby producing more waste with the possibility of affecting its own reproduction (O'Connor, 1998). The approach of *accumulation by dispossession* (Harvey, 2003) as the extension of the Marxist thesis of *original accumulation*, explains how the ongoing expansion of the capitalist system

needs to integrate “others” outside itself, as cheap inputs to trade and to invest in profitable ventures, using cheaper labour power, raw materials, and low-cost land. The historical geography of capitalism has followed this path of a persistent practice of accumulation based on predation, fraud, repression and violence. Accumulation by dispossession implies the privatisation of land, the displacement of people, the transformation of different property regimes into private property rights, the suppression of rights in the commons, the commodification of the labour force and the suppression of alternative forms of production and consumption (Harvey, 2003: 145). Through this process, the geography of the world has been materially and symbolically transformed to produce profit, collapsing nature in a commodity form.

The second group of approaches has been called the *social construction of nature*, which is inspired by poststructuralist scholars, such as Foucault, Derrida, Deleuze and Guattari, among others. Poststructuralist approaches in geography have criticised elements of the ontology of the discipline such as space, place, nature, culture, individual and society, and how some objects are taken as central for geographical analysis (Dixon & Jones III, 2004). The analysis of the relationship between society and nature has been sought to destabilise the limits of the representations and meanings of culture, society, economy, politics and environmental issues (Braun & Castree 1998; Castree & Braun 2001, Demeritt, 2002; Willems-Braun 1997). This set of accounts has argued that nature is socially constructed by a complex system of representations, knowledge, discourses and materialities goes well beyond the economic domain. The argument that nature is socially constructed is based on the idea that there are cultural and historical concepts that guide how people interact and transform their physical environment, which in turn influences people’s conceptions (Escobar, 1996; Braun, 2004; Castree, 2005; Bridge, 2010). There is no nature *per se*, but a cultural construction, multiple histories and practices, which are taken from common sense and cannot be disentangled from practices of representation (Gregory, 1994; Braun, 2002a).

A key work in social construction is the deconstruction of *wilderness* by William Cronon (1996), who suggested that this concept involves a construction of particular human cultures and material relations from particular moments in history. In the 18th century wilderness was synonymous with savage, desert, desolate, and set in opposition to civilization. Meanwhile, in the 19th century, wilderness was conceptualised as a thing to be preserved, mapped and visited by tourists. Wilderness has strong gender content, presenting nature as a female entity, where man became a man. It is also embedded in a peculiar bourgeois reaction against modernity,

where wilderness becomes a landscape for the urban elite through tourism, where land has value for consumption and recreation. This discourse was strengthened through notions of biodiversity and ecology and the creation of public and private institutions for the preservation of "nature" that embodied relationships of power over the use of the environment (Cronon, 1996; Proctor, 1998).

In social construction approaches, meanings, identities, forces and relations are "fixed" only in a provisional way. Nature has been framed through inspection, coding and calculation; it has been subjected to regulation and valued for its incorporation into society. Thus, nature has been rewritten, structured as a system of ownership and concessions, secured and placed in a position to be worked reasonably, reduced to mathematical formulae and managed. The result of this process is the formation of a domesticated landscape where power is exercised (Gregory, 2001; Braun, 2002b; Braun & Wainwright, 2001). However, the ability to invent nature is unevenly distributed, and different concepts and practices of nature are in tension within societies, communities and individuals, including different cultural practices and epistemologies of indigenous people and other social groups (Escobar, 1999).

There is a third analysis of society and nature that corresponded to *materialist socio-nature* approaches influenced by Spinoza, Foucault, Deleuze and Latour, among others. In geography several scholars, such as Harvey, Massey, Thrift and Whatmore, are working on the reunification of nature-culture. These approaches have criticised the fact that cultural practices shape what is experienced as natural or real. In these accounts, nature is not just the result of political economy and culture, but something that is not infinitely malleable (Baker & Bridge, 2006). There is not an intrinsically inanimate matter, and this matter is not entirely reducible to the contexts in which human subjects set them. In other words, nature is never entirely exhausted by semiotics and never rendered as a mute and stable background to political economy (Bennett, 2004, 2010; Hinchliffe, 2008). Through concepts such as matter, materiality, things, hybrid, agency, body, embodiment, performativity, becoming, affect and actants, human and nonhuman are presented as having sufficient coherence to perform actions, produce effects, and alter situations (Bennett, 2010). Therefore, there is a "conjoined materiality", where human and nonhumans are assembled through material artefacts in socio-natural environments that are embodied in cultural constructions and material formations, where both participate in the production of socio-nature (Bridge, 2010; Bakker & Bridge, 2006; Butler, 1993).

My research is influenced by these approaches. I am using a variant of the social construction of nature argument, recognising that physicality is constructed through social relations, discourses, and material practices. Hence, material things are understood in particular cultural frames that change over time, and materiality is simultaneously physically constituted and culturally practiced. However, my research is also influenced by personal experiences about socio-natural relations. In 2010, Chile was affected by an earthquake of 8.8° on the Richter scale, which is in the list of the five strongest earthquakes registered by modern society. After the earthquake, a tsunami affected different parts of the country during several hours, killing almost 500 people. Cities like Concepción were physically displaced 3 metres towards the Pacific. I was in England - 12,000 kilometres far away- yet my life changed, as well as the life of my family and also the life of Chile. The earthquake removed the foundation of the country, its institutions did not work for several days, and a large part of the population was left without basic services. Millions of people were affected in their everyday life, some of them lost their houses, meanwhile others were affected because every aspect of human life was turned into a difficulty, especially in urban areas. The triumphalist economic discourse that had dominated in Chile since the 1980s was destabilised, through images of looting and people sleeping in the streets. The fear of robbery, insecurity and social struggle grew. And for the first time since the end of the dictatorship, the military went to the streets to maintain security. However, in this hostile scenario, a message of national unity and hope emerged. For example, communitarian practices to supply food and water started to appear, solidarity and activities of being together reinforced social ties and maintained security between citizens.

What I want to make clear is that after the earthquake, many social changes started to happen, among them a general concern about the future, which can be linked to the student movement, and also to changes in perceptions of nature. The biophysical features of the country allowed the extraction of natural resources, but were also responsible for social disasters. It became evident that nature is not something external to society, but rather something under our feet and surrounding us. These emerging realisations could also underlie recent environmental conflicts. From this socio-natural process, different discourses of nation, future and nature started to circulate, emerging from the experience of the people, and they affected the whole social structure of the country.

Summarising, in this research, nature and society are not seen as separate domains. The construction of dams is an economic, political, cultural and ecological process that produces new socio-natural environments, such as the reservoir of water. The transformation of

environments requires specific relations of power, supported in knowledge and discourses about the use of resources, and the places that can (and cannot) be transformed. However, despite representations, there are material, biophysical features that are not constructed by humans. Water, basin, ice fields and tectonic faults are also acting. In this research, Patagonia is a historically constructed cultural artefact that works as a *palimpsest*, in uneven relations of power, but also it is a thing that has its own life and history. Patagonian landscapes are social and natural representations of the material and symbolic power of the state and elites, but also of citizens and local groups, and of matter itself. My argument is that the conflict over the construction of dams in Patagonia is not only “environmental” but also historic and cultural, and is strongly associated with the existence of dominant narratives. More than the defence of the environment as something abstract, many of the people who reject the construction of dams in Patagonia are defending a specific idea of territory that has been culturally constructed over time and disseminated as the “truth” about Patagonia by the cultural machinery of the educational system and the media, but also through the everyday life of Chilean society through tales, experiences and expectations.

Through nationalist and environmentalist discourses Patagonia is presented as the motherland; a wild territory in an era characterised by concern over global warming. In this way, public and scientific knowledge are acting together in the construction of Patagonia as a global commons to be preserved-exploited. However, despite discourses, a large part of Patagonia's territory remains without significant human transformation, and this is the reason it has been labelled by the Chilean government as a *Reserve of Life*. Its physical and symbolic transformation for the production of hydroelectricity is generating the rejection of Chilean society, which understands nature as an integral part of its territorial identity.

1.3. Environmental Conflicts

What is an environmental conflict? I started to ask myself this question several years ago, and the answer was always “disagreements about the exploitation of natural resources”. However, there is a range of other environmental conflicts that are related, for example, to pollution, the loss of wildlife, the intervention of green spaces in cities, or even the aesthetic of landscapes. Moreover, there is a range of environmental conflicts associated with previous social conflicts related to issues such as ethnic differences, privatisation of resources, and the expansion of state control over “natural” areas. Therefore, environmental conflicts have a history, and in

many cases, a long history of “disagreements” between different social, ethnic and gender groups as well as over how those groups are distributed in space.

The literature about environmental conflicts can be divided in two broad fields: the first has provided “apolitical” explanations related to ecological and economic discourses; the second group, known to many scholars as “political ecology”, is associated with critical theories in social sciences to explain environmental change, and has an explicit concern for social justice.

1.3.1. Apolitical environmental conflicts

These approaches are influenced by Malthusian thought about population growth and Hardin’s “*The Tragedy of the Commons*” (1968). In these perspectives, environmental conflicts have been created by the human degradation of environments, through the intensive use of renewable and non-renewable resources in order to increase well-being beyond the capacity of the ecosystem (Libiszewski, 1992). Environmental degradation is caused by population growth and overconsumption, which will lead to conflicts because of the scarcity of resources, limiting subsequent access and creating insecurity and social instability. Environmental resource scarcity is an economic and ecological problem, between individual and society, which needs appropriate institutional and market mechanisms to secure the supply of resources. To prevent environmental conflict it is necessary to rationalise the productive processes, promote technological advances, and foster the search for raw material substitutes (Barnett, 2000; Diehl & Gleditsch, 2001; Pompe & Rinehart, 2002).

In another approach the scarcity and vulnerability of resources is likewise caused by population growth, but also depends of the balance of political power, the nature of the state, patterns of social interaction, and the structure of economic relations among social groups. These elements determine how resources will be used, the social impact of environmental scarcities, and the grievances arising from these scarcities (Percival & Homer-Dixon, 2001). In this second approach, there is a reference to a *structural scarcity* generated by the unequal distribution of resources, where powerful groups in a society, anticipating future shortages, shift resource distribution in their favour, subjecting the remaining population to scarcity, denying weaker groups access to resources, and also forcing them to migrate to ecologically fragile regions that subsequently become degraded (Homer-Dixon, 1994).

These explanations are vague about the relation between population growth, overconsumption and degradation, and are characterised by a noncritical analysis regarding the historical

process that allows the enclosure of resources. Nature and society are separated in ways that are consistent with utilitarian discourses of economy, and the coordination of rational individuals is only possible through market mechanisms. These explanations began to be challenged by several scholars, especially by those now known as political ecologists. These scholars have presented complex analyses of the relation between society and nature, with especial interest in the link between power and environmental change. Political ecologists also have integrated analysis of the effects and deepening of capitalism, the historical context of colonialism and postcolonialism, the existence of plural rationalities, and the emergence of the environmental concern within society.

1.3.2. Political ecology

Political ecology is an eclectic field of studies that shares a research concern for environmental change and society-nature relations. In these traditions analysis is focused on the tension between the use, perception and representation of resources (often natural and local resources), mediated by a combination of regional biophysical characteristics and processes, and the discursive-material manifestations of power. Political ecology is a multidisciplinary analysis in which it is possible to find elements of environmental and cultural anthropology and geography (Paulson, *et al*, 2003), political economy and ecological economics (Martínez-Alier, 2004), environmental history (Hornborg, *et al*, 2007), and environmental sociology (Beck, 1995), among others.

These kinds of studies are often divided into two main streams (Forsyth, 2003). The first of these follows a structuralist approach to land degradation through reference to capitalism and/or oppressive states, and their effects on local people and their environment (Blaikie & Brookfield, 1987; Blaikie & Springate-Baginski, 2007). According to these perspectives, the major causes of ecological deterioration are based on how relations of poverty and wealth affect the access to and control over resources, and how these phenomena have implications for the livelihoods of local groups (Martínez-Alier, 1998; Bryant & Bailey, 1997). In these approaches, environmental change is *social* in origin and definition, so the analysis must be focused on *why* there are social practices that affect the environment, and *how* social forces are shaped by political economy. In these readings, environmental conflicts may have their origin in the increasing scarcities, but they have been produced through resource enclosure or appropriation by the state, elites or firms, that accelerate conflicts between groups based on

gender, class and race, especially as capitalist relations extend towards the historical peripheries. This situation has undermined the conditions of livelihood of indigenous and peasant communities, because of the uneven distribution and allocation of environmental hazards or adverse impacts (Robbins, 2011; Martínez-Alier, 2002, 2009; Muradian, *et al*, 2003).

The second stream of political ecology has been focused on the influence of history and culture on concepts and representations of the environment (Escobar, 1999; Peet & Watts, 1996; Peet, *et al*, 2011). The so-called *poststructuralist political ecology* derives from Foucault-inspired analysis of power/knowledge/discourse and from Said's postcolonialism, among others. These kinds of analysis are about the creation, legitimisation and contestation of environmental narratives that include languages and practices that are socially and politically situated (Stott & Sullivan, 2000). Scholars working in this perspective have identified a plurality of perceptions and definitions of nature, environment and natural resources, and have had a particular interest in how specific types of knowledge are privileged and institutionalised (Peet & Watts, 2004; Escobar, 1996, 1999). Attention has been placed on local narratives, cultural practices, temporal and spatial scales and alternative management of natural resources, on how these are mobilised in efforts to confront the power of the state, and on forms of resistance and protest that give voice to those excluded (Peet, *et al*, 2011; Robbins, 2011).

In this line of analysis, then, environmental conflicts are about culture and how power is exerted by various groups. Consequently, environmental conflicts are about how the *environment* is socially constructed and how this construction is embodied in historically uneven relations of power between dominant and subaltern representations. According to Robbins: "*Environmental conflicts are, therefore, struggles over ideas about nature, in which one group prevails not because they hold a better or more accurate account of a process -soil erosion, global warming, ozone depletion- but because they access and mobilize social power to create consensus of truth*" (Robbins, 2011: 128). Thus, environmental conflicts are understood as clashes between a rational instrumental knowledge and lay knowledge, or between rationalities and social positions (Peuhkuri, 2002), that affect the different ways in which development, democracy, society, environment and market are understood (Bebbington & Humphreys Bebbington, 2009).

Despite the strict academic division between the two streams in political ecology, scholars often use a set of analytical tools to analyse environmental change and environmental conflicts. For example, in the case of Latin America, Bebbington has based his analysis of environmental conflict on the history of exploitation and dispossession that underlie the current extractive economy in the region. He identifies a phenomenon of “increasingly aggressive expansion of extractive industry” over land, territory and the political control of the space that is facilitated by macroeconomic strategies that seek to extend investment into historically marginalised territories (Bebbington, 2009; Bebbington & Humphreys Bebbington, 2011). This expansion is supported in a discourse that “resources belong to the nation” and that they should be used for poverty reduction and in increased social investment (Bebbington, 2009: 19). In these terms, environmental conflicts are also based on how environmental management and governance, that represent the mandates of the state and the interest of capitalism, become internalised within communities and individual themselves. Meanwhile, politically marginalised individuals and communities tend to be invisible for planners and investors, and these individuals and groups (such as women, peasant and indigenous communities) may be not represented by development policies (Robbins, 2011). In many cases, the cost of extraction is assumed by local indigenous and peasant communities, while the benefits and opportunities accrue in other spaces (such as national capitals and other areas of demographic concentration). Thus, environmental conflicts show patterns associated with colonialism, violent integration of the peripheries and resource dependence.

At the same time, the everyday meaningful practices of peasant and indigenous people are colonised by forces that accelerate the cultural modernization of traditional practices and the disarticulation of moral economies. In many cases, according to this line of analysis, the social mobilisation associated with environmental conflicts is a response to this colonisation, seeking to ensure the security and integrity of *lifeworlds*, material livelihoods, and the ability of the population in a given territory to control what it views as its own resources (Bebbington, *et al*, 2008: 2890). Hence, environmental conflicts are the result of pre-existing social, political and racial relations about the environment (Bebbington, 2009; Martínez-Alier, 2002; Folchi, 2001).

In this dissertation, the explanations of environmental conflict are focused on three main elements. Specifically I understand this conflict as: a) a historical process associated with the expansion and imposition of the capitalist system in new territories and the enclosure of natural resources; b) a cultural process in which worldviews, discourses, valorisations and

knowledge are in struggle; and c) an effect of the uneven social distribution of resources access and control, and of the fact that capacities of representation and use of resources depend on the ability of power to coordinate discourses and material practices within society.

1.4. Historical Political Ecology

Historical political ecology is trying to trace how knowledge and narratives have become dominant or hegemonic over time, and how they support and reinforce environmental change and nature-society relations through discursive and material practices. In other words, historical political ecology analyses the connection between social processes and material outcomes to understand historical and current environmental change (Davis, 2009; Offen, 2004). In this account, the neoliberal management of environments has a history, which is connected in different degrees to constructions and narratives about nature and environment change, and created in the particular time, space and cultural frame of western imperialism. Western imperialism is understood as the process of colonisation, the political economy of dispossession, and the development of a scientific construction of environments and people through the imposition of “otherness”. Colonial environmental knowledge was institutionalised through discourses and practices that today continue to operate in postcolonial societies. Through laws, codes and institutions this form of environmental management has been reinforced, reproducing programmes of environmental transformation that are considered as socially unjust or environmentally inappropriate by local people (Davis, 2009).

Historical political ecology can be divided into the historical application of approaches of “production of nature” and of the “social construction of nature”. In 2009 *Geoforum* published a special number about Gramsci's political ecology, which argued in favour of historical analysis to understand the process of hegemony formation, power relations and “material” environmental change. In Gramsci's theory, hegemony is defined as the legitimization of the interest of the ruling group through the diffusion and adoption by subordinated groups of a set of ideologies and social relations that secure the capitalist order. Hegemony is not a singular project but an articulation of a widerange of popular, philosophical, economic and cultural phenomenon. In this account, Mann (2009) called for a deeper engagement with the processes through which exploitation and injustice are naturalised by society, and through which hegemony works ideologically. Gramscian political

ecology understands nature as a human production, where humans and “their” environments co-evolve. The environment is understood as a socio-natural entity, mediated by labour and technology, in which hegemony is built through the material and ideological transformation of nature (Ekers, et al, 2009).

Following this perspective, Karriem (2009) analysed the Brazilian Landless Movement, one of the most important social movements in Latin America, which has become constituted a counter-hegemonic political actor in the global context. The study of hegemony is focused on actors and social relations, and how local relations are connected to different geographical and environmental scales, to produce nature through coercive and consensual means. This conceptualisation is strongly related to the approach of production of nature and studies of how subaltern classes contest the remaking of nature. The struggle of this movement is to challenge not only the unequal distribution of land but also “common sense” about land and production, by promoting, for example, “popular education”, self-organisation and different agro-ecological practices.

Within this approach, Ekers (2009) studied the multi-dimensional character of hegemony paying attention to the entanglement of class, gender and ecological relations in the “forestscape” in British Columbia during the 1930s’ Great Depression. In his account, struggles for hegemony over subordinate groups led to the production of new natures and landscapes. Hence, hegemonic projects are also historical ecological projects; Ekers illustrates how policies of employment focused on young men and the creation of forest industry were embedded in an ideology of nature that constituted a material force over class, gender and environment (Smith, 1984; Castree, 2001).

The second stream of historical political ecology, and what in which I locate my dissertation, is associated with a form of social construction of nature. Bruce Braun (2007) suggests the need to expand the historical materialist arguments regarding the production of nature to more heterogeneous practices using Deleuze, Latour and Haraway, to capture the multiple and intertwined social, epistemological and political processes, which interact in the construction of socio-nature. This socio-nature is produced also by discourses and material practices of everyday life, language, meanings and history. Scholars working within this stream of historical political ecology use -expressly or not- Foucauldian inspired genealogy as their method of analysis. They have identified misconceptions in environmental management,

deriving from the colonial and postcolonial histories during which structural inequalities that endure to the present were created.

Deeply influenced by Nietzsche, Foucault developed *genealogy* as a historical method to study how power relationships involve specific discourses, and how those relationships shape or construct various kinds of practices. According to Foucault, power is produced and exercised through the construction of knowledge, and the establishment of discourses and representations that allow the disciplining of subjects and objects through the management and normalisation of behaviour in space and institutions. The aim, therefore, is the destabilization of meaning and the study of power relations, their reinforcement, and the mental and material transformations that this process entails (Foucault, 1982; Prado, 2000; Downing, 2008; Dreyfus & Rabinow, 1982; Rabinow, 1984).

Genealogy is an analytical tool to reconstruct the “history of the present” (Foucault, 1995). It is the analysis of what makes the imposition of power relations upon *bodies* possible, and of the transformations that occur through discursive and non-discursive practices, control mechanisms and the use of different techniques that help to normalise behaviours and spaces (Flynn, 2005). It is not a linear analysis, but the study of transformations and changes through the deconstruction of meanings and their contingency. A central point in the elaboration of genealogy is the examination of the relationship between knowledge and power. For example, there can be no construction of dams without the development of the field of engineering, or without the existence of social mechanisms for the control of water and rivers. In the modern society, there is no environmental and human transformation without frameworks of knowledge that makes it possible.

Power is embodied and located in space, for example, through the establishment of institutions (Foucault, 2003). Knowledge is embodied in practices, practices are embodied in the body, and the body is immersed in modes of spatial organization through which the system of knowledge is created (Murdoch, 2006: 56). The structures of the built spaces and their distribution reflect the precepts of knowledge and the way in which power is exercised on subjects and objects, with the aim of modifying their behaviour. Thus, the spatial configurations in which subjects are living, and the discourses that support them, are internalised by the individual, thereby helping to produce subjectivities (Murdoch, 2006).

In these studies, the notion of postcolonialism is a critique of the material and discursive legacies of the colonial era that are still present in modern societies. Its origin can be traced,

among others, from Fanon, Said, Bhabha, Spivak and García Canclini, and the application of Marxist and poststructuralist analysis in Africa, Asia and Latin America. Meanings, values and practices are embedded not only in the persistent domination and exploitation of the former colonies but also shaped through geopolitical and economic relations. Colonialism reconceptualised nature through the production of knowledge, the creation of discourses that ordered the world and that identified “others”. The discourse of environmental determinism and the expansion of imperialism justified colonialism and the imposition of a “truth” about the political, social, economic and environmental order of the world. In this process, certain representations of nature were constituted as dominants and have become internalised within society such that they persist after the independence of the colonies (Sioh, 2009; McEwan, 2009). The history of poverty and social injustices has been hidden behind environmental narratives that, for example, blame subaltern groups of environmental destruction and promote resource enclosure. Neumann (1998), among others, has highlighted the symbolic importance of landscapes, the political struggle over landscape meaning among different social groups, the co-existence of different discourses and practices over the environment over time, and the confluence of struggles over meaning and over land and resources access.

Within this stream of historical political ecology, Nancy Peluso and Peter Vandergeest have studied how the idea of forest has been constructed as a part of the development of economic models in postcolonial context in Asia, especially Indonesia, Malaysia, and Thailand. The forest is a discursive-material construction supported by political, judicial, cultural and racial elements that can be traced from the colonial era (Peluso & Vandergeest, 2001; Vandergeest & Peluso, 1995). Specific types of control over forest and land resources were exercised by the state, through territorial zoning and mapping, the enactment of land and forest laws, the constitution of state institutions, and the criminalisation of previously common practices. Therefore, the concept of forest is associated with a set of discursive and material practices that are reinforced by institutions and operate on the ground through the work of bodies such as the forest police, but also through the self-disciplining of forest users. Peluso & Vandergeest use the Foucauldian concept of *governmentality* to describe how power is exercised not just from institutions to individuals, but also from the individuals who themselves control their behaviour related to the forest.

Raymond Bryant (1994) studied *laissez-faire* practices and the management of forest in Burma in Southeast Asia in the years of British colonisation in the 19th century. Private extraction, prevailing social and economic beliefs, and the experience of other colonies

created policies of environmental management in which the state took control over the forest through scientific discourses and practices for the regulation of extraction. The control of the forest created conflicts among diverse forest users, especially local groups who contested these modes of state classification and control. Bryant concluded that patterns of control and strategies of resistance established in the early colonial period have hardly changed over the subsequent decades (Bryant, 1994: 168)

Roderick Neumann (1998) has studied how Europeans constructed the African “wilderness”, particularly in Tanzania, through the establishment of colonial settlements and the creation of protected areas restructured property relations. The park of Mount Meru in Tanzania is the result of a historical struggle over land and resources, especially of ancestral land claims. The way in which landscapes have conceived by the “West” and environmental protection promoted by the state and international organizations, such as World Wildlife Fund for Nature, has led to confrontations with traditional users of land since the European colonial era and the way in which landscapes have been conceived by the Western culture. At the same time, this situation has allowed the creation of the identity of peasants and the articulation of resistance to protect that landscape against the ways in which the colonial and postcolonial state has understood customary rights.

In Bruce Braun’s work (2002b), the rainforest is a concept that has been built from contradictory discourses that allow different representations and social practices, related to the exclusion of natives, the sovereignty of the Canadian state, and the colonial exercise of power. There are struggles over nature, land and its meaning, which at the same time, are struggles over identity and rights among natives, the state, corporate capital and forestry workers. In Braun’s work, the rainforest is constantly stabilised and destabilised as an object of economic calculation, political and aesthetic debates. For Braun, land and its qualities are historically contingent; nature and its characteristics are constantly changing and come into history. For example, he analysed the discourse of geology, and how nature has been framed and capitalised, leading to cultural and historical representations of the environment that have facilitated its material transformation. In addition, universities developed specific disciplines related to mining and trained of suitable subjects, thereby feeding the cycle of the transformation of the territory, through a set of discourses and practices that highlight the welfare of the population through the exploitation of natural resources.

Peter Walker (2004) worked on historical narratives of tree planting in Malawi in Southeastern Africa, analyzing them as a “regional discursive formation” (Peet & Watts, 1996), the thoughts, logics, expressions and metaphors embedded in historical discourses about particular regions and that appear, disappear and reappear over time. Walker’s research was focused on the historical reconstruction of environmental transformations based on the persistence of colonial conceptions and practices over natural resources. These narratives about the environment are supported in the “expert” knowledge and international agencies, such as the World Bank. For Walker, these narratives taken together are deepening social injustices.

Following this second stream in historical political ecology, I am focusing on how the material and discursive forms of power of the colonial and postcolonial state have shaped the Patagonian landscape. The dispossession produced by colonialism and capitalism have, in my analysis, made it possible to promote the construction of dams in Chilean Patagonia. However, given the process of internalisation within society of other dominant, historical narratives of Patagonia, it has also been possible to challenge its specialisation as a region of hydroelectricity production, and to promote its conservation, through deploying nationalist and environmentalist discourses. Nevertheless, what today seems natural is in fact the result of the prior exercise of power relations, and the related consolidation of discourses about Patagonia.

There is also a history of hydroelectricity production in Chile, which illustrates the dramatic changes that have been ushered in by neoliberal policies over the last 40 years. The discourse of development among private actors, the privatisation of water and electricity companies, and the concentration of political and economic power in a few hands, have together created a dominant narrative regarding the “proper” use of rivers to produce energy for economic growth, and the need to expand the generation of electricity into places that offer “natural” conditions for the development of hydroelectricity, especially in a global scenario of energy and environmental crisis.

In addition, there is a history of environmentalisms, territory and politics, that has been fashioned through the emergence of discourses and practices surrounding conservation, democratisation and decentralisation. Environmentalist, social and regional movements have emerged in the last three years in Patagonia, demanding development, public investment and participation in decision-making, especially over large investment projects.

1.5. A Historical Political Ecology Approach to the Construction of Dams in Patagonia

“There *is* something outside the text” (Peet, 1996; emphasis original), said Richard Peet in his study about Shays Memorial in Massachusetts, criticising the over-textualisation and over-representation of poststructuralist approaches in geography. This criticism is shared by many scholars, and the response has been the emergence of a “material turn” in geography which is not only concerned with *things*, but also with individual experiences of lived space (Jackson, 2000; Thrift, 2002; Cook & Tolia-Kelly, 2010; Waterton, 2013).

There is a tension between discourses, practices and materialities, and my dissertation reflects that tension. A large part of my work addresses representations, through the analysis of texts about Patagonia produced by various actors in the last four hundred years. However, my analysis of texts is strongly linked to material process and social relations of power. My focus is on both discursive and material practices that transform Patagonian landscapes and their human occupation, through a historical process of dispossession. It is linked to the persistence of colonial discourses and material practices about environment and people. At the same time, it is about the emergence of new discourses and political forces that challenge historical representations and practices. In the following pages I present the theoretical elements from historical political ecology that I use to perform a genealogy of “Patagonia” and the condition of possibility for the construction of dams there.

1.5.1. Discourse and discursive formation: framing dams

Discourses are an intersection between power and knowledge. They are world-views that belong to a specific time, place and culture, which legitimate actions via a set of knowledge, practices, institutions and things (O'Farrell, 2005; Jørgensen & Phillips, 2002). Discourses are social actions, or social practices, that construct social reality through objects, situations, identities and social relations. They are produced and performed by individuals who interact with each other, embedding the construction of knowledge in social interactions and subjectivities (Wodak & Chilton, 2005).

Discourse, then, is language plus context and does not only include statements, but social experiences, assumptions and expectations, which are constantly constructed and negotiated through social practices. As a consequence, discourses change in contact with other discourses, in struggles for meaning, and non-material and material representations that are

never completely finished. Therefore, knowledge about the world is not “objective” or “true”, but a socially constructed set of discourses and representations of the world (Woods, 2006; Burr, 2002).

Statements about social and material reality are produced in a relatively autonomous system of discourses that may be called a *discursive formation* that establishes “truths”. This concept was used by Foucault in reference to disciplinary fields in *Archaeology of Knowledge* (1979) and *The Order of Things* (2002). Thus, discursive formations are frameworks, or a system of formulation and signification, with particular rules about how groups of objects, enunciations, concepts or theoretical choices are formed (O’Farrel, 2005: 12). What can be thought, said and done is established through a discursive formation; these emanate from institutionalised sites of production, and reinforce social institutions and social practices, identifying the preconditions for relationships (Foucault, 1979: 50).

Discursive formations permit the conditions of possibility for power. On the one hand, there is a process of consolidation of dominant statement and the building of consensus through networks of knowledge production and diffusion, intellectuals and think tanks that systematically construct subjects and the worlds about which they speak (Springer, 2010; Purvis & Hunt, 1993; Steadman, 1992). On the other, discursive formations create a process of “subjectivation”, where individuals are integrated in their everyday life. This means that a discursive formation works from both top-down and bottom-up: a productive conception of power means that “truths” are not only imposed from above, but also that those “truths” are internalised by individuals and are open to contestation (Springer, 2010). Knowledge and truths constitute a network of power. This network of power which is linked to struggles that are simultaneously discursive and material, and which take the form of mundane practices.

Scholars have applied the notion of discursive formations to understand the construction of ideology (Purvis & Hunt, 1993), co-dependency (Steadman, 1992), sexual violence (Das, 1996) and neoliberalism (Springer, 2010). Within political ecology, discursive formation refers to frameworks from where environmental change is possible, linking cultural constructions over nature, ideological purposes and socially situated relations of power, with material practices for the organisation and government over objects and subjects. Regional discourses, landscapes and icons correspond to discursive formations of specific social relations that limit representations and modes of regulation (Peet, 1996). Therefore, space,

knowledge and representations are articulated through discursive formations in the interest of class, gender, ethnic and regional power systems.

It is possible to understand dams within this conceptualisation. Scholars who work on the ecological and political effects of dams have identified various discourses about them, such as monuments, pyramids or temples, which became symbols of national prestige, modernization, control and discipline over nature, and as a sign of progress and technology (Kaika, 2006; McCully, 2001; Leslie, 2005; Nüsser, 2003; Cumming, 1995). Dams can be understood as discursive formation; a thing that is part social and part natural (Swyngedouw, 2003, 2007) formed by political and economic power and scientific progress, but also by the cultural and material mobilisation of water and the natural resources and environments that are enrolled in dam construction and function. Dams are a result of relations of power that represent a dominant ideology about nature and society, but are not simply an imposition of power. On the contrary, dams need a high degree of “truth” and consensus within society, because they are among the most enormous structures that humanity has ever erected (McCully, 2001). In other words, the political forces within society must “agree” to build dams, and to do that, different mechanisms of power are symbolically and materially mobilised. In these terms, dams represent power, the generation of power, power over others, and the power to create and maintain civilizations (Turpin, 2008).

Discussion of dams and power can be traced from the work of Steward and Wittfogel, on the “hydraulic society”, a social order founded on the intensive management of water through an elite formed by scientists, engineers, priests and agro-managerial bureaucracies in ancient cultures, such as Mesopotamia, Egypt, India, and China (Worster, 1982). In Kaika’s work (2006) on modern dams in Greece, the scientist and the engineer become the modern Prometheus: the heroes of modernity promising to dominate nature and deliver human emancipation, employing imagination, creativity, ingenuity, a romantic heroic attitude, and a touch of hubris against the given order of the world. In Swyngedouw’s (2007) works on dams in Spain, water infrastructures and the transformation of the techno-natural edifice were part of a continuous mobilisation of fascist propaganda machinery. The aim was to engage agriculture aided by water-intensive irrigation and tourist-based development, but also, the creation of a nationally integrated Spain, based on the eradication of regionalist or autonomist aspirations through a physical and cultural homogenisation. In Nüsser’s (2003) work, dams in the Soviet Union were engaged in a complex relationship between ideology and material transformations: as Lenin said in 1920, “Communism is Soviet power plus the electrification

of the whole country” and later Stalin would generalise the concept of the “transformation of nature into a machine for the communist state”.

The modernist discursive formation around dams has been created by proponents whose main priority has been to make economic progress through inexpensive electricity to stimulate economic growth and/or the irrigation of lands for cultivation or the supply of water for urban areas. Much of the existing literature tends to attribute dam building to population growth and rising levels of economic activity that increase human demand for water and energy. In addition, technological change, life-styles and income distribution are affecting the demand for water for electricity production. However, freshwater resources are limited and are unevenly distributed both in time and place (Altinbilek, 2002). Mobilising scientific knowledge and discourses about developments, hydroelectricity dam-builders assert that hydropower generation is clean, that the water which flows freely to the ocean is wasted, and that local residents will benefit from dam construction (Rosenberg, *et al*, 1995).

McCulloch (2008) has studied the values of civil engineers as actors who create and recreate power/knowledge about relations between society and nature in order to understand pro-dam discourses. The ethos of engineers who build dams is founded on principles that McCulloch has systematised after interviewing dam builders:

- Water which runs free is wasted, and of little use to both the human and non-human requirements of the environments downstream.
- A core idea is the creation of jobs for “majorities”, without recognition of minority groups, local people or traditional land values.
- There is an uncritical view concerning progress and environmental change, focusing on nature as dynamic and dams as an essential part of that development.
- It is to be celebrated that society has the ability to “improve the river”, and make it productive. In this sense, there is no “destruction” of the environment but instead the creation of a new one: for example the irrigation of the desert, the production of salmon or even the creation of wildlife reserves.
- Technology can reverse damage by controlling nature and it may even be possible to reverse the ecological effect of dams. Dams can work in cooperation with nature, for example by controlling floods.
- Dams are “beauty in artifice”, through the creation of lakes for producing energy, making the environments attractive for tourists to spend their holidays.

Discourses about dams construct positive characteristics that explain their strong support and promotion. Dams use a renewable and domestic resource in a non-consumptive and non-polluting way. At the same time, they are efficient because of their cost, structural complexity, construction time and the relatively limited damage they cause to the environment, compared with other energy alternatives, they can respond to peaks in energy demand (Altinbilek, 2002; Erakhtin, 1998). In addition, dams are used for flood protection, flow regulation and to avoid fossil fuel use, as well as serving as tourist attractions and opportunities for local economic revitalisation (JCLD, 2009).

Dams are firmly located within the realm of modernization, so that traditional or non-industrial uses of water and rivers, and their cultural landscapes, are virtually invisible: the energy produced by dams is not for local consumption, but for the future industrial needs of a country (Howitt, 2001). The discursive formation on dams is highly contested by scholars, international NGOs, grass-roots organizations, social movements, state environmental agencies, judicial courts, and even international agencies, such as the World Bank Commission of Dams. Therefore, there is an on-going struggle in which opponents assert that dams are not “clean”, because they cause destruction of the landscape through flooding of vast forest areas, they dry up water courses because of water diversion, they cause shoreline erosion, mercury contamination, and emit greenhouse gases as a result of flooding of upland forest and peat lands (Rosenberg, *et al*, 1995).

These opponents also argue that water should not be considered as “wasted” because the natural seasonal run-off patterns heavily influence the ecology of downstream deltaic, estuarine, and coastal areas. At the same time, the substantial transformation of landscapes and hydrological regimes generate social impacts, especially on local economies because of changes in the use and management of resources such as water and land, and the organization of production and distribution (Rosenberg, *et al*, 1995). Dams disturb socio-natural practices of subsistence such as fishing, irrigation, drinking water and transportation, which are critical to the livelihoods of basin residents and central elements in the worldview of local (often indigenous and peasant) communities. For example, in the Thai language and for Katio-Embará indigenous people in Colombia, the word “river” translates literally as “water mother”, which embodies the economic and spiritual foundation of their culture (Usher,

1997). Furthermore, dams affect people's survival, rights, recognition, self-determination and self-government regarding the use of resources.

These two discursive formations on dams are the basis for the two dominant narratives that I will analyse in the case of Chile and Patagonia, and in the pre-construction stage: *hydropower* (Chapter 5) and *ecopower* (Chapter 6). These narratives are embedded in a set of specialised discourses, technologies, and politics regarding nature, social practices, materialities and possibilities for environmental transformation. In order to reconstruct these narratives, it is first necessary to understand what Patagonia is, and what dominant discourses have emerged about its landscapes and inhabitants.

1.5.2. Discursive ecological formations: framing Patagonia

In the influential collection *Liberation Ecologies*, Peet, *et al* (1996) define *regional discursive formation* as an historically dominant discourses among geographical groups of people that produces physical, political-economic and institutional conditions. Hegemonic discursive formations are “grounded in material, political, or ideological power supremacies (and) extend over spaces with greatly different physical characteristics and discursive traditions” (Peet, *et al*, 1996: 16). In the second edition of *Liberation Ecologies*, Peet, *et al* (2004), use the concept *discursive ecological formation* to understand how regions are constructed, how they have a history, and how they are popularized through cultural mechanisms until a naturalised narrative or a hegemonic discourse in history is created. These discursive formations are Western hegemonic cultural and historical representations of nature, and place, constructed via scientific rationalities, that intersect with the effects of colonial and postcolonial rule and which become naturalised discourses within society.

Neumann has identified regions as “things” transformed by the power of external forces (Neumann, 2010: 370). Regions are not only discursive constructions, but have biophysical conditions related to cultural practices: they are co-constitutions of nature, space and society (Zimmerer, 1991; Neumann, 2010). The notion of *primary commodity-supply zones* (Bridge, 2001) refers to material-semiotic spaces constructed through scientific, economic and legal discourses and with a particular epistemology of nature, economy, and development. These discursive constructions are supported by the action of the state, via a chain of concepts such as growth and development which normalize and discipline the behaviour of a group of people. The construction of this commodity-supply zone is achieved via a discursive

reduction of the socio-ecological complexity of territories. In this way, commodity-supply zones are similar to empty spaces, homogeneous blanks yet to be inscribed by human history (Bridge, 2001: 2154). Landscapes are defined only for the extraction of natural resources, denying those who occupy the land of their connection to it. These kind of discursive ecological formations are identified as an “empty-yet-full space” in order to support the colonial construction of territories for extraction and consumption. Moreover, those territories designated as commodity-supply zones could become sites of cultural spectacle, key sites through which we witness the broader socio-political and ecological relations in which post-industrial society is enmeshed (Bridge, 2001: 2168).

The notion of discursive ecological formation is deeply influenced by Said’s *Orientalism* (2003), in which the Orient has been constructed as the “other”, which has helped to define the West in terms of a contrasting image, idea, personality and experience. Thus, the Orient is an integral part of European material civilization and culture, supported by institutions, academic knowledge, vocabulary, scholarship, imaginary, doctrines, colonial bureaucracy and colonial style. In the same line, the concept of *tropicality* (Bowd & Clayton, 2005; Arnold, 2000) refers to Western cultural construction based on a system of knowledge and discourses that have stereotyped the East as something environmentally and culturally distinct from Europe. These kinds of studies compare the temperate and productive nature of Europe with a tropical nature that is wild and forbidding, and that needs to be domesticated and ruled. Hence, the tropics have been represented in both positive and negative terms: as rapturous, luxuriant or Edenic, and also as backward, pestilential or demonic. It is possible to identify national and disciplinary variations, and significant processes of subversion and cross-cultural exchange in the discourse of *tropicality*. The colonizing power of discourses such as *orientalism* and *tropicality* in part stems from the presumption that Western discourse speaks as the legitimate expert on behalf of “lesser peoples,” who, it is also presumed, cannot adequately represent themselves (Bowd & Clayton, 2005; Clayton & Bowd, 2006).

The Polar Regions can be also understood via reference to material and symbolic practices of power. The *Arctic* (Powell, 2007, 2008), for example, has been constructed in the twentieth century by environmental science as an experimental space. The discursive construction of the Arctic situates this territory as a pristine natural laboratory for the field sciences through the development of hydrographical, oceanographic, geophysical, and biological studies of the continental shelf. Scientific knowledge has been used to assert Canadian sovereignty in the High Arctic, through narratives that construct the frozen North as either Eden or hell, as

passively empty, or as a savagely adversarial, picturesque, sublime, female and/or a godless space (Collis, 1996 in Powell, 2007). In the *Antarctic* cultural, scientific, economic and geopolitical projects have been performed during the twentieth century, which includes specific power relations of class, race, gender and space (Wylie, 2009; Dodds, 2007, 2012; Day, 2013). The Antarctic has been constructed as a masculine, epic, and white European space, wild, unpopulated, distant, freezing and homogenous (Glasberg, 2012; Dodds, 2012).

In a similar way it is possible to understand Latin America as a discursive ecological formation. The concept of *Latin America* (Mignolo, 2005) has been constructed as a homogenous continent in opposition to Anglo America, through discourses on civilization, race and otherness. However, subaltern discourses have also been emerging from the indigenous people, *mestizos*, and African descendants in many countries and territories. The philosopher of liberalism John Locke introduced the idea of America as “*how Europe used to be*”, and reinforced the idea of a pre-civilization continent, strongly connected with the origins of humankind.

Within historical political ecology, the notion of a discursive ecological formation has been applied to the idea of *forest* as an emblem of nature to develop economic models of development supported by strategies of political, judicial, cultural and racial dispossession, especially in a post-colonial context such as Canada (Baldwin, 2009; Braun, 2002), Indonesia, Malaysia, and Thailand (Peluso & Vandergeest, 2001). In Latin America, studies have described symbolic and material practices relating to environment and people, such as the *very garden* (Naylor, 2000) or the Amazon as an *Eden* (Slater, 2002). In Africa, Neumann (1998), who later has started to integrate the production of nature approach in his studies, has analysed the conceptualisation of “*national park*”, especially in Tanzania and Kenya.

Drawing on these theorisations, I will use the concept of discursive ecological formation to refer to the relation between representation and meaning in the context of nature and society. The concept draws attention to the material and symbolic transformation of the environment and emphasises prevailing relations of power over time. In discursive ecological formations, spatiality and knowledge are embedded in colonial practices, which have produced unequal geographies and difference between people. These are often naturalised, but also heavily contested within the colonised spaces (Braun, 2002; Wainwright, 2005). Regions and territories are historically constructed and discursively produced. In my research on Patagonia, I am concerned with how this region has been conceptualised, materially

transformed and reconceptualised to secure the power of the state and of economic, cultural and military elites. Dominant discourses promoted by the colonial and postcolonial state, as well as by Western scientific rationality, have attempted to homogenise its landscapes and environments to create a single, uniform space with similar biophysical features and identity. The dramatic transformation of Patagonia, which has involved the burning of forest, the extermination of indigenous groups and historical tensions with settlers, have been covered by a nationalistic and environmental narrative that promotes a view of pristine nature. Such pictures and image have been disseminated worldwide and internalised by many in the region, yet they are also contested.

Patagonia is a bi-national territory. Argentinean scholars have developed historical geographical studies of how Patagonia came into being within a Western discursive ecological formation. Casini (2007) has argued that it is possible to speak of "*Patagonialism*", which emerged through the European gaze as a uniform and negative imaginary about the region. Based on environmental determinism, this narrative served to justify strategies of domination (Casini, 2007: 22). In these narratives Patagonia is not empty, but involved in a process of material and symbolic transformation through a process of territorialisation by the colonial and post-colonial state and the dispossession of indigenous land considered "to be empty". Patagonia has been culturally constructed as dramatic, wild, pristine and damned. It has to be understood, therefore, as part of the expansion of imperialism in which a combination of colonial state machinery and modern science created an imaginary geography of "otherness" which still persists today (Irrarrazaval, 1930, Livon-Grosman, 2003; Casini, 2007; Peñaloza, 2010). This has established the condition of possibility for a massive and long-term environmental transformation of the Patagonian landscape.

Through long-term environmental transformation, Patagonia has become an instrument of cultural and material power related to imperialism (Mitchell, 1994). European explorers invented a subject –*Patagonian*– and created an object –*Patagonia*– and through these cultural and material constructions they displayed imperial conceptualisations and representations in order to exercise power over land and people. This exercise of power made visible a territory and encouraged its exploration and colonisation. The postcolonial state of Chile and Argentina mimicked these material and symbolic practices, framing Patagonia in a subaltern condition. Its land was violently emptied of its previous indigenous occupation, and its manufactured "empty" landscapes were conceptualised as "natural" and "pristine" to promote the development programs of the state.

But, at the same time, the idea of Patagonia started to become incorporated within Chilean society through abstract and material representations that invoke the *mother land*, a vast and magic territory located in the South of America, full of unique biophysical and human features, and an integral part of the territorial identity of Chile:

*“A la Patagonia llaman
sus hijos la Madre Blanca.
Dicen que Dios no la quiso
por lo yerta y lo lejana”*
(Gabriela Mistral)

*“Patagonia is called
by her sons the White Mother
they said that God did not want her
because she is inflexible and distant”*
(Gabriela Mistral; my translation)

*“Patagonia, aquella de dientes helados
roídos por el trueno, aquella bandera
sumergida en la nieve perpetua”*
(Pablo Neruda)

*“Patagonia that of frozen teeth
gnawed by thunder, that flag
immersed in perpetual snow”*
(Pablo Neruda; my translation)

These representations of Patagonia by the Chilean winners of the Nobel Prize for Poetry Gabriela Mistral (1945) and Pablo Neruda (1971), are part of major works to reconstruct the history, geography and politics of the country and the continent. Gabriela Mistral talked about Patagonia in her book *Poem of Chile* (1967), while Neruda integrated his representation of Patagonia in his book *General Song* (1950). Mistral was a lesbian and Neruda was a communist: the two of them were never part of the traditional Chilean elite. However, their representations of Patagonia are integral elements of the cultural construction of that place in the first half of the 20th century, which coincide with the *territorialisation* of the Chilean state in the Aysén region.

Patagonia, as a discursive ecological formation, has been not only written about by poets, but by explorers, politicians, scientists, historians and members of the military. There was a period of time in which many people were making representations of this territory, filling maps with sense, meaning and names. These accounts are in schoolbooks, and an image of Patagonia started to be reinforced by the media and tourist activity through pictures and films that circulate within Chilean society. Since the 1990s, environmentalist organisations have begun an international campaign in opposition to large investment projects in aluminium, highlighting how Patagonia is in a “natural condition”. Opposition continues today against the possible construction of dams in Aysén.

For years there have been everyday interactions in Chile over Patagonia that cannot be separated from the legacy of the military dictatorship. During the seventeen years in which Pinochet was in power, Chile and Argentina came close to an armed conflict on at least two

occasions over the boundaries of Patagonia. In those same years, Pinochet was working on a book about geopolitics as part of a military tradition that highlighted the importance of Patagonia for Chile. But this manner of geopolitical thought was also a practice: Pinochet was building the Austral Road, a road penetrating through the heart of Aysén that today bears his name, and which demonstrated the power of the military Junta over the wilderness nature of Patagonia. Furthermore, the dictatorship renamed Aysén with military references (see Chapter 4). Between these discourses of defence and conquest, Chilean society constructed a common understanding about this territory: statement such as “*Patagonia is Chilean*”, “*Chilean Patagonia*” and “*the Chileans who fly the flag in Patagonia*” are all part of a mechanism of governance and sovereignty.

Moreover, the idea of Patagonia has been transmitted in more personal everyday interactions. In my own case, during my undergraduate studies at the Universidad de La Frontera I had two classmates from Coyhaique and the University had student accommodation set aside for Patagonians. Because Patagonia is far and is expensive to travel, these representations have started over time to become the “truth” about this territory, and today have been internalised by Chilean society. Patagonia, as I show in this dissertation, is a contested idea, place and thing, and from these contestations the HidroAysén conflict has emerged.

1.5.3. Territorialisation: discursive and material practices

If you ask a Chilean where Patagonia is, everyone will answer you by pointing to the south. If you ask a Chilean where the northern boundary of Patagonia is, you will receive different answers depending on land connection, tourist activities, or political geographical administration. Perhaps someone will say: to which Patagonia do you refer? because this territory is commonly subdivided in Los Lagos, Aysén and Magallanes. If you look at a political map of Aysén, you will find that the official name of the region is “General Carlos Ibáñez del Campo” (a former military President of Chile) and that the provinces of the south are called “General Carrera” and “Captain Prat”. Those names were imposed by the military dictatorship to highlight the geopolitical importance of the region and the boundary conflict with Argentina. The message is clear: the Chilean state is occupying Patagonia and using the names of military heroes to refer to its territories and material and social formations. For example, the two largest lakes are called General Carrera and General O’Higgins, the capital of the province is called Cochrane because of a Chilean-British captain of the Navy, the Baker

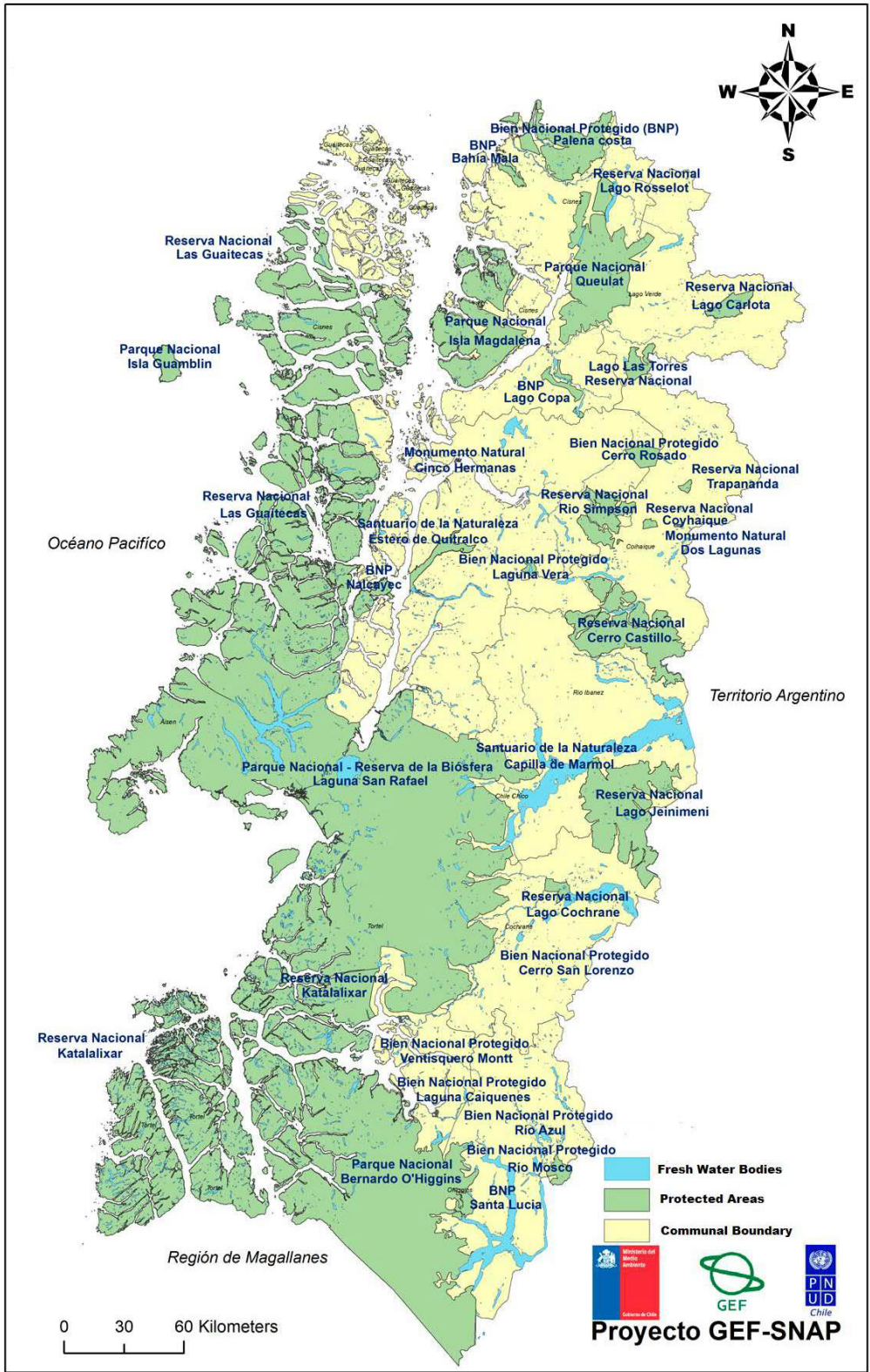
river got its name because of an Admiral of the British Navy, and the road that unites the cities and towns is called the Austral Road Captain General Augusto Pinochet. In other words, there are military names for the least inhabited region of Chile.

If you look at a map of Aysén (which is slightly smaller than England), you can observe how 50% of the region is covered by national parks and reserves, as well as natural monuments (figure N° 4). The territory of Aysén is clearly divided between those spaces that can be used for living and those that are preserved. And in those places unoccupied by Chilean citizens, the material presence of the state has been deployed through the conservation of large areas of land.

Aysén has been shaped by the state during the last four hundred years in a non-linear way. I think that to understand the current environmental conflict through the lens of historical political ecology, it is necessary to research the ways in which the colonial and postcolonial state have been practicing their territorialisation in Western Patagonia. It is necessary, in other words, to understand the history of the present: the way, for example, that 50% of Patagonia's surface remains without human occupation and has been declared a national trust. In order to develop a genealogy of the construction of dams in Patagonia, I am using the concept of *territorialisation*.

Territorialisation is the discursive and material practice of the state over territory. It takes form through a set of discourses, knowledge practices and power relations to create particular kinds of landscapes. According to Peluso (2005), territorialisation is the historical result of the demands and actions of individuals and communities who want authority, jurisdiction or control over land and resources, within the state in national boundaries. The state mobilises discourses, as well as individuals and institutions, to collect and classify biophysical and human features allowing the conceptualisation of landscapes. With these discourses, knowledge and power relations, environments can be managed, transformed and protected.

FIGURE N° 4. PROTECTED AREAS IN AYSÉN REGION



Source: <http://www.proyectogefareasprotegidas.cl/recursos/mapas/>

Territorialisation is an historical process, related to cultural projects of legitimisation and new forms of state power. It is associated with the consolidation of national states in Europe and North America, European claims on major territories on every continent, and the evolving dominance of capitalism in the global economy. The state has created institutions to designate “non-occupied” land that was then claimed as property of the state. Later on, territories were legally created and delimited using modern cartography, which has been essential to legitimate state rule. Different forms of power have been exercised through institutionalisation and legal arrangements, which have identified what kind of people have access to resources and what kind of symbolic and material practices are included and excluded. As a result of this discursive and material practice, the physical and social characteristics of territories have subsumed into political economy (Vandergeest & Peluso, 1995; Peluso, 1995; Vandergeest, 1996; Wainwright & Robertson, 2003, Isager & Ivarsson, 2010).

Territorialisation is stronger when people internalise the frameworks and practise of the state as part of their own everyday practices. Peluso & Vandergeest (2001) explicitly use the Foucauldian concept of *governmentality* to explain how certain practices in regard to “forest” are allowed by the state and used in non-coercive ways by people. However, the territorialisation of the state often ignores, and sometimes contradicts, those people who live in those territories: in some situations, the state uses coercion against rural residents to implement territorial control through violence. In this way, territorialisation is an uneven process: it varies across localities depending in the enforcement of boundaries, extent of the state’s police power or other authorities, and the historical, political and ecological characteristics of the landscape (Corson, 2011: 707).

The territorialisation of the state can have dramatic impacts on the livelihoods of marginal populations (Lestrelin, 2011). In countries with ethnic minorities, the territorialisation of the state has implied the de-territorialisation of social groups and their re-territorialisation in other environments through land reform and resettlements. These processes often confront minorities with new social, cultural, economic and regulatory contexts. Therefore, territorialisation is increasingly contested by local communities through practices of “counter-territorialisation” that resist the government’s territorial strategies. Through “counter-territorialisation” a reinterpretation of territories is possible, by showing local land use associated with the cultural practices and everyday life of the communities, especially against customary rights, or even rejecting the control of the state over land and people (Peluso, 1995,

2005; Isager & Ivarsson, 2010). This “counter-territorialisation” is not necessarily associated with large social and environmental movements, but with everyday acts of resistance (Lestrelin, 2011; Scott, 1976).

In the colonial and post-colonial era, the state was the leader of the territorialisation process in terms of surveying, controlling, monopolising land and resources, and allocating rights. Even when other non-state actors took part in the process, the territorialisation of the state was embedded in the national discourses and political economy projects. Within neoliberalism, however, there is no longer a single national project, but instead a consensus created and maintained by the economic and cultural elite. Although the state still plays a central role, the participation of powerful non-state actors such as transnational companies, international NGOs, consultants, scientists and other international institutions (for example aid donors or multilateral agencies), is opening up new territorialisations, putting pressure on national governments in order to influence laws and policies, and to exercise new forms of control (Peluso & Lund, 2011). For example, there are global claims over national territories related, for example, to environmental conservation (Corson, 2011): the discursive ecological formation of Amazonia and Patagonia, for example, are presented as *global commons* as beyond the complete control of the state.

My argument is that Patagonia is the result of four processes of territorialisation:

1. The expansion of the British and Spanish empires between the 16th and early 19th century.
2. The integration of Patagonia into the Chilean and Argentinean national states between late 19th to mid 20th century, supported by the use of modern science and a political economy discourse .
3. The expansion of the Chilean state through military discourses and practices from the mid 20th century to the 1990s.
4. The territorialisation of the neoliberal state since the 1990s, the development of large private investment projects, and the emergence of “counter-territorialisation” associated with environmental defence and regionalist demands

Currently, it is possible to observe in Patagonia a neoliberal form of territorialisation that is focused on the production of hydroelectricity and tourism for global markets, and an environmental territorialisation through NGOs and social organisations that aim to conserve Patagonia in the context of global climate change. These discourses and practices have

created tensions within Chilean society, which are important for understanding the HidroAysén conflict.

1.5.4. Governmentality and environmentality:

One further theoretical element that I want to introduce relates to the conflict itself. Why do a large number of people reject the construction of dams in Patagonia? In Chapters 3 and 4 I reconstruct how Patagonia in general -and Aysén in particular- have been culturally constructed over time. Patagonia has been integrated into Chile, through nationalist discourses, discursive and material representations, institutions and everyday practices. The exercise of territorial power of the state has not been imposed from outside but exercised from within Chilean society, which has internalised and largely accepted histories, practices, things and stereotypes associated with Patagonia and with Patagonians. Ideas, ideals and practices relating to Patagonia are socially accepted and shared, and so when there are problems in Patagonia (natural catastrophes such as volcanic eruptions and earthquakes, and social issues such as accidents and demonstrations), Chilean society reacts.

Embedded in discourses about nationalism, paternalism and environmentalism, Patagonia is fully engaged by Chileans. According to a survey, there was a massive popular support (92%) for the demonstrations in Patagonia demanding public investment (Chapter 4). The demonstrations in Aysén used the slogan “*your problem is my problem*” (“*tu problema es mi problema*”), demanding improvements in health, education, housing, energy supply and retirement. Even when this call for investment has involved a struggle with the state, Chilean society has generally supported Patagonian demands on the ground that they are Chileans and have the same rights as the rest of the Chilean people.

This phenomenon is described by Foucault (1980, 1982) as *governmentality*. It is a discursive field where the exercise of power is rationalised, establishing who governs, what can be governed, and what and who are governed. There is a plurality of government agencies, authorities, expertise and technologies for different aspects of behaviour that should be governed and a set of rules to be invoked. This makes governmentality a continuum, ranging from political forms of government to individual forms of self-regulation. In environmental research this kind of approach is used to understand how relations between people and things are conditioned and stabilised by social structures of power.

In the work of Bruce Braun (2002), for example, governmentality refers to the historical and cultural practices through which the inert objects of nature were constructed and new economic and political domains were created. More specifically, it refers to the way space and various “nature” (in the form of an institution or territory) and rationalities and discourses (different mentalities and techniques of command) are brought into relation. Environmental knowledge is culturally institutionalised and embedded in a variety of persons, offices, rituals and customary practices (Peet & Watts, 2004), and power is understood as the ability of an actor to control his own interaction with the environment and the interaction of other actors with the environment (Bryant & Bailey, 1997: 37).

Power is exercised in order to control access to a range of environmental resources, via influencing or determining the location of sites in which large environmental transformations take form. Power is expressed via dominant discursive and material practices and through the regulation of ideas and socially accepted norms about the environment. Powerful actors often impose political and ecological order over the environment, obliging others to accept environmental transformations. For example, large territories are taken for production or for conservation, displacing inhabitants, awarding exclusive rights and allowing large physical environmental transformations such as the construction of infrastructure, environmental modification and contamination. This kind of power is called “*sovereign environmental power*” (Peet, et. al, 2011: 32).

Discourses of global capital, global warming and global nature are central to understanding sovereign environmental power and environmental governmentality beyond the limits of the national state. There is a concern within expert knowledge and discourses about the global character of an ecological crisis which could compromise the ability of capitalism to reproduce its conditions of production. This transnational scientific mobilisation is creating new actors, norms, conventions and treaties who are focused in the dependency and damage of fossil fuels and the viability of a civilisation based on hydrocarbon consumption. A new regime of global governance with state, companies, institutions, civil society and social movements has to be understood as a special sort of capitalist social order, which is creating a particular sort of environmental governmentality of a global nature (Peet, et. al, 2011).

In this background, *environmentality* can be understood as the existence of discourses of nature, ecology, or the environment, that is articulating the governance of modern economies and societies. Environmentality is the attempt to reinvent nature in the logic of the economic

exploitation of advanced technologies, linking the structure of nature to rational mastery. This implies a concern about the future; it is concentrated on changing today's ecology of societies to realise tomorrow's sustainable economy (Luke, 1995: 75). Struggle against the rational mastery of the environment, new environmental policies, and new technologies of environmental government that emerge from the state, are creating new institutions, change in subjectivities and creating new environmental subjects (Agrawal, 2005). Concern about the environment is becoming immersed in claims for legal protection, regulation and planning. In short, governmentality is fully operating; many of the environmental claims are based on scientific knowledge to prove that state action is required (Cepek, 2011). Through these claims, environmental practices are modified, along with new delimitations of areas such as parks and natural reserves (Gabriel, 2011).

I think that in Patagonia it is possible to identify the exercise of governmentality associated with nationalist discourses promoted by military elites. In Chapter 4 I will show how a *Chilean Patagonia* has been constructed, promoted by the state, but also performed by settlers who conceived themselves as the extension of the sovereignty of the state, and Patagonia as a motherland. In Chapter 5, I show how hydroelectric production has been framed as an environmental concern, and in Chapter 6 I illustrate how Patagonia has been constructed as a pristine region, and how public institutions and social movements are demanding state environmental protection.

Summary

This dissertation aims to understand an environmental conflict associated with the construction of dams in Chilean Patagonia. Informed by work on the social construction of nature, it acknowledges how discourses, knowledge and power relations shape environments and resources - both materially and socially - through the dominance and circulation of particular representations over time. Ideas, frameworks and practices are mobilised by the state's cultural machinery and shared within society, which in turn reinforces those representations through everyday interactions. However, the ability to represent nature is unevenly distributed and different concepts and practices of nature are in tension within societies, communities and individuals.

I follow historical political ecology as an approach to analyse dominant narratives of environment and place, the construction of two distinctive discursive ecological formations

about the nature of Patagonia -what I term *hydropower* and *ecopower*- , and the way in which different meanings of environment clash within society to generate environmental conflicts. Historical political ecology is strongly influenced by Foucauldian understandings of the relationship between knowledge and powers, but also by postcolonial and material analysis. I draw on this work to show the persistence of historical representations of landscapes and the way they are now mobilised to support particular strategies for development in Patagonia.

I have adopted genealogy as a method of analysis in order to trace dominant narratives and practices and their role in enabling the territorialisation of the colonial and postcolonial state. I show how power/knowledge/discourses have been materialised through institutions, artefacts, technologies, cultural state machinery and legal arrangements, to govern the environments, natural resources and social groups of Patagonia. The construction of dams in Patagonia is an integral part of the process of state territorialisation that has involved the dispossession of indigenous land, and the privatisation of natural resources such as water. Dams symbolise the power of the elite, and express an understanding of the environment as a means of production: rivers are understood as economically productive, water as a source of energy, and dams as historically significant political and ecological projects. The social conflict over dams in Patagonia, then, takes the form of a struggle to define how Patagonia is represented and the promotion of particular practices over the environment.

In this dissertation, I reconstruct the history of today's Patagonia in order to explain the conditions of possibility for environmental transformation according to two dominant narratives: *hydropower* and *ecopower*. The following chapters analyse dominant discourses about Patagonia created by the colonial and postcolonial state. Through these discourses this territory has been constructed in a symbolic and material way, as a space of the Chilean state and embedded in Chilean society. Patagonia became a symbol of nationalism because of the boundaries dispute with Argentina, especially during the years of military dictatorship. This idea has been reinforced over time and today it compels many citizens to protect Patagonia's landscapes and natural resources.

Neoliberal reforms created "irreversible changes" carefully constitutionalised by the military dictatorship, especially in the ownership and exploitation of natural resources. One of the most important cases is the privatisation and transformation of the electricity sector through the creation of the Water Code and the Electric Law, supported in a framework

developed by neoliberal scholars and civil engineers. With the return of democracy, neoliberal electricity policies became entrenched and were accompanied by a consensus over the role for hydroelectricity in the development of Chile. The notions of Patagonia that are widespread in Chilean society are now clashing with this supposed consensus, challenging the legitimacy of neoliberal environmental transformations in Chile. The HidroAysén environmental conflict, then, has to be understood by reference to the historical ways in which power has been exercised, and the ways in which Chilean society now performs these political ecological relations.

Chapter 2. Research Design and Methodology

2.1. Research Questions and Objectives

This work is a critical analysis of specific cultural and historical frameworks that allow different representations, and conflictive social practices over Patagonia, and the possibility of the construction of dams in the Aysén region. The question that guides this research is: *Why has the HidroAysén project generated a socio-environmental conflict over Patagonia?*

To answer this I have raised three specific questions:

- How has Chilean Patagonia been socially constructed in the past?
- What political economic conditions and discourses enable dams to be built in Chilean Patagonia?
- Which discourses are in conflict regarding the HidroAysén Project?

My research has three specific objectives:

- To develop a genealogy of Chilean Patagonia in order to show how different and often contradictory constructions coexist.
- To develop a genealogy of the HidroAysén project to show how the electric sector has been preparing itself for the expansion of Patagonia.
- To analyse current discourses about Patagonia identifying how they reconstruct space for political contestation.

2.2. Genealogy and Critical Discourse Analysis

I am following historical political ecology to research how dominant discourses construct semiotic and material representations to justify environmental change. I will analyse “discourses”, a Foucauldian inspired concept (Jørgensen & Phillips, 2002; Wodak & Chilton, 2005; Woods, 2006), to understand, in one hand, dominant discourses constructed by explorers, surveyors, historians and scholars in the last four hundred years about Patagonia, and in the other, the connection of those dominant discourses with the way in which dam-building proponents, environmental activists and regional settlers perform today’s Patagonia through contradictory representations.

Located in historical political ecology, I will use genealogy as the way in which it is possible to reconstruct the meaning of current discourses, with especial focus on how specific knowledge, politics, and events, have been combined to produce dominant representations

over Patagonia, which are taken for granted by and within society. Genealogy does not understand history as a linear development or continuity, but recognises the dispersion of events and accidents which constitute history and “*gave birth to those things that continue to exist and have value for us*” (Foucault, 1977: 146). Hence, genealogy is the history of the constitution of discourses identifying how they have been constructed in specific social and political agendas to understand the present. Concepts, things, forms of power and changes of behaviour, are analysed via language, and discursive and material practices, to study environmental changes and the conformation of particular landscapes (Peluso, 1995, 2005; Peluso & Vandergeest, 2001).

To develop the historical analysis of genealogy, I will use *Critical Discourse Analysis* (CDA). As other theoretical and methodological approaches in social science, CDA in geography can also be divided in two streams: the *political economy informed* and the *Foucauldian inspired* (Lees, 2004; Jacobs, 2006). The discourse analysis informed by political economy is concerned with how language is deployed to legitimise action and to structure the parameters of policy intervention. In this strand, discourse is almost synonymous with ideology, as the Gramsci’s assumption of discourses as instrument of hegemony (Lees, 2004). The discourse analysis came from Fairclough’s structural constructionist approach to study the dialectical relationship between discursive and social practices, understanding discourses as expressions of the dominant ideology over particular subjects (Araplough, 2004a). But also it is possible to find early readings in Foucault’s discourse theory and Van Dijk’s critical discourse analysis. For example, Fairclough (1995) used CDA to analyse the marketisation of discursive practices in contemporary British universities, through press advertisements for academic posts, programme materials for an academic conference, academic curriculum vitae, and entries in undergraduate prospectuses. Liu (2008) used CDA to examine the construction of Chinese patriotism in primary schools. He focused on how historical and cultural knowledge is constructed and challenged through texts in a hierarchical society, where subjectivity, identity and social relations are constructed and reconstructed constantly through texts. His focus is on “overwording”, the use of “pronouns” and “metaphor”, showing the way in which texts may build up “particular versions of the world”.

In *Foucauldian-inspired discourse analysis*, urban policies, for example, are subject to historical shifts that are contingent on the diffuse ways that power is exercised. Discourses are not necessarily part of the hegemony but they are multiple and competing set of ideas and metaphors embracing both texts and practices. Changes in discourses are the outcome of

power conflicts in which different impose their agenda, rather than of a rational, deliberative set of events. According to Van Dijk (1998) discourses about “power”, “dominance”, “hegemony”, “ideology”, “class”, “gender”, “race”, among others, are macro-level analyses which have to be analysed through a bridge that can catch everyday interaction and experiences on the micro-level of social interaction in specific situations. In CDA, discourses can be defined in terms of shared beliefs that satisfy the specific criteria of a community. Each community in a particular historical moment has its own criteria that allow members to establish that some beliefs are treated and shared as knowledge, whereas others are not (Van Dijk, 2005). The focus of CDA is to challenge the social order and practices that are assumed to be "natural" and the way they are "naturalised" by individuals and groups (Van Dijk, 2001; Martín, 2008; Wodak & Chilton, 2005).

In human geography literature, especial interest has been placed to ethnic groups and their trajectories in cities (Parker, 2000; Phillips, 2006), the meaning of house and the neighbourhood for the working class (Mele, 2000; Gurney, 1999a, 1999b), the use of determined concepts such as homeless (Gurney, 1999b), lone parents (Jacobs, *et al*, 2003) and the environment (Murdoch, 2004). What is important in this perspective is that there are fixed meanings of concepts and subjects, but a constant redefinition of identities, places and practices. In the second version of CDA, it is possible to locate the work of Wodak & Weiss (2005) that explores the construction of identity in the European Union, through the use of policy papers, interviews, spontaneous conversations, multi-modal and printed media texts, websites, speeches, legal texts, focus groups, and opinion polls.

In this research I will follow a top-down approach (see for example Fairclough version of CDA used by Atkinson, 1999, 2000 and Hastings, 1998) to analyse the historical dominant discourses about Patagonia. But also, I will use the Foucauldian inspired version (Murdoch, 2004 and Jacobs, *et al*, 2003) to analyse representations from the inhabitants of Patagonia. I am using genealogy and CDA, following how scholars have analysed socio-natural formations, such as forest (Braun, 2001, 2002; Vandergeest & Pelusso, 1995; Peluso & Vandergeest, 2001), regions (Neumann, 1998; Slater, 2002; Casini, 2007) and landscapes (Mattles, 1998; W.J.T. Mitchell, 1994, 2002). I am considering the following interlocking elements to develop a genealogy of discourses about Patagonia and the way in which the colonial and postcolonial state were territorialised:

- The establishment of an epistemology, in other words the relationship between knowledge, the creator of knowledge and the use of technologies such as sampling, observations, surveys and mapping, which permit the organization and classification of elements that compose discursive ecological formations.
- The establishment of a "subject/object" concept and a string of concepts that give meaning and build discourses.
- The feminization or masculinisation of subjects and objects.
- The objectification and dissemination of knowledge through studies, books, journals and institutions.
- The cultural and historical values that support physical transformations of space.
- The normalization of practices and places through laws regarding space and the use of its resources.
- Imperial and colonial representations and policies on space, people and identity.
- The construction and use of institutions from which they arise and reinforce discourses.

Through this approach, it is possible to identify the process of social semiotic and material construction and the formation of different understandings of Patagonia. These understandings are supported by a specific territorial, institutional and symbolic shape of space. In these terms, Patagonia has to be understood as a discursive ecological formation, full of meanings and values that are in conflict, through discursive strategies and practices of power over this territory. With these, I will identify the conditions of possibility from which the two dominant narratives create consensus for the transformation of the Patagonian environment.

2.3. Grounded Theory and Situation Analysis

In general terms, the use of genealogy and CDA in geography do not clarify the way in which data has been analysed, for that reason I want to contribute to the methodological discussion using the constructivist approach of grounded theory. To process multiple qualitative data in order to understand the genealogy of Patagonia I will use the *coding paradigm* of grounded theory. In Charmaz (2002) grounded theory methods are a set of principles and practices which can complement other approaches to qualitative data analysis. Developed by Glasser & Strauss (1967), grounded theory is a method for qualitative analysis which could

systematically generate concepts and theories based on observational and textual data, allowing for: a) simultaneous data collection and analysis, b) the pursuit of emergent themes through early data analysis, c) the discovery of basic social processes within the data, d) inductive construction of abstract categories that explain and synthesize these processes, e) sampling to refine the categories through comparative processes, and f) the integration of categories into a theoretical framework that specifies the causes, conditions, and consequences of the studied processes (Charmaz, 2002).

Originally, in Glasser and Strauss's (1967) the discovery of theory emerges from data separate from the scientific observer. Unlike their position, Charmaz suggests that neither data nor theories are discovered. Rather, she assumes that we are part of the world we study and the data we collect. In this sense, she says "*we construct our grounded theories through our past and present involvements and interactions with people, perspectives, and research practices*" (Charmaz, 2002: 10). In this respect the researcher constructs in concert with others along particular planes and time.

In constructivist grounded theory approach, data collection and analysis are tools that help researchers to produce tentative explanations about the social construction of reality (Charmaz, 2002, Bryant & Charmaz, 2007). Moreover, the emphasis is on how the data and its analysis are products of social interaction, focusing on the process of social interaction and how it creates meaning. The research technique is sensitive to how contextual factors such as time, place and culture influence the research process (Marvasti, 2004).

However, constructivist grounded theory is based on a similar process to analyse qualitative data as is the classical grounded theory: the code's construction. Nevertheless, the main difference is in the use of "post-structural" categories in the process of the *codes' construction*. In this perspective, coding means that we attach labels to segments of data that depict what each segment is about. Coding distils data, sorts it, and gives us a tool for making comparisons with other segments of data. By making and coding numerous comparisons, our analytic grasp of the data begins to take form. "Memos" are used as preliminary analytic notes about data. Through studying data, comparing it, and writing memos, the analyst defines ideas that best fit and interpret the data as tentative analytic categories.

In Charmaz's constructionist grounded theory data is coded using "sensitive concepts" which are revised or elaborated. Those concepts are the results of *initial coding* which is the aim of perusing data for meaningful categories or themes, such as associations that come to mind

when the researcher reads the data around basic questions. Then, the data is followed by a more theoretical sensitive categorization called *focused coding*, more abstract, general, and simultaneously more incisive than the initial codes. Focused coding broadens the concepts' level of abstraction while simultaneously expanding the range of their application i.e. they become more theoretical and apply to a broader range of observations. In this way, focused codes allows the researcher to reduce the possible universe of meanings, moving from a large number of initial codes to a smaller, more manageable set.

Following this approach, Clarke (2003) and Clarke & Friese (2007) developed a method called “situational analysis” with innovations that allow studies of discourse to be drawn together with work on agency, action and structure, image, text and context, history and the present moment. According to Clarke & Friese, situational analysis draws deeply on Foucault’s approach to the study of discourse and offers explicit strategies for such analyses. This analysis builds on and extends Strauss’s work in a “cartographic” approach through: a) *situational maps* that lay out the major human, non-human, discursive, and other elements of the research situation in question and provoke analyses of relations among them, b) *social worlds/arenas maps* that lay out the collective actors, key nonhuman elements, and the arenas of commitment within which they are engaged in ongoing negotiations, or meso-level interpretations of a situation, and c) *positional maps* that lay out the major positions taken, and not taken, in data vis-a-vis particular discursive axes of variation and difference, concern and controversy surrounding complicated issues in the situation (Clarke, 2003: 554). In Clarke’s approach to grounded theory the focus is on “the situation of action” where what is important is the coding categories which link the analysis technique with the post-structural frame (Clarke & Friese, 2007: 365).

In Clarke’s approach to grounded theory, the “*focused codes*” are sorted as follows:

- Individual human elements: key individuals and significant people in the situation.
- Collective human elements: particular groups, and specific organisations.
- Non-human elements: technologies, material infrastructure, specialized information and/or knowledge, and material things.
- Spatial elements: spaces in the situation, and geographical aspects; local, regional, national, global issues.
- Temporal elements: historical, seasonal, crisis and/or trajectory aspects.

- Political economic elements: the state, particular industries; local/ regional/global orders; political parties; NGOs, and politicized issues.
- Organisational/institutional elements
- Sociocultural and symbolic elements
- The discursive construction of actors and related discourses (historical, narrative and/or visual): the normative expectation of actors, moral/ethical elements, mass media and other popular cultural discourses, situation-specific discourses.
- Major contested issues
- Other empirical elements

In my opinion, taking situational analysis to the “mapping” stage is unnecessarily complicated; in the end, these maps are diagrams showing interrelations between different elements. However, I have found useful to work from *initial codes* to *focused codes* in the process of conceptual construction because this allows me to bring together discourses about Patagonia in the conflictive situation of HidroAysén.

2.4. Model of Analysis

To develop a genealogy of Patagonia, I am using CDA with the analytical phases of constructionist grounded theory, specifically the coding paradigm. The first step was to understand the environmental conflict through a preliminary analysis of newspapers, websites, scientific papers, discussion panels, banners and slogans during demonstrations, among others. In the case of my research, the dimensions of Patagonia as a discursive ecological formation emerged from how different people make claims about the territory. The second step was to understand the social construction of Patagonia, which meant the analysis of the main historical and ecological representations and practices by different individuals, social groups, organisations and institutions, given the discourses previously identified. In this analytical process the idea was to look for dimensions of Patagonia such as historical settlement, economic activities, cultural and environmental heritage, trying to spot the dominant discourses throughout its history. The third step was to study the hydropower project in its context. In the case of HidroAysén, this context is related to the implementation of a neoliberal model in Chile, the invention of an electricity sector, the exploitation of specific raw materials and the conditions of possibility that Patagonia as a territory presents for the creation and development of the hydropower business. There are global, national and

local discourses that support the implementation of hydroelectricity (which I have called *hydropower*) and justify the creation of a whole new socio-natural environment. The last step was to analyse how those social constructions of Patagonia as a discursive ecological formation have been contested by discourses related with the protection of nature, environmentalism and nationalism (which I have called *ecopower*).

The initial codes were focused on:

- Which are the boundaries of Patagonia?
- What do we know about Patagonia?
- How do we know about Patagonia?
- Who are the people that have been living there?
- What kind of economic activities do they do?
- What are the main social, economic and cultural characteristics of the population?
- What is the distribution of population in the territory?
- Why does the population have this distribution?
- Which is the role played by the “territory” in the political economy of the country?
- Who are the proponents of hydropower?
- What conditions does the territory have that enable development of the hydropower project?
- What is the hydropower project about?
- What are the main characteristics of the hydropower project?
- Who are the opponents of the hydropower project?
- What is this opposition about?

With the answers to these questions I initiated the *focused codes* in the following categories and subcategories (but not exclusively):

<p><i>Epistemology:</i></p> <ul style="list-style-type: none"> • Knowledge/ knowledge creator • Technologies: classification and organization • Concepts and strings of concepts • Cultural and historical values that support transformations of space (moral/ethical elements) • Objectification and dissemination
<p><i>Establishment of a "subject/object":</i></p> <ul style="list-style-type: none"> • Actors, organisations, institutions • Non-human elements: geosymbols and iconography • The feminisation or masculinisation of subjects/objects.
<p><i>Normalization of the space:</i></p> <ul style="list-style-type: none"> • Construction and use of institutions • Laws • Maps

<ul style="list-style-type: none"> • Landscapes • Use of resources
<i>Representations:</i> <ul style="list-style-type: none"> • Imperial and colonial domination over space, people and identity • Local, regional and national socio-cultural and symbolic elements
<i>Context:</i> <ul style="list-style-type: none"> • Spatial elements: spaces in the situation, geographical aspects; local, regional, national, and global issues. • Temporal elements: historical, seasonal, crisis and/or trajectory aspects. • Political economic elements: the state, particular industries; local/ regional/global orders; political parties; NGOs; politicized issues.

From these it is possible to cover different social constructions of Patagonia and Patagonians throughout history, and to understand the discourses that are now clashing in the social-environmental conflict. In this sense, I have traced the origin of each discourse and the way in which they are developed to show who, when, why, how and from where actors exercise power/knowledge and territorial representations.

I collected data using two techniques of qualitative research according to the research questions: *analysis of secondary sources* to identify those dominant discourses about Patagonia, and *semi-structured interviews* to identify how those dominant discourses work at local level, and the existence of subaltern discourses that have constructed Patagonia in other ways.

Analysis of Secondary Sources: My work is focused on identifying the way in which Patagonia has been materially and symbolically constructed through history and the emergence of dominant discourses. The sources I have used include:

a) Institutional Documents:

- Regional Government of Aysén documents, specifically Regional Development Strategies.
- Reports from institutions belonging to the National Army Force (Military Geographical Institute and Navy Hydrographical Services).
- Reports from National Government Institutions such as the Statistics National Institute and the National Census (2002)
- Publically-available documents and reports from HidroAysén, as well as inserts in the national media by company executives, both written and audiovisual, and the HidroAysén media campaign.

- Documents and written and audiovisual material from the anti-dam campaign and from organizations united in the campaign “*Patagonia Sin Represas*”.
- Documents of international non-governmental organizations that have carried out research and activities in the region (GTZ, Germany and Project ACCA, France).
- Documents and records of civil organizations and individuals concerning the development of hydropower project in Patagonia in documentary films.

b) Historical Documents and Research:

- Historical documents on the settlement and development of Patagonia produced by local historians, in particular the works of Danka Ivanoff and Mateo Martinic.
- Archaeological and anthropological studies about the settlement of the presence of different indigenous people who lived and still live in Patagonia: mainly the Mapuche, Tehuelche, Kaweskar and Onas people.
- Historical books about the settlement of boundaries by the Chilean state and the conflict with Argentina, the colonization of Patagonia by the Chilean state.
- Historical accounts of campaigns conducted by European explorers.
- Books about Patagonian culture and heritage.

c) Political Debate:

- Public relations materials, TV reports and TV spots.
- Interviews, reports and notes from the most important newspapers in Chile, “El Mercurio” and “La Tercera”.
- Demonstrations against HidroAysén in different cities in Chile mainly through TV news, blogs, websites, and social networks such as Facebook.
- Documents, public declarations and legal actions from members of the Chilean congresses who have supported or are against the hydropower project.
- Declarations of the current President of Chile (Sabastian Piñera) and the former President (Michelle Bachelet) through their National Public Account, interviews and speeches.
- Declarations by members of the Government (current and former) especially in the sectors of: Energy, Public Works and Environment.

In addition to the above, I also consulted a range of *scholarly articles, scientific papers and public opinions*. These are cited in the text.

Semi-Structured Interviews: I carried out 50 interviews in Patagonia over the course of two fieldtrips: the first in 2009 and the second one in 2011 to the section south of the region that could be impacted by the construction of dams (Coyhaique, Puerto Tranquilo, Puerto Bertrand, Cochrane, Caleta Tortel and Villa O'Higgins). The interviews that I present in the following chapters are from the *settlers* (sons of the pioneers), *local authorities* and *tourism entrepreneurs*. I have decided to apply non-structured interviews due to the condition of a “conflictive zone” and to the conservative reaction of people about my researcher role. In some cases I had to turn off tape recording following request from interviewees.

Through the use of semi-structured interviews I was looking to identify the “everyday” discourses of Patagonia, capturing the mosaic of representations that are in opposition, and identifying the social and political tensions that exist between different local actors. My concern was not only to capture how the locals used the palimpsest of the social construction of Patagonia and/or mobilised the dominant discourses, but also how they understand Patagonia as part of their own history of territorialisation.

The interviews lasted between thirty minutes and one hour, they were recorded (when possible) in digital format, and later on transcribed by me entirely or partially, considering only the most important passages. I took into consideration the fact that because Patagonia is isolated, and due to its strong dependence on state institutions, it was important to secure the anonymity and confidentiality of the respondents. To do that, I removed the real names of the interviewees and used pseudonyms and identifiers in the process of transcription and analysis. To analyse the interviews, I used Nvivo software for qualitative analysis, which helped me to manage the documents and facilitate the process of initial coding and then the analysis of focused codes, which constituted three nodes to connect concepts and categories with statements made by the interviewees.

The major issues covered in the interviews were:

- The colonization process and settlement (pioneers, their descendants and new settlers who have arrived in Patagonia in recent years).
- The views, ideas and perceptions about Patagonia and the Baker River.
- Productive activities and their relation with territory.
- Personal and collectives positions about the HidroAysén project.
- Views about the future family, community and regional.

Since most of my data is in Spanish, I translated it myself into English. To secure the meaning of discourses, I checked the translation with a professional translator. Where I have translated a quotation, I indicate it in italics in the parentheses together with the source information. For example: "*I dressed the Indians, and I made a speech about the purpose of my arrival to their lands*" (Jesuit Priest Jose Garcia, Annals of the University of Chile, 1871: 50, *my translation*).

Summary

I am using genealogy and critical discourse analysis to understand how the idea of Patagonia, in terms of its territory, people and landscapes, has been historically constructed. The data analysis follows the coding elements of the constructionist approach of grounded theory, in order to integrate data collected from different sources via different techniques. I am using an analytical model elaborated from elements of historical political ecology and the research of other scholars in geography concerning territories and landscapes. Thus, my research is located in a body of literature about the role of power, discourses and materialities, and in the process of territorialisation of the colonial, postcolonial and neoliberal state. In this way, I understand discourses as social practices which embody representations and actions over the environment.

In the following chapters I will analyse Patagonia as a discursive ecological formation. In my analysis: a) Patagonia does not precede its construction, b) it appears in history through discourses, c) its boundaries are physical and cultural, d) its inhabitants have been culturally fabricated, and e) its construction is supported via a chain of concepts derived from social and political projects. With all these elements I will understand the dominant and subaltern discourses of Patagonia and the conditions of possibility for its environmental transformation.

In Chapters Three and Four I reconstruct Patagonia by reviewing four hundred years of discursive formation which I have called *imagination*, *liberation*, *occupation* and *circulation*. In Chapters Five and Six I will analyse the constitution of two dominant discursive formations which I have called *hydropower* and *ecopower*, to show the clash between the *conditions of possibility* of environmental transformation and the existence of subaltern discourses. Thus, in this research Patagonia is not a static conceptual construction but a material living thing.

Chapter 3. Imagination and Liberation of Patagonia: the Territorialisation of the Colonial State

The demonstrations against the HidroAysén project

In May and June of 2011, demonstrations against the HidroAysén project monopolised the political debate about the contradiction between the supply of energy to support economic development in Chile and the defence of environments not yet integrated into the productive dynamic of the country. Hundreds of thousands of people took to the streets to show their opposition to the authorization of the construction of dams in Patagonia. At first these demonstrations were violently repressed by the police, and then peaceful authorized demonstrations occupied the main streets in the most important cities of Chile. Today HidroAysén is at the core of political discussion about energy, development, democracy and the end of the non-interventionist role of the state. Thus, HidroAysén is a major political issue for the next presidential elections in Chile.

The defence of Patagonia has become a symbol of resistance of the neoliberal model. “*Patagonia sin Represas*” (Patagonia without Dams) is the slogan of these protests, which bind together the people’s rejection of the government’s role as supporter of the project, the relationship between economic and political power, and the defence of nature as an integral part of the Chilean national territory. In this sense, the conflict generated by HidroAysén is not only an environmental conflict but a cultural and ecological one; the conflict is connected to the very idea of the historical and geographical construction of Chile, located deeply in the current economic situation in which more and more energy is demanded to sustain the competitiveness of the Chilean extractive model.

During the demonstrations, the claims made were more than just “environmental”. Patagonia has been constructed as Chilean, as a space of and for nature, as a space of heritage and traditions, as a still unknown space, a space between myth and realities, and a space for future generations. Little children with banners, grandmothers, families, students, academics, environmentalists, people from different political parties and social movements, were all on the streets defending different histories of Patagonia. Clearly, demonstrations, research, documentaries, books, pictures, political speeches, propaganda, TV spots, songs, talks, and travelling, are configuring a new geography of Patagonia as a “commons”. These “Patagonias” have been constructed from the palimpsest of different representations, which still conserve traces of previous imperial and postcolonial construction.

**FIGURE N° 5. DEMONSTRATION AGAINST THE
HIDROAYSEN PROJECT, SANTIAGO 28TH MAY, 2011**



Source: My own.

This picture was taken in the civic centre of Santiago. In it is possible to identify in the forefront children with banners that say (from left to right): “*Listen to the voice of the children. Chile without dams. Say no to HidroAysén*”; “*Patagonia without Dams. I am not a vandal, I just love my land*”; “*Patagonia for the Chileans*”. The big banner says: “*I (the child) defend Patagonia too*”. The Chilean flag is in the centre of the picture. On the right there is a black flag as a symbol of mourning because of the Government’s decision. The blue banner at the back says: “*Constitute Assembly*”, referring to the transformation of the political system inherited from Pinochet’s dictatorship.

Following Haraway (1991) and her approach to the social construction of nature, I argue that Patagonia does not preexist its construction. Thus, there is no Patagonia outside history and society, and all that we know about Patagonia comes from how the West culturally understood and transformed this territory. Moreover, all that we currently know about Patagonia is an everyday reinforcement of the modernization project, because *she* (Patagonia is a female entity in the Spanish language) has been constructed as a point of comparison between nature and civilization. In order to understand the current environmental conflict over the construction of dams in Patagonia it is necessary to know its long history of “otherness” which until today has been one of its main features. From this cultural process it is possible to understand the current dominant discourses about its environments.

This Chapter is about the territorialisation of the colonial state and the construction of Patagonia as a specific discursive ecological formation, located in the transition between medieval and modern times. Patagonia in this account is the result of the expansion of the

European imperial powers and it was constructed as the antithesis of culture and production. Patagonia's landscapes were presented as a wilderness, pristine and unoccupied, ready to be the scenario of a Western masculine performance, and as a possibility for reconstructing the origins of humankind through new scientific knowledge. In the following pages I will analyse historical texts about this region written by the European explorers over the last five hundred years. My analysis is located in a body of research which has identified "founding discourses" that articulate an "imaginary geography" and "fictions" about Patagonia (Irrarrazal Larrain 1930, Livon-Grosman, 2003; Casini, 2007; Peñaloza, 2010). I am arguing that European explorers invented a subject: *Patagonian*, and created an object: *Patagonia*. Through these cultural constructions they displayed imperial conceptualizations and representations to exercise power over land and people. This exercise of power made a territory visible and encouraged its exploration and colonization.

Casini (2007) argued that it is possible to speak of "Patagonialism", which emerged from the European gaze like a uniform and negative imaginary about the region, based on environmental determinism which served to justify strategies of domination (Casini, 2007: 22). In these narratives, Patagonia is not empty, but involved in a process of material and symbolic transformation through the process of the territorialisation of colonial power and dispossession (Harris, 2004; Vandergeest & Pelusso, 1995).

I am proposing to reconstruct these discourses about Patagonia by dividing them from the earliest exploration in the sixteenth century to the current projects of the twentieth first century. The division that I am proposing consists of four processes: imagination, liberation, occupation and circulation. All these processes must be understood together, because they act as a *palimpsest* of social constructions. That is, a set of discourses that still retains traces of earlier discourses, which have been used in the material and symbolic occupation of Patagonia.

This Chapter is structured in three sections about the territorialisation of the colonial state: the first one is the process of imagination through the normalization of places, the earliest representation in maps and the domination of the indigenous tribes. The second one is the process of liberation through the Jesuits, and the third one is the process of liberation by modern science.

3.1. The Processes of Imagining Patagonia

In this chapter, I will discuss the construction of Patagonia from the territorialisation of the colonial state between the sixteenth century to the first half of the nineteenth century, characterized by the growing information about its physical and human geography developed by European imperial powers. As with other places in the world, Patagonia entered into western history as part of a process of expansion, discovery and conquest. But contrary to other colonial places, Patagonia remained independent for almost four centuries; from the north, the Spanish Crown was unable to advance because of the presence of several tribes of “Indians”, who lived on islands, channels, fjords, low valleys, and mountains, without a central organisation that could be dominated. From the east, the dryness of the pampas did not allow for the support of a settlement which may be under the threat of the indigenous people and the enemies of Spain, mainly the British, Dutch and French, who will come inevitably from the Atlantic. In the case of the west, the topography of the coast did not allow the landing of ships, and the archipelago and fjords were difficult to colonize with an army. In the middle of this unknown territory, the Andes range made the connection from the Atlantic to the Pacific impossible.

My argument is that an early process of “liberation” began in Patagonia; every attempt at the construction and representation of its physical and human dimensions sought to take the territories and populations from “the darkness of the unknown” (see figure N° 6 about earliest representation of America). The “liberators” wanted to open routes by land and sea, to connect the region with the outside, and to break its isolation, aiming to integrate Patagonia into the Kingdom of God and the Spanish or British Empires. This process of liberation also sought to rescue their inhabitants from their primitive condition and civilize them through faith and production. In this way, the construction of Patagonia has been an attempt to liberate a territory, emptying it of its original inhabitants and landscapes, through the creation of new representations and the exercise of power. Each foray into Patagonia has been a mission carried out by a number of subjects over objects through the construction of discourses.

My analysis takes into account the classic (and in some case the only) historical documents about the explorations of Patagonia, which are mostly in Spanish. These texts are: “*The First Voyage Round the World by Magellan (1525)*” by Antonio Pigafetta (2010), “*The Expedition of Francis Drake (1577-1579)*” (Marina de Chile, 1880), The “Letters Annals” of the Jesuit,

such as the “*Letter of Father Juan Bautista Ferrufino (1611)*”, “*Letter from the Father Felipe de la Laguna (1609)*”, “*Voyage of the Fathers Melchor Venegas and Mateo Esteban (1614)*”, and letters of soldiers such as the “*Voyage of Juan García Tao (1620)*” and the “*Diary of Bartolomé Gallardo (1673-1674)*” (all of them compiled in Hanisch, 1982), the “*Diary of the Father José García (1766-1767)*” (Marina de Chile, 1871), “*The Voyage of the Commanding Officer John Byron*” (1769) and “*Story of Honourable John Byron*” (1901), “*A Description of Patagonia, and the Adjoining parts of South America*” by the Jesuits Thomas Falkner (1774), and “*The Voyage of the Beagle*” by Charles Darwin (1839).

Livon-Grossman (2003) noted that the process of social construction is not only one way; from Europe to Patagonia. The indigenous people were the main sources of information, and they contributed to the reaffirmation of European ideas about lost cities, white/Christian inhabitants, giants, savagery, and deserts. At the same time, the social construction of Patagonia was couched in different languages: Spanish, English and the Indigenous people’s languages (mainly Mapuche, Tehuelche and Chono). Apart from the efforts made by the Priests to talk and understand the languages of the “others”, the indigenous people learned how to speak and understand the will of the Europeans.

The Governor of Chile and Viceroy of Peru, Manuel de Amat, wrote about this in 1760: “*The Indians are the perpetual sages of southern geography and they distribute lands and waters, Spanish and Indians at their will, with the credulity of the Spanish from the Viceroy down, and without the pleasure of looking to see if they were true or false*” (in Hanisch, 1982: 142; my translation).

To support this idea, there are at least two “stories” told by indigenous people to meet the expectations of the Europeans, which created solid discourses about the reality of Patagonia. The first case is the dialogue between the Jesuit Father Mascardi and the Indigenous Queen of Nahuelhupi about the lost cities of “Caesars” around 1670:

"As father Mascardi manifests a desire to learn their language, he sent the Queen. In this way the Father learned it well, within those years. He carefully evangelized them and made “fiscales” (Indigenous people that have achieved their authorities from Christian conversion) of those who were his teacher of the puelche language. The christening of the Queen was made in all seriousness, and she was dressing like a Spanish woman. The Queen gave thanks, and told him many things about the Caesars, which ignited the missionary spirit of the father

to go there and convert them” (Exploration of the Father Mascardi, in Hanisch, 1982: 94; my translation).

This story was taken as truth and motivated the exploration of Mascardi and other Jesuit priests and soldiers under the command of the Church and the Spanish Crown, to discover and rescue the inhabitants of the City of Caesars. Desires, people, and money were mobilised to open Patagonia and to find the lost city. There is another example in the account of Darwin about Jemmy Button and the practice of cannibalism amongst the indigenous people, which served to exemplify the enormous difference between civilization and barbarism:

“The different tribes when at war are cannibals. From the concurrent, but quite independent evidence of the boy taken by Mr. Low, and of Jemmy Button, it is certainly true, that when pressed in winter by hunger, they kill and devour their old women before they kill their dogs: the boy, being asked by Mr. Low why they did this, answered, “Doggies catch otters, old women no.” This boy described the manner in which they are killed by being held over smoke and thus choked; he imitated their screams as a joke, and described the parts of their bodies which are considered best to eat. Horrid as such a death by the hands of their friends and relatives must be, the fears of the old women, when hunger begins to press, are more painful to think of; we are told that they then often run away into the mountains, but that they are pursued by the men and brought back to the slaughterhouse at their own firesides!” (Darwin, 2001: 237).

I think these are examples of several encounters between the explorers and the “Indians” to produce physical and human information about Patagonia. I believe that the process of the social construction of Patagonia was a process of co-construction between meanings, desires and expectations of the European and Patagonian actors.

3.1.1. Actors, subjects and objects

The iconic actors in this Chapter are the “explorers”. These explorers were Spanish, British, Dutch and French sailors (the latter three often called “pirates” by the Spanish), who sought to control the maritime path and ports. Further, the Jesuits and Franciscan priests performed one of the most important roles in explorations to evangelize the indigenous people and collect information about the southern territories. With this information it was possible to mobilise colonial state power.

The indigenous people were involved in all the exploration campaigns, such as the Chonos, Alacalufes, Mapuches (Pehuenches, Puelches and Huilliches), Tehuelches and Fuegians, usually called by their local names. These “Indian” groups played key roles in supporting exploration, whether under coercion of the Spanish Empire as a result of the evangelization or through collaboration arising from conflicts with other tribes. In this way, the European explorers invented a subject: *Patagonian*, and created an object: *Patagonia*. The material and symbolic power of the empires was exercised over its people, through the cultural display of conceptualizations and representations:

“...one day, without anyone expecting it, we saw a giant, who was on the shore of the sea, quite naked, and was dancing and leaping, and singing, and whilst singing he put the sand and dust on his head...The captain (Magellan) named this kind of people Pataghom” (Pigafetta, 2010: 56).

This is the most popular version about the creation of the very idea of Patagonia. The name came because the indigenous people had *patas grandes* (large feet), and the country they inhabited was called “*Pattagonia*” (Pigafetta, 2010: 56). However, one of my theoretical claims in this research, following Haraway (1992), is that: *Patagonia cannot pre-exist its construction*. According to María Rosa Lida de Malkiel (Peñaloza, 2010), the name *Patagon* already existed in the imagination of the European explorers because of the medieval saga *Amadís of Gaul*, which includes the story *Primaleon of Greece*: “*I heare great marveiles of ye(Sir) answered Primaleon, truly I would gladly see a monster so admirable: never desire the fight of him, replied Palantine, for in sooth ye mere better see the Divell than Patagón*” (Primaleon of Greece, Second Book, Chapter XXXIII, 1619: 255; in Peñaloza, 2010: 2).

This story was published in 1512, eight years before the landing of Magellan in the southern part of America. The monster called Patagon lived on an unknown island in the south of the world; he dressed in animal skins and ate raw meat. The stories about monsters and mythological beings, many of them giants, were part of New World narratives to support the “dramatic performance” (Tsing, 2005) and secure the interest and funding of the European kingdoms. Many of those giants appeared on maps which made visible their localization and distribution to the European audience (figure N° 7).

George Chaworth Musters chronologically mapped the issue of size assigned to the Patagonians through narratives of exploration during three hundred years:

"Testimony of successive travellers on the stature of the Patagonians: Pigafetta (1520): they at least are taller than the tallest men of Castilla, Drake (1578): they are higher than some Englishmen, Kynvet (1591) they are fifteen to sixteen inches high, Van Noort (1598): the natives are tall in stature, Schouten (1615): there are human skeletons from ten to eleven feet long, Falkner (1750): a cacique is seven and a half feet and a few inches tall, Byron (1764): they were about seven feet high, and a few were lower, Wallis (1776:) I measured some of the tallest; one was six feet seven inches and several were six feet five inches tall. The average was five feet ten inches to six feet, Viedma (1783): generally they are six feet tall, D'Orbigny (1829): he never found anyone that exceeded five feet eleven inches, Fitz Roy and Darwin (1833): on average they are taller than any other people, some are more than six feet tall, and few are less, Cunningham (1887-8): it is rare that they measure less than five feet eleven inches tall, and often they are a few inches above six feet, one of them measured six feet ten inches" (Musters, 1911: 260-261; my translation).

As a result of all this, the main myth of Patagonia is that it is inhabited by giants, who control the land and paths between the Atlantic and Pacific Oceans. The giants were cultural artefacts located in the transition between medieval and modern times. They represented the images of the unknown world overseas, supporting the desire for travel, knowledge and conquest (figure N° 7 and 8). For example, the Patagonian god *Setebos*, was a character in Shakespeare's (1610-1611) *The Tempest*. Through this cultural exercise, a dominant discourse emerged about Patagonian "otherness", as unnatural, wild, and demonic. According to Casini (2007), this could be understood as the discursive base for the material exclusion and extermination of the Patagonians.

Titulus actives

Socanus omdetals

Has antillas del Rey de castila

Os montes rados em africa

Socanus omdetals

Titulus capetoni

Titulus antiochus

POLO ARCTICO

TIERA DEL CANADÁ

TIERA DEL BRASIL

LINEA DELA PATRICION

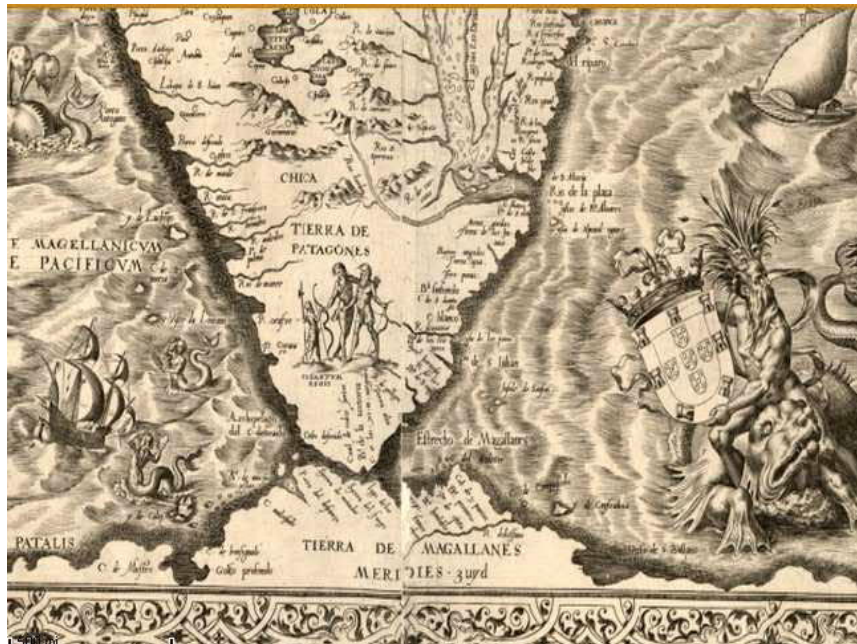
MAR DEL SUR

MAR OCCIDENTAL

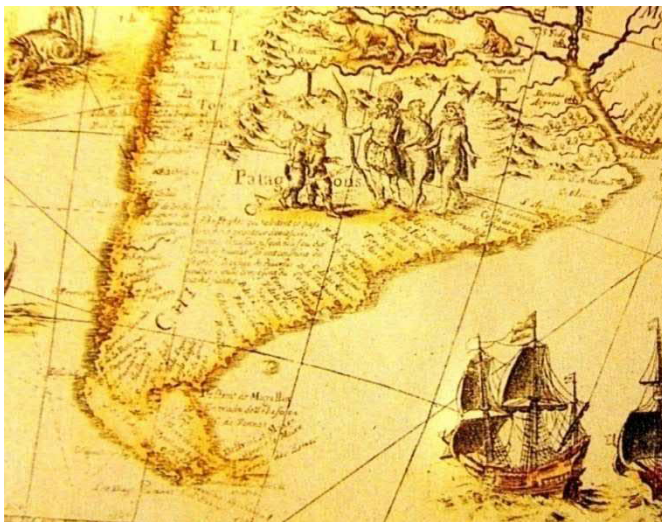
POLO ANTARTICO

66

FIGURE N° 7. REPRESENTATIONS OF PATAGONIA POPULATED BY GIANTS BETWEEN THE 16th AND 17th CENTURIES



Source: Diego Gutiérrez (1562)



Source: Alexis Hubert Jaillot (1669)



Source: Ulrico Schmidl (1605).

FIGURE N° 8. THE PATAGONIANS BETWEEN THE 16TH AND THE 18TH CENTURY



Source: John Byron (1768)



Source: Patrick Gray (1764)

3.1.2. Normalisation of places and subjects

In Latin America, particularly in Patagonia, the explorers were financed by the Crowns of Spain and England, and the Catholic Church. Examples of these early explorations of South America are Ferdinand Magellan and Francis Drake; the Jesuit Priests, such as Mascardi and Garcia during the 17th century; the English Jesuit Thomas Falkner in the 18th century, and the English naturalist Charles Darwin, who made his exploration between 1832 and 1835. The Spanish explorers of the southern part of America had encountered pirates. Most of these pirates were British (such as Francis Drake and John Narborough) and Dutch, and their presence as a geopolitical threat was constant in Patagonia. It follows that these pirates appear to be of the main motivations for conquering and patrolling the coasts of Chile, resulting in the mobilization of resources, knowledge and men (Hanisch, 1982; Martinic, 2005). The possibility of a foreign “threat” has remained as part of the dominant discourses of Patagonia until today.

The territorialisation of the colonial state was manifest in the normalisation of Patagonian geographical features through the designation of names associated to religion. For example, “Cape Virgins”, “Port of St. Julian” and “Land of December” in the explorations of Magellan (Pigafetta, 1520). With the discovery of Chile by Pedro de Valdivia in 1540, one of the main concerns was to secure the Strait of Magellan against other powerful empires, but the position was abandoned until 1578. By that time, Francis Drake had arrived at the Strait of Magellan, under the orders of Elizabeth I, Queen of England, with the intention to explore and control the southern route between the Atlantic and the Pacific Ocean (*The Expedition of Francis Drake*, Hydrographic Yearbook of Chile, 1880). As a reaction to the British presence, for the first time in history settlements were created in Patagonia in 1584, with the names “Ciudad del Nombre de Jesús” and “Ciudad del Rey Don Felipe”. However, the settlements failed because of climate conditions, the impossibility to produce food and isolation. When the British Thomas Cavendish arrived at the Strait in 1587, he only found the ruins of the cities and dead bodies, replacing the name “Ciudad del Rey Felipe” with “Port Famine”.

The Dutch also started incursions into the south of America, with the explorations of Jacobo Mahu in 1598, Oliver Van Noort in 1599, and Sebalt de Weert in 1600 who discovered the Falklands, Spliberg in 1614-17, and Shouten and Le Maire in 1615-16 who discovered Cape Horn (Figure N° 9). In common with the Spanish and British, the normalization of places was related to names and the construction of maps.

**FIGURE N° 9. CLASH BETWEEN THE EXPEDITION OF VAN NOORT
AND THE SELK'NAM, 1599**



Source: Johann de Bry (1601)

The normalisation of the indigenous people was different, through armed conflicts with battles against different tribes. Meanwhile the behaviour of the explorers was controlled with executions. In fact Francis Drake found the gallows used by Magellan in Saint Julian Port, and in the same place he killed mutineers (Armada de Chile, 1880: 537). For his part, the Dutchman Van Noort did the same thing with his crew. From this story of discipline in the most difficult moments of the boundaries dispute between Chile and Argentina in the late nineteenth century, the Chilean intellectual and politician Benjamin Vicuña Mackenna called Patagonia “a mutineer’s gallows (Vicuña, 1878), to show the minor importance of those lands to Chile, and to avoid military confrontation.

All of these expeditions changed the geographical ideas and representations of the region forever. The Spanish called Patagonia *terra incognita* (unknown land), while the British called it *terra bene nunc cognita* (never well known land). Those names, as an exercise of power/knowledge about a land and people are still in use today, constituting a powerful discourse about an empty space, without civilization and ready to be discovered and conquered.

3.1.3. *The City of Caesars*

After almost two hundred and fifty years, the Spanish Crown was unable to control Patagonia, and because of the lack of information, the vast territory discovered by Magellan started to be colonized by the imagination. On several occasions, the Spanish authorities recognized the existence of a lost city populated by white settlers located between the Atlantic and the Pacific oceans. For example, in 1781 the Spanish Research Officer in Chile said that there was a human settlement located between 45° and 56° latitude south, known as the City of Caesars (Musters, 1911: 233).

A genealogy of this second myth of Patagonia can be traced from different origins which are fused together in the cultural creation of the City of Caesars. According to different sources, the myth was a story about some Incas who escaped the Spanish conquest of Peru to the south, finding a territory full of gold, silver and precious stones (figure N° 10). The second story said that in 1539 the Spaniard Francisco César started an exploration from the Parana to the south, finding a city of gold, cattle and farming. The third one said that it was a city of “Indians” who escaped the Spanish invasion led by Diego de Almagro. During the colonization the myth was constructed with stories about Spanish survivors of shipwrecks from 1523 to 1540, or survivors of the cities located in the Magellan Strait or survivors of the destruction of Osorno in 1600, the southern city of the Spanish Crown in Chile (Martinic, 2005; Couyoudmjian, 1971; Latcham, 1929; Bayo, 1913; Musters, 1911; Fonk, 1900; De Angelis, 1836).

After 1565, dozens of explorations were made by coast and land to find the city, supported by the Spanish Crown and the Catholic Church, driven by the threat that the British and Dutch would occupy the territory. These stories were fed by the indigenous population who spread the word about the constant landings and incursions of white skinned foreigners on the coast of Patagonia. In this way, *The Caesars* started to be part of the normalization of an imaginary place: “*I ignore the shape or the building that the city have, because the Indians said that they are not allowed to enter, but the houses are made with walls and tile, which could be seen from outside because of their magnitude and greatness*” (Pinuer, 1774: in De Angelis, 1836: 30; my translation).

In summary, it is possible to observe the co-construction of Patagonia. More than a discursive formation from Europe, Patagonia is the outcome of different discourses about land and people which emerge together. The indigenous people took an active role in the representation

of the southern lands of America, showing political complexity with other tribes and other empires. Thus, the construction of places is not innocent; information about the presence of Europeans on the coast and inland could be a strategy according to the political economy of particular tribes, more than the action of an ignorant “*bon sauvage*” telling stories just for fun. As Couyoudmjian (1971) and Hanisch (1982) suggest, the information given by the indigenous people was confusing because the exploration by the Jesuits, Spanish, British and Dutch took place in different parts of Patagonia during the 17th and 18th centuries. For example, the expeditions of Father Mascardi and the settlement of the Misión de Nahuelhuapi between 1669 and 1673 were related by the indigenous people several times during various years to different people. Through these myths, Patagonia underwent a discursive ecological formation, was identified and integrated into maps as *Trapananda* or *The Caesars*, (see for example figure N° 10 and 11).

The constitution of Patagonia as a discursive ecological formation can be traced from two medieval myths, which worked together in the process of imagination, and supported the earliest representation of this space; Patagonia was a distant vast land, populated by giant savage Indians who control the territory, and full of resources (gold, land and the possibility to built cities). The mythical origin, the “otherness”, the presence of abundant resources and the threat of invasion are key elements to understanding the process of the dispossession of Patagonia by the postcolonial state during the 19th and 20th centuries. The “truth” about Patagonia was constructed through the account of explorations, maps, novels, and geopolitical discourses, which circulate from the colonies to the centre of the empire and survive until today as the basis of the understanding of Patagonia within Chilean society. In this way, these two myths are an integral part of the current dominant discourses about Patagonia and are key to understanding part of the social rejection to HidroAysén and the defence of Patagonia as a cultural artefact more than as a natural environment.

FIGURE N° 10. THE CITY OF CAESARS



Source: Unknown author



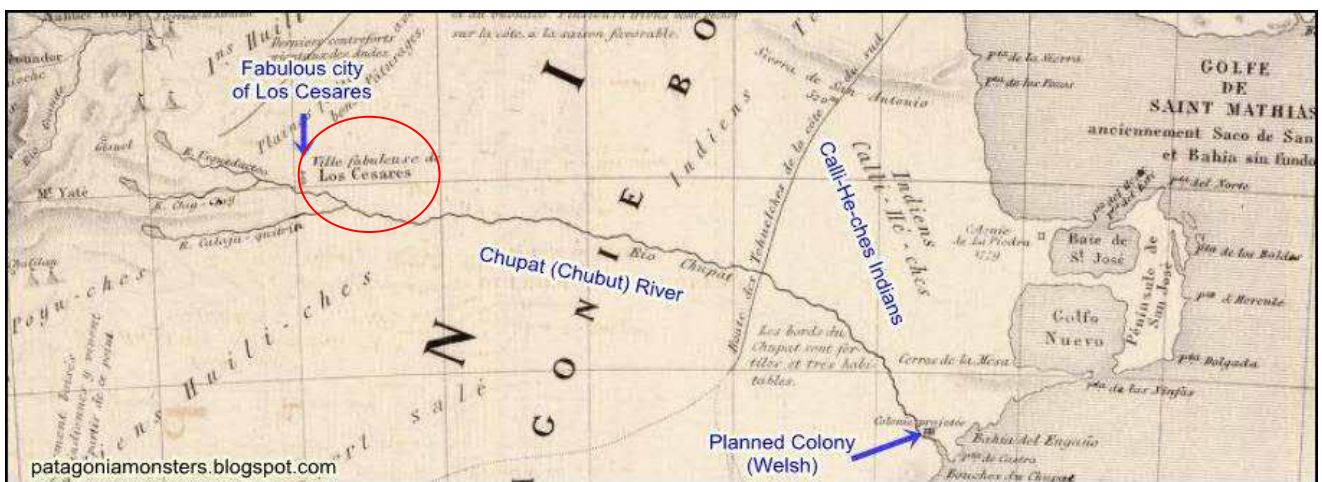
*Indi prodigijis Montis ignisumens, Amraus arborem, monstrum que trahentis, Aquilaram plenum
tantum Visarum, extrahit Hispani in aere de suo Victoris, patis concubant et Fides in Chile.*

Source: Alonso de Ovalle (1646)

FIGURE N° 11. LOCATION OF THE CITY OF CAESARS



Source: Martin de Moussy (1873)



Source: Martin de Moussy, (1873). In Patagoniamonsters.blogspot.com

3.2. The Process of Liberating Patagonia

In Latin America, especially in Patagonia, the territorialization of the colonial state was developed through two strongly related agencies: the Catholic Church and the Navy. The colonial state refers not only to Spain but also to Britain, because Patagonia is a result of the geopolitical tensions between both empires. The process of liberation was to bring Patagonia to light, to break the medieval myths, to fill maps with systematic knowledge, and to develop accurate accounts and representations for colonial centres of calculation (Harris, 2004). The process of liberation was a masculine performance, supported by Western values related to honour, the expansion of Western beliefs and the construction of an imperial landscape (Mitchell, 1994). To this day the Church and the Navy remain powerful actors in Patagonia: Catholic priests are the leaders behind the rejection of HidroAysén and the Navy is the main supporter of the settlement located in the region of Aysén in terms of goods and services.

3.2.1. Liberation by the Church

The first systematic descriptions of Patagonia came from the Jesuits. As a product of the Protestant Reformation, the Catholic Church commanded the Jesuits in alliance with the Spanish Crown, to secure the southern colonial territories of America. Without precise information about the topography, landscape and inhabitants, the geopolitical aims were: a) to control the sea and the path between the Atlantic and the Pacific Ocean, b) to connect the Atlantic and the Pacific by land, c) to protect the Spanish southern positions for the possible landing of the British, Dutch and French, and d) to look for the survivors of shipwrecks who supposedly lived in the City of Caesars. The discursive construction of this city was necessary, at least in the imagination of the Empires, to justify the settlement of European people in Patagonia (Hanisch, 1982, Martinic, 2005).

Therefore Patagonian “otherness” was constructed as follows: according to Pigafetta (2010), Patagonia was wild, exotic and giant, according to the Jesuits and their Missions, Patagonia was remote, barren and cold, and at the same time, it was an opportunity to bring civilization, progress and production. As a discursive ecological formation, “Patagonia” started to be charged with negative opinions on both sides of the Andes. In Western Patagonia, the Jesuits regarded the southern archipelago and the mountain valleys in terms of a crusade: “*The whole day was rough; rain and cold caused by the proximity of the snowy range*” (Father García, Annals of the University of Chile, 1871: 20; my translation). Each of these voyages of

exploration highlights the idea of a “heroic mission”, a “life of burden” which creates a “dramatic performance” (Tsing, 2005), full of values related to the era of empire era and the Church. This is the construction of a “men”, who bear the inclement weather without abandoning their duties. The records of the time highlight the will to conquer, the lack of food and the uncertainty: *"All the great works of Patagonia always demanded relevant conditions, i.e. upright men, equipped with high human virtues in the sense that we give the expression when we say: a proper man!"* (Dumrauf, 2005: 13; my translation).

For the priests, Patagonia was a space of evangelisation and colonisation related to concepts such as faith, duty, knowledge and citizenship. All of these belong to the rational mastery of nature in opposition to the indigenous beliefs, and are presented as the liberation of the indigenous people from their ignorance and primitive conditions. This liberation was not only of the “souls”, but the material integration of the indigenous and their lands into the Spanish Crown and the Church: *“on behalf of the Holy Trinity, Father, Son and Holy Spirit, I took possession of all these souls and reinstated our Lord Jesus Christ that he had redeemed with his blood”* (Father Mascardi, in Hanisch, 1982; 95; my translation)

A second element in the discursive ecological formation of Patagonia was the natural condition of its landscapes. In the accounts of the Jesuits there were no physical transformations of the landscape by human hands, so the indigenous people were understood as an extension of nature. This “otherness” was constructed through the idea of unproductive societies, with barbaric customs, without memory and history. The pristine landscapes were ready to be integrated through the normalization of the space through the naming of places and the construction of maps. As with places, peoples and behaviours were also changed through Christianization.

The methodology of the Jesuit Catholic Church in Latin America was the establishment of missions to penetrate indigenous territory. The Jesuits established two missions to the European public presented as true epic actions: the mission of "Chiloé" (1595-1767) and the mission "Nuestra Señora de Nahuelhuapi" (1669-1717) (see figures N° 12 and N° 13). The missions were located in strategic areas following the political conception of space in order to rediscover American space through the use of systematic knowledge in search of potential economic profit. Thus the Jesuits, and later the Franciscans, developed a strategic economic vision for the Spanish Empire concerning the population, the distribution of land, labour and

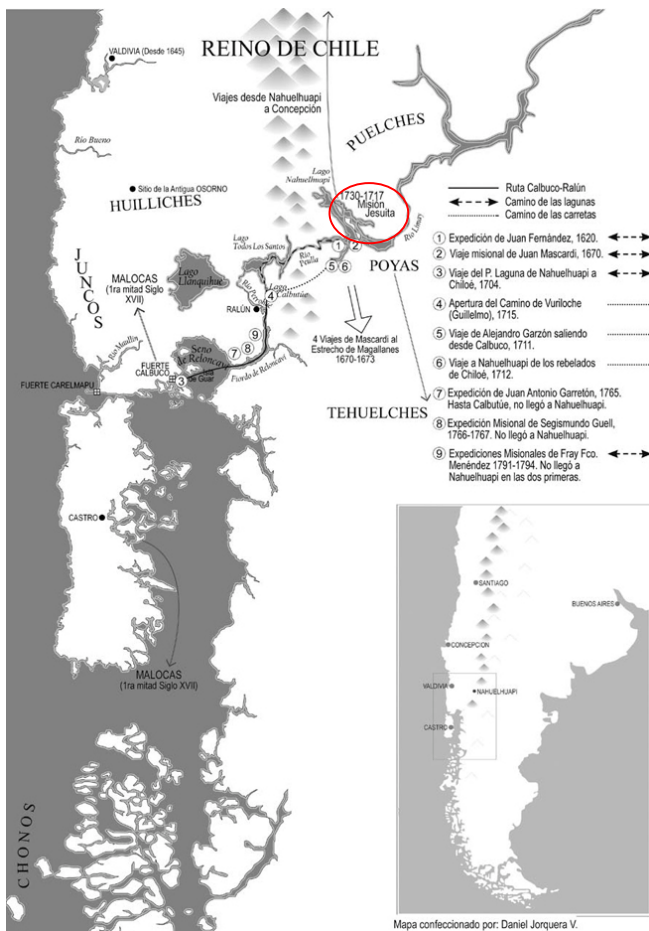
capital, through a process of urbanization of Araucanía (the Mapuche country) and Patagonia (Nicoletti, 1998: 90).

According to Nicoletti (1998), evangelism followed two criteria: the creation of "Indian towns" or *reductions* ("*reducciones indígenas*"), i.e. indigenous populations transferred to centres established by the missionaries, and "flying missions" or "circular missions" that were visited once a year in search of indigenous people in their original territories. The reduction strategy was based on the change of lifestyle of indigenous people from nomadic to sedentary, restructuring the lives of communities and their relationship with nature through Christian indoctrination and the use of land for agriculture and livestock. But the reductions were also supported by a discourse of protection of the indigenous people from the abuses of the Spanish conqueror, ensuring that the process of civilization of the Indians was conducted in a peaceful manner. The missions called "flying" or "circular" were an evangelization strategy conducted mainly from Chiloé. They consisted of annual trips between September and May (months with less rain) to evangelize, administering sacraments and instructing some indigenous people known by the Jesuits as "fiscal" and "patterns". This role was played by some indigenous people who were authorized to baptize other indigenous people and to act as mediators in conflicts between indigenous communities. Thus, discipline strategies were developed in indigenous territory, transferring the responsibility for recruitment and evangelization to the Indians themselves. This process required information on births, marriages and deaths, supported by a network of seventy seven chapels on the islands near Chiloé (Nicoletti, 1998; Gutierrez, 2007).

The territorialisation of the colonial state through the Jesuits was very important, not because of the number of indigenous people converted to Christianity, but for their territorial strategies of power. The Jesuits gained systematic knowledge from their observations of the indigenous population, collecting information about the physical and human features of Patagonia (*Diary of the Father Garcia*, Annals of the University of Chile, 1871; *Fathers Vengas and Riveras*, 1614, in Hanisch, 1982). The Jesuits succeeded in the establishment of Indian reservations, mainly in Chiloé. This not only meant the removal of indigenous people, but also the reduction of ethnic differences which existed between the different indigenous groups, initiating a process of cultural homogenization and dispossession of their land, heritage and self-determination. The Jesuits succeeded in the effective colonisation of indigenous customs and in their discipline in Western culture (for example, the practice of agriculture, the use of clothing and the improvement of navigation). The Jesuits were able to materialize the

presence of Spain and the Catholic Church. They took possession of Patagonia in a material and symbolic way through the iconographic use of the cross and the establishment of chapels. Furthermore, through the celebration of the Eucharist and the catechism, the Jesuits transferred the responsibility of the territorialization of the colonial state to the indigenous people.

FIGURE N° 12. FROM CHILOÉ ISLAND TO NAHUELHUAPI (in red)



Source: Urbina (2008)

FIGURE N° 13. CHILOÉ ISLAND, PLACE FROM WHERE THE JESUITS EXPLORED PATAGONIA



Source: Jacques Bellin (1764)

3.2.2. *Liberation by Science*

The conceptual construction of Patagonia has been a process of exploration, classification and representation (Livon-Grossman, 2003). First were the observations of the Jesuits and European explorers, followed by the use of “technologies” such as biology, geology, geography and ethnography, following the style of naturalist narrations of the eighteenth century, and the travel literature and positivist approach in the nineteenth century. This process was supported through technological devices of measurement such as astrolabes, compasses, and charts, which expanded the possibility for new forms of power. Through the use of systematic observation and the translation of the sizes on a measuring scale, the first myth of Patagonia was demolished: there are no giants in Patagonia but only tall people:

“The Patagonian, or Puelches, are a large bodied people; but I never see that gigantic race, which others have mentioned, though I have seen persons of all the different tribes of southern Indians” (Falkner, 1774: 26).

“...the three others were powerful young men; about six feet high... they seem closely allied to the famous Patagonians of the Strait of Magellan” (Darwin, 2001: 226-227)

In the same way, the myth about the City of Caesars was knocked down:

“What further makes this settlement of the Caesars to be altogether incredible, is the moral impossibility that even two or three hundred Europeans, almost all men, without having any communication with a civilized country, could penetrate through so many warlike and numerous nations, and maintain themselves as separate republic, in a country which produces nothing spontaneously, and where the inhabitants live only by hunting; and all this for the space of two hundred years (as the story is told) without being extirpated, either by being killed, or made slaves by the Indians, or without losing all European appearances by intermarrying with them” (Falkner, 1774: 113).

Consequently, the medieval myths of Patagonia were replaced by new ones in accordance with modernity. In *Storytelling Globalization from the Chaco and Beyond*, Mario Blaser (2010) argues that the myths of modernity are neither true nor false; they just engendered different worlds which have their own criteria for defining truth. One of the modernity myths came from John Locke, who said in 1690: *“in the beginning all the world was America”*. The second myth of modernity came from Descartes and the dualism of opposing pairs, including subjects/objects and culture/nature. In this sense, modernity was the expansion and the

material and symbolic violent imposition of those myths into the rest of the world (Blaser, 2010: 3-4). Through these myths a new discursive ecological formation of Patagonia was created; those lands and their inhabitants belonged to the “beginning of the world” and were located as an object of nature. This discourse was reinforced by the British Falkner, Byron, Darwin, and Musters, among others, who recreated Patagonia at a primitive stage. This scientific discourse about Patagonia was an assemblage between the chronology of travels and discoveries, the classifications of species, stories about the life of the explorers, and observations and moral judgments about the life of the indigenous population. From these, Patagonia was constructed as an empty space, unoccupied by Europe, where it was possible to recreate the origins of human and geological life (Livon-Grosman, 2003).

The work of Father Thomas Falkner was the first successful attempt to survey the topography and ethnography of Patagonia. By the end of 1730 he had established himself among the Puelches, using indigenous oral knowledge as a source of information and the account of other explorers (Livon-Grossman, 2003). Falkner explained who the different indigenous groups were and where they lived, describing different Patagonian landscapes, and weather. Falkner made the maps “meaningful”. For example, in his account about Western Patagonia (today’s Aysén region) Falkner wrote: *“to the south of Valdivia, according with the missionaries, is very poor, and without all the necessary to live in; happening the same in the whole coast from Chile to the Strait of Magellan”* (Falkner, 1836: 31).

The second well-known work about Patagonia came from Darwin (who visited Patagonia between 1832 and 1834); this took a canonical meaning for the postcolonial states, using a scale from nature to civilization. In Darwin’s work, the indigenous groups, the “other Patagón”, belong to the past; they have a precarious way of dressing, an absence of culture, and strange savage practices. This kind of description which separates nature and culture belongs to what William Mitchell (1998) has called *imperial landscapes*, a cultural product to support the expansionist project, where nature is a precondition of civilization (Livon-Grossman, 2003: 95). Patagonia was constructed from a physical and cultural distance, and the civilizing mission consisted of a cultural disarming of the space to be later occupied by the civilized. Consequently the indigenous people were seen as savage, they did not have culture, they did not produce, and their land was being wasted (Casini, 2007).

The description of Eastern Patagonia by Darwin was as follows: *“The whole line of country deserves scarcely a better name than that of a desert. Water is found only in too small wells; it is called fresh; but even at this time of the year, during the rainy season, it was quite brackish. In the summer this must be a distressing passage; for now it was sufficiently desolate...Everywhere the landscape wears the same sterile aspect; a dry gravelly soil”* (Darwin, 2001: 77).

“The country remained the same, and was extremely uninteresting. The complete similarity of the productions throughout Patagonia is one of its most striking characters. The level plains of arid shingle support the same stunted and dwarf plants; and in the valleys the same thorn-bearing bushes grow...Patagonia, poor as she is in some respects, can however boast of a greater stock of small rodents than perhaps another country in the world.. Everywhere we met with the same productions and the same dreary landscape” (Darwin, 2001: 198).

These descriptions created a solid discourse which was later repeated by the postcolonial state: Patagonia is poor, desert and unproductive but it is possible to improve it. To do this land and people should have been separated. In Falkner and Darwin, Patagonia was populated by various indigenous groups which are identified as belonging to the origin of humankind (Livon-Grossman, 2003; Casini, 2007). From the second half of the 18th century, until the first half of the 19th century, indigenous people were conceived of as part of nature. They belonged more to the animal kingdom than to the human. They did not have a rational mastery of nature or culture to work their land and manage their territories, nor did they have political, economic or religious complexities. Falkner gave the designation “Patagones” to the Puelches and Tehuelches, while Darwin gave the same name to the Fuegians. In the end, all the indigenous groups that inhabited Patagonia become simply Patagones, reducing their characteristics to one single savage Indian. At the same time, Falkner and Darwin made moral judgements describing, from the myths of modernity, the indigenous social organizations as savage, exotic and precarious behaviour. From these descriptions a powerful tool for otherness was created that was later used by the postcolonial state.

“I believe, in this extreme part of South America, man exists in a lower state of improvement than in any other part of the world” (Darwin, 2001: 254).

All this knowledge was disseminated and objectivised in the centres of calculation, mainly London, and the capitals of the new national state of Chile and Argentina. Maps, accounts of travels and novels reinforced the desire to travel to Patagonia. For example in Shakespeare’s

The Tempest (1610-1611), John Byron's *The Wager* (1768), Lady Florence Dixie's *Across Patagonia* (1881), and George Musters' *At home with the Patagonians* (1871) discourses of adventure and savage Indians lands became embedded. At same time, the southern coasts of Chile were the scenario for *Moby-Dick* and *Robinson Crusoe*, two of the most famous adventures stories of the 19th century. Thus, the landscapes of faraway Patagonia were culturally popularized as vast and exotic, unoccupied by Western civilization and unproductive. Patagonia as a discursive ecological formation for explorers was viewed as a female land, marked by negative views, tragic and terrible. The imperial landscape of this epoch was either the labyrinth of archipelagos, islands and fjords of Western Patagonia (today's Aysén), or the desert of Eastern Patagonia. In both cases a virgin but sterile vast land was inscribed.

Summary

This Chapter has established a basis for understanding a large part of the discourses about Patagonia that are mobilised in the HidroAysén conflict. Patagonia has been presented in the process of territorialisation of the colonial state which deployed a discursive ecological formation created by European men, as an assembly of values and knowledge, which in turn created an imperial landscape. During three hundred years several discourses about its environment and inhabitants were deployed. Sometimes there have been contradictions, but in others they have worked together. For example, the pristine discourse is the basis of the environmental claim about Patagonia, one of the only places of the world untransformed by human hands, which has to be preserved for future generations. But also the discourse of unproductive has survived which is the basis of the condition of possibility for hydroelectric transformation. The dams will not destroy productive land because Patagonia is barren and cold. At the same time, the discourse of "otherness" is still present. The landscape of Patagonia, with its positive and negative features, constitutes a different, strange and exotic cultural artefact for Chilean society. I think this "otherness", which represents the persistence of colonial discursive formation, plays a major role in the defence of Patagonia by a large part of Chilean society. I will explain this in more detail in the coming chapters.

Today's Patagonia is a palimpsest of social construction where it is still possible to find the process of imagination through the persistence of the mythology of giants, especially in the use of Patagonia as a trade mark for tourism. Until today the giants, and in general terms the

gigantism of Patagonia, are an integral part of the cultural geography of this land for Chilean society. In terms of a popular discourse, the myth of Caesars is less known, but there are documentary films and stories about the expeditions. However, the idea of Patagonia as full of resources survived, and new myths about foreign settlements have been created. The myth of the presence of the indigenous population is now in transition because the extermination and assimilation of them by the postcolonial state. Today just a few indigenous people from different tribes survive and their culture only exists in museums. A new kind of Patagonian was created with the territorialisation of the postcolonial state, which has replaced the previous human occupation. If the Patagonian indigenous people are a myth (pre-history), the Jesuits are real. The chapels are part of the national heritage with specific public policies for their conservation. The Catholic priests are playing an important role in the HidroAysén conflict, leading the debate about environmental protection. In some sense they are still liberating the Patagonians against the domination of foreign forces such as transnational companies.

With the configuration of the postcolonial states of Chile and Argentina new representations of Patagonia, and new forms of power appeared. The maps of Patagonia presented it as an absolutely distinct territory located in the south of America (see figure N° 14). This situation generated the necessity for Argentina and Chile to close their southern boundaries, and put the landscapes and people under the control of the postcolonial state. Based on the knowledge generated by Falkner and Darwin, the liberation of Patagonia received a new impulse, the savage population of Patagonia, “the other Patagón”, must be controlled and disciplined by the force and violence of progress.

FIGURE N° 14. SOUTH AMERICA, BETWEEN THE 18th AND 19th CENTURIES,
SHOWING PATAGONIA AS A COUNTRY



Source: Frédéric Lacroix (1839).

Chapter 4. Occupation and Circulation of Patagonia

The Social Movement of Aysén

“The nobility of Patagonia has been the worst enemy of the Government”

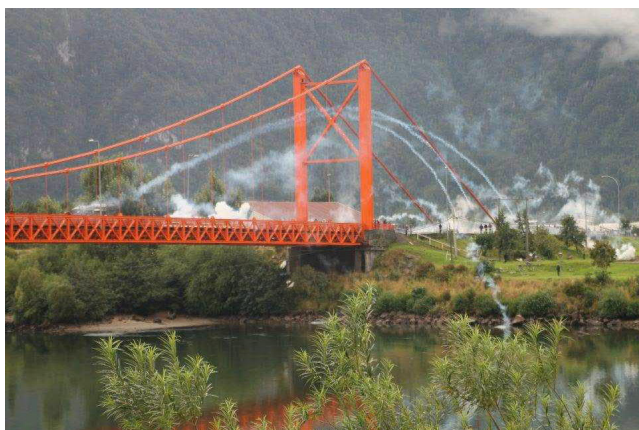
Ivan Fuentes, Leader of the Social Movement of Aysén, March 2012

Between February and March 2012, the inhabitants of the Region of Aysén located in Western Patagonia, started a series of demonstrations demanding that the Chilean state provide improvements to their quality of life, because of the isolation and its effects on high living costs and high costs of production. They were organized into the *Movimiento Social de Aysén* (Social Movement of Aysén), which brought together different groups including environmentalists, opponents of HidroAysén, craft fishermen, women, indigenous, workers, civil servants and local groups, under the slogan “*Aysén, tu problema es mi problema*” (Aysén your problem is my problem).

The Social Movement of Aysén presented a list of demands to the state, such as: the reduction of the price of fuel and timber, improvement to health systems and the incorporation of more medical specialities into the hospital, the establishment of a minimum wage according to the regional cost of living, a regional retirement pension, citizen participation in large investment projects, the construction of a high quality public regional university, management over regional natural resources, transportation assistance for people and goods, and the construction of a 100% land road to connect the region to Chile (currently the land connection is by sea, by air and through Argentina), to develop an agricultural plan for the small and medium scale farmer, to create a housing policy according to the climate characteristics of the region, and the protection of craft fishing (*El Mercurio*, March 12th, 2012).

The government identified the movement as part of the left wing, led from Santiago, and associated with the anti-dams campaign. During the conflict, citizens started to occupy the airports in the town of Melinka, and they blocked the main highways. Hundreds of people clashed against the police in Puerto Aysén, and some of them were injured in the riots. The Government sent hundreds of police to the zone, while the media showed images that the Chilean people easily related to the years of Pinochet’s dictatorship (figure N° 15). During those days, 92% of Chileans supported the demands of Aysén (La Tercera, March 12th, 2012), and the government was forced to negotiate. The negotiations have been very slow and people are starting to worry about the real goals of the process.

FIGURE N° 15. IMAGES OF THE SOCIAL CONFLICT OF AYSEN, FEBRUARY-MARCH 2012



Source: El Combatiente Aysenino, 2012a



Source: El Combatiente Aysenino, 2012b

Above, riots in Puerto Aysén, and on the highway from Coyhaique to Puerto Aysén. In the picture on the left the police are throwing tear gas at a group of protesters to control President Ibañez Bridge, which joins the Aysén region to the Pacific. In the picture on the right a man celebrates the destruction and burning of a police bus.

Below, thousands of people celebrate the arrival of the leader of the Social Movement of Aysén who was in Santiago in negotiation with the Government. In the picture on the right Ivan Fuentes, the most important leader of the movement speaks in front of the citizens. The banner behind him says: *As long as misery exists, there will be rebellion*, showing a picture of a “Patagonian” on horseback and with bolas, controlling the President Ibañez Bridge.



Source: El Patagón Domingo, 2012



Source: El Diario de Aysén, 2012

This chapter is the continuation of the genealogy of Patagonia to understand the historic and cultural context of the HidroAysén environmental conflict. The main argument is that Patagonia can only be understood via reference to the historical process of the consolidation of the Chilean state and the implementation of capitalism. I will defend the idea that “there is nothing natural about Patagonia”, but a set of discourses and spatial practices with different consequences. What today looks natural in Patagonia is in fact the historical transformation of landscapes brought about by capitalism in the last century. The construction of a discourse of Patagonia as “natural” or “pristine” is to deny the history of dispossession of the postcolonial state.

Thus, I will be focusing on the process of territorialisation of the postcolonial state and the emergence of a “Chilean” discursive ecological formation about Patagonia. In the overall argument, this chapter aims to show how the Chilean state has created the region of Aysén through the delimitation of boundaries, laws, customary rights, institutions, settlements and the material transformation of environments and landscapes, resulting in large-scale environmental degradation. This chapter will follow the symbolic and material creation of a territory, the emergence of cultural landscapes and the conformation of discourses about nation and sovereignty which form the basis of the HidroAysén conflict.

I will show how process of occupation started in Patagonia and how the Chilean postcolonial state developed a strategy of “Chileanization”, making Patagonia Chilean. In this chapter, the genealogy of the occupation of Patagonia will be split into four historical moments: 1) the British explorations (from the first half of the eighteenth to the beginning of the second half of the nineteenth century), 2) the laissez-faire attempt, 3) the occupation by the settlers (both in the first half of the twentieth century), and 4) the intervention of the state (from the second half of the twentieth century). The actors in the territorialisation of the postcolonial state are explorers, geographers and surveyors working for the Chilean state, and pioneers, settlers and public staff responsible for the material and symbolic transformation of Patagonia.

I will take into account three different sets of text, and I will complement them with academic articles about these historical moments:

- Exploration journeys: a) British Explorations: *The Story of Honourable John Byron 1768* (1769 and 1901), and *Life Among Patagonians* of George Musters (originally

published in England in 1873, but with the Spanish version of 1911), Chilean Explorations: *Report on the Central Region of the Magellanic Lands* (“Memoria Sobre la Reji3n Central de las Tierras Magall3nicas”) of Alejandro Bertrand (1886), *Land of Colonization: the Land Grant of the Ays3n and Simpson’s Valley* (“Tierras de Colonizaci3n: La Concesi3n del Ays3n y el Valle Simpson”) of Pomar (1923), *About the Colonization Problem in the Zone of the Baker River* (“Informe Sobre el Problema de Colonizaci3n de la Zona del R3o Baker”) of Oportus Mena (1928), and *The Exploration and Research Voyage to Western Patagonia 1892-1902* (“Viajes de Exploracion i Estudio en la Patagonia Occidental”) of the geographer Hans Steffen (1910).

- History books about Chilean Patagonia: *Nogueira The Pioneer* (“Nogueira El Pionero”) (1986), *Menendez and Braun Notable Patagonians* (“Men3ndez y Braun Prohombres Patag3nicos”) (2001), *From Trapananda to Ays3n* (“De la Trapananda al Ays3n”) (2005) all of them of Mateo Martinic. The work of the Institute of History of the Catholic University of Chile: *The Incorporation of Ays3n to the National Life 1902-1936* (“La Incorporaci3n de Ays3n a la Vida Nacional”) of Iba3ez (1973), and the remarkable work of the local historian Danka Ivanoff *The War of Chile Chico* (“La Guerra de Chile Chico”) (2002) and *General Carrera Lake, Dream’s Storm* (“General Carrera, Temporales de Sue3os”) (2007).
- Research articles such as: *The Whaling Society of Magallanes: from whales hunters to “heroes” who marked the national sovereignty* by Nancy Nicholls (2010), *Chilotes in the Quintay Whaling Station* of De la Fuente and Quiroz (2011), and *The fleet of the Whaling Society of Magallanes* (2011).

4.1. The Transition from Imagination to Occupation

The account of Commodore of the British Navy John Byron and the British ethnographer George Musters are separated by more than one hundred years. From both stories it is possible to observe the process of occupation and how the British culturally constructed one version of Patagonia which exists until today¹. John Byron was one of the survivors of the

¹ The British have been present in a large part of Patagonia’s history. From the early expeditions of Francis Drake in 1577; Thomas Cavendish in 1587; John Davis in 1591; John Narborough in 1669 who took the country in the name of Charles II, King of England; George Anson and John Byron in 1741; Samuel Wallis in 1677; Thomas Falkner until the expulsion of the Jesuits in 1767; Robert Fitz Roy in 1825 and Fitz Roy and Darwin in 1831; John James Onslow who took the Falklands in 1833; Robert Cunningham in 1866; George Musters in 1869, among the

wreck of *HMS Wager* in 1741 off the coast of Western Patagonia during the expedition of George Anson. The two versions that I analyse are oriented towards two different audiences. The first one, which was written in Spanish in 1769, includes a special emphasis on the giants called Patagonians. A completely different situation is presented in the Chilean version of 1901 where there are no references to giants; on the contrary, the story of Byron could be compared to Robinson Crusoe. Both novels are in the context of the British territorial expansion, and both are about a man who faced nature in unknown places populated by savages. The landscape in Byron is a critical factor: "*... of a country made up entirely of swamps and mountains, unable to produce or be cultivated ... We have known the most ungrateful of the globe, and as just observers, we try to describe and make it known*" (Byron, 1901: 2-3; *my translation*).

In Byron's account the introduction of cattle and iron transformed the social relations of the indigenous people. Furthermore the idea of permanent settlement was changing the nomadic customs, and the political complexity of the indigenous groups was changing because of the control exercised by the Jesuits and the presence of the British.

In the book of George Musters, *Life Among Patagonians*, published in England in 1873 with the support of the *Royal Geographical Society*, the Tehuelches are not the savage indigenous people with bows and arrows described by previous explorers, but bands of hunters with horses who traveled by Patagonia from the Straits of Magellan to the settlements in Argentina. Like the discourse constructed from science about the myth of giants in Patagonia, Musters declares that the Patagonians are large people, but they are no taller than some British. In this account the normalization of Patagonia was through the creation of colonies, the increasing application of capitalism over land, the transformation of resources and goods into commodities, and the existence of the social and racial relations of production (settlers as owners of the means of production and people from Chiloe as workers), the relations established in the territory between settlers and indigenous people, the identification of iconography and geo-symbols as material and symbolic deployments of national state power, and the situation of the indigenous people in the period during the consolidation of Chile and

ones that have been recorded by British colonialist history. Through the work of Falkner, Byron, Darwin and Musters, a detailed geographical description of both sides of Patagonia, and ethnographies of the different tribes who lived in it were presented. I separated the works of Byron and Musters from the rest, because they allow me to show the process of increasing occupation, and because they act like protagonists of the stories more than just observers.

Argentina in Patagonia. It is important to point out that the occupation and circulation processes during Musters' exploration were happening mainly due to the advance of the Chilean and Argentinean armies, who were penetrating Mapuche, Pampa and Tehuelches lands from the north.

In his account, the Chilean settlement of *Punta Arenas* (former "Bulnes Fort" founded in 1843), was the commercial centre in the south of America with increased industrial activities such as the operation of a coal mine, a gold panning centre and a sawmill, all of them using workers from Chiloé. Also there were activities related to a steamship line from Liverpool to Valparaiso. With Punta Arenas, there were three settlements in the Eastern part of Patagonia by the years of Musters' exploration (1869): *Carmen* or *Patagones* (1779) in the north, *Santa Cruz* (1859), and the Welsh colony in Chubut (1865), all of them part of Argentina. Meanwhile, in Chilean Patagonia there was only Punta Arenas and the German settlement promoted by the Chilean government in the North close to Llanquihue Lake (1852), the new city of Puerto Montt (1853), and the cities of Chiloé (Chilean from 1828). Moreover, between the Chilean colonies of Punta Arenas and Puerto Montt there were more than 1,300 kilometres of land devoid of non-indigenous occupation.

According to Musters, there was a racial and social division of labour. At the top were the European immigrants who were capitalist pioneers, owners of the means of production and controllers of exchange. At the bottom were the people from Chiloé who constituted the labour force. The Chilotes were the result of the colonization made by the Jesuits and Franciscans over the past two hundred years. The Chilotes were "mestizos", progeny of the indigenous Patagonian people collected by the Jesuits, homogenized, domesticated and transformed into new subjects. They are until now one of the most important migratory flows into Patagonia, and they contributed a particular cultural ecology related to the sea (navigation and diet) and the craft work of wood. Along with Chilotes, Musters identifies other mestizos between the Tehuelches and the settlers, as well as "hybrids" between gauchos and sailors.

In contrast to Byron's account about the coast of Western Patagonia, in Musters' story of Eastern Patagonia the most significant geosymbol is the "pampas". The word came from the Tehuelches for whom the word pampas referred to any tract of land; meanwhile the explorers of Patagonia gave the name pampas to plains or plateau (figure N° 16 and N° 17). Thus, the Patagonian landscape is the same described by Darwin, desert and sterile, and constituting an empty and hostile space.

Musters recognized the iconographic use of the flags of Argentina and Chile showing the occupation of Patagonia by the national states (figure N° 17). The indigenous Tehuelches and Pampas conducted economic exchange with the colonies, consisting of ostrich feathers and skins, mostly guanaco, puma and ostrich, which were exchanged for snuff and brandy (like almost all the chroniclers, Musters highlights the Indian penchant for alcohol and their constant state of intoxication). The Tehuelches *caciques* (local bosses) lived even in the settlements and were recognized by the Argentinians and the Chilean state, from which they received animals and goods in exchange for their sovereignty in name of the postcolonial state. This shows the style of political relations with the national state, and how some of the Tehuelches acted as an Argentinian agent in the political gatherings with other indigenous tribes. In contrast with the other descriptions mentioned in the works of other explorers, Musters was focused on identifying differences between the tribes, and on showing the political and ecological complexity of the indigenous peoples.

The discourse of Patagonian “otherness” was deployed in the territorialisation of the postcolonial state, for which to liberate the land was to exterminate the indigenous population. Musters was conscious of the collapse of the indigenous way of life, for example, he mentioned the extermination campaign of the Argentinean General Rozas against the indigenous in defense of the Rio Negro in 1832, which was previously recorded by Darwin. In addition to the direct elimination by the Argentinian and the Chilean states, the other causes of indigenous extermination could have been alcoholism and a lack of resilience in the face of illness: “...*The number of pure Tehuelches, in both north and south Patagonia, does not exceed 1,500 men, women and children*” (Musters, 1911: 281; *my translation*).

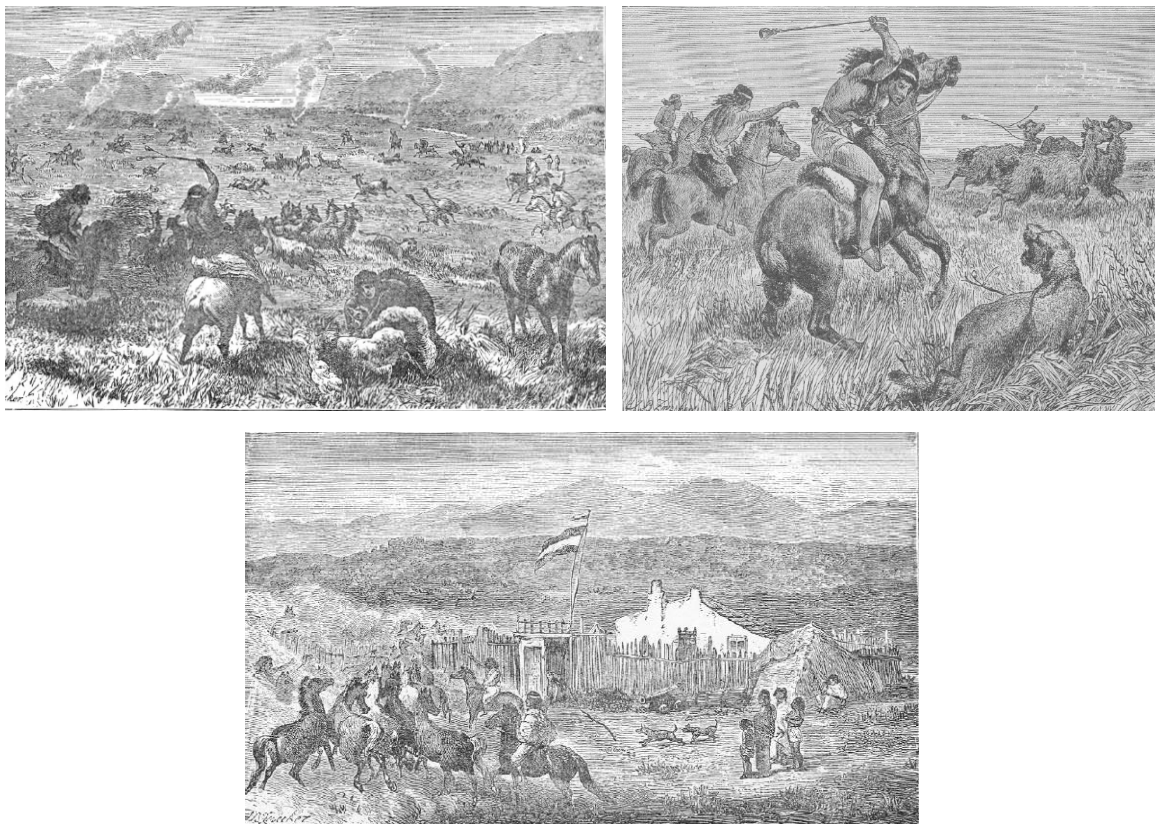
During the 19th century Patagonian otherness was reasserted by the postcolonial state as a still unknown empty space, far from civilization, populated by indigenous people who were considered enemies of the state. This discourse identified the indigenous people as an obstacle for the configuration of the national map (the southern boundaries of Chile and Argentina were not clear), and for the implementation of economic activities. Through this discourse, which legitimated the use of force against the indigenous groups and reinforced the idea of a territory “full but empty”, Chile and Argentina disagreed about the boundaries. A new discursive process started when Patagonia was reconstructed as a cultural artefact of nationalism and economic growth.

FIGURE N° 16. REPRESENTATIONS OF PATAGONIA BY BYRON



Source: Byron (1769). Left, the indigenous people receive the British on the coast of West Patagonia. It is possible to identify the boats, the horses in the back of the picture, and people dressing in animal skins. Right, Byron shows a clock to a tall Patagonian woman and her children.

FIGURE N° 17. REPRESENTATIONS OF PATAGONIA BY MUSTERS



Source: Musters (1911). Above, Tehuelches hunting on horseback using bolas to hunt guanacos, pumas and ostriches in the pampas. Below, the colony of Santa Cruz populated by Argentinians and indigenous people, with its little fort and the Argentinean flag.

4.2. “Damn Patagonia” (*Patagonia Maldita*)

In contrast to the southern region of Chile, known as Magallanes, Western Patagonia remained unknown. Without names, knowledge and maps, the discourse of soldiers, priests and explorers was *Western Patagonia is empty, because it is the wilderness*. Perhaps because of a misunderstanding from the English into Spanish translation, the idea of wilderness was translated as “desert”, which in the case of Chile means “dryness”:

“In this way, the terrains of West Patagonia “are dry as well as without resources”, according to the Argentinian diplomatic Mister Frías; “territory which for the most part does not have any value, and it could be a problem in the future”, according to the former Chilean minister Mister Ibañez; “sterile deserts”, according to the former business official Mister Lira, and “damn lands”, according to the illustrious naturalist Darwin. That is the opinion of Chilean and Argentinian diplomats and the scientist view of the counties in dispute” (Editorial of *El Ferrocarril*, December 24th, 1878; my translation)

It is through this discursive formation that the boundary conflict between Chile and Argentina took shape. The conflict was mainly based on the lack of a specific delimitation between the emerging countries that were part of the Spanish Crown. The Latin American nations used the legal principle *Uti Possidetis Juris* ("as possessed, according to right- possesses") which in the case of Chile was the recognition of the "Chilean territory" of King Carlos III, which corresponded to "Captaincy General of Chile" or “Kingdom of Chile”. Between 1860 and 1878 the Frenchman Antoine de Tounens Orélie proclaimed himself as "*King of Araucania and Patagonia*" by claiming the territory from the south of the Bío Bío River in Chile and the Río Negro in Argentina, bordering the Pacific and the Atlantic to the Straits of Magellan. This situation made it urgent to the postcolonial state of Chile and Argentina to define their occupation of Patagonia.

After 1856 Chile and Argentina agreed to discuss the boundaries of the Spanish Crown, which created a war of maps between the two countries. The situation had to be agreed in the treaty of 1881 signed between both nations in the context of *The War of the Pacific* between Chile against Peru and Bolivia. For this situation, Chile negotiated with Argentina 1,000,000 km² of land in Patagonia. Along with the treaty of 1881, the Additional Protocol and Explanatory of 1893 were needed, the Agreement of 1896, and the Border Demarcation of 1899 (Martinic, 2005).

To establish the southern boundary, both countries deployed a series of discourses on Patagonia, based on inherited historical rights over the territory. The discussion about Patagonia attracts great interest on both sides of the Andes, where patriotic and scientific discourses were constructed to legitimize the right of Chile and Argentina to occupy those territories. One of the most important discourses to avoid the war between Chile and Argentina was constructed by the Chilean politician Benjamin Vicuña-Mackenna:

“I feel the keenest joy, knowing that two sister republics and friends will not fight like dogs for the bare bone called “Patagonia”” (Vicuña Mackenna, 1880: 36; my translation).

“(Patagonia)... as created by God is an ugly wasteland that is barren and cursed, whose geological formation is different and inferior even to that of the Pampas, and whose geographical boundaries lie beyond the Rio Negro, the true limit of Patagonia, called by Chileans or Argentinians”... “horrible flank, defenseless and indefensible that is rightly called Patagonia, and its arid steppes”... “It would be said perhaps that God, the author of so many wonders in this portion of the universe, known as the New World, and of which the poets have declared to be the forgotten site of the Garden of Eden, that he wanted to create in Patagonia, by contrast, only an immense and horrible cemetery” (Vicuña-Mackenna, speech to the Congress, 12 de Diciembre de 1878; my translation).

The origin of this discourse is strongly related to the exploration of Darwin, and his comment about Patagonia’s landscape, taken as the truth about the southern lands of Latin America:

“Patagonia, poor as she is in some respects, can however boast of a greater stock of small rodents” (Darwin, 2001: 198).

“Because it must be borne in mind here the fact established by Darwin, that the only thing that is rich and flourishing in Patagonia is its rodents” (Vicuña-Mackenna, speech to the Congress, 12th December of 1878; my translation)

In this conflictive context, both countries agreed upon the mediation of the United Kingdom through Queen Victoria in 1896. In 1898 diplomats presented in London studies about the right to possess Patagonia for each country. In the Research Commissions the representation of Chile was in the hands of the German geographer Hans Steffen and the Chilean geographer Alejandro Bertrand, while from Argentina representation was in the hands of the expert Francisco Moreno. The discussion was about how Patagonia could be divided: the

Argentinean position was in terms of the “high peaks”, meanwhile the Chilean position was centered around the continental division of the water. After the Commission’s exploration of Patagonia, the final report and decision was signed by Edward VII, King of England in 1902, known as the *laudo arbitral* (arbitration award). In this way, the no man’s land of Patagonia was portrayed as an integral part of the national territories of Chile and Argentina, divided, delimited, framed, and physically and symbolically integrated into the sovereignty of the postcolonial states.

In the case of Chile, conservative historians such as Francisco Encina and Jaime Eyzaguirre constructed a nationalist interpretation of the boundary dispute. They were charged with writing an “official history of Chile” or a “truth”, which was later included in textbooks whose content was controlled by the government through the Ministry of Education, sponsored by the Military Geographical Institute. In this textbook, Frías Valenzuela says: *“From the time of Pedro de Valdivia and his immediate successors, the kingdom of Chile was confined to the north by the Atacama desert, to the west by the Pacific, to the east by a line from north to south at 100 leagues from the ocean (including all of currently Argentinian Patagonia) and to the south by the South Pole (including the Chilean Antarctic)”* (Frías Valenzuela, 1957: 180; my translation).

This nationalist discourse presents Patagonia as a legitimate Chilean territory taken by Argentina. According to Lacoste (2002) this message is repeated in all the Chilean textbooks, creating mistrust and a sense of frustration transferred from the elite to Chilean society. Thus, the history of Chile and Argentina during the twentieth century is the history of the boundaries of Patagonia. Within this context the incidents at “Laguna del Desierto” on November 6th of 1965 occurred when the Chilean policeman Lt. Hernán Merino was killed by Argentinian police. The daily “El Mercurio” (the most important right-wing newspaper in Chile) reported the events as follows: *“Chile wanted to protect its sovereignty in the area and sent an advance of five Carabineros (Chilean police) who were received by a troop of more than 90 Argentine gendarmes”* (El Mercurio, 2005). The portion of land defended by the Chilean police has officially belonged to Argentina since 1994, following a ruling by the International Court of The Hague, which reopened the debate during the Chilean transition to democracy and with the role of the armed forces still under the orders of Pinochet. Thus, the discourse of the dispossession of Patagonia is well known for the Chilean population, reinforced by the army and the education system. For many Chileans, Lt. Hernán Merino is the hero of the 20th century, and he is remembered and honoured in public acts.

This nationalist discourse about Patagonia has to be understood as a core component of the HidroAysén conflict. All the claims about Patagonia, pro-dam and the anti-dam, are based on the nationalist assumption: Patagonia is an integral part of Chile, the Chilean state exercises sovereignty in Patagonia; its inhabitants (European pioneers), environments and natural resources are Chileans. Thus, the dominant discourses are in conflict because the construction of dams in Patagonia shares the same diagnosis: to produce or to conserve (understood as to safeguard for the future) Patagonia is to exercise within society the territorialisation of the postcolonial state and to broaden through more knowledge, territorial practices and the discourses of development of the domain of Chilean society over Patagonia.

4.3. The Pioneers and the “Discovery” of Western Patagonia

The territorialisation of the postcolonial state is linked to the application of capitalism in Patagonia. This territory was rapidly transformed for the production of cattle and whaling, according to the geographical distribution of production. In this sense, I understand the circulation process as a specific way of ordering the land and life according to these economic activities, and the use of Patagonian otherness to legitimise these material and symbolic transformations. The main actor in the capitalist expansion of Patagonia was the *pioneer*, which is represented in the figure of the Portuguese José Nogueira, the German-Jewish Mauricio Braun, who played a very important role in the normalization of Aysén years later, the Spaniard José Menéndez, the so called “The King of Patagonia”, and the Norwegian Adolfo Andersen.

The pioneer is a male immigrant who came from Europe to Punta Arenas (capital of the territory called Magallanes and by extension of Chilean Patagonia), without a high level of education and only a small amount of capital. However, the pioneer used his intelligence to take advantage of the adverse condition of Patagonia and generate profit. The pioneer transformed himself and the territory he supported in the discourse of progress and civilization: “... *Nogueira and the incipient development of Magallanes were mutually conditioned in those transcendent moments, so that somewhere, or in large measure, the fate of one entails the other* (Martinic, 1986: 48; *my translation*). The pioneers played a central role in the historic development of the region from their function as settlers, capitalists and planners. They arrived at Punta Arenas in the 1870s as part of the strategy promoted by the Chilean Government to colonise Patagonia with European farmers through the offer of land, tools, animals and free education for their children. After a few years they were the owners of

companies and large portions of land in Patagonia and Tierra del Fuego. Braun & Blanchard was one of the most important companies in Patagonia and a “*true driver of the expansion and economic development that would determine the advancement of its civilization*” (Martinic, 2001: 99; *my translation*)

To support this expansionist project, industrial activities were introduced in Magallanes, such as the salting of meat, leather tanning and cheese making. During late 1880s, wire fencing began to appear to delimit fields and pastures. In 1884 the auction of land grants was intensified, associated with foreign capital and the ruling elite. For example José Nogueira won a grant of 1,009,000 hectares in Tierra del Fuego in 1890. Patagonia and Tierra del Fuego were thus following the dynamics of domestic private capital allied to transnational capital, with the direct support of the Chilean government. But more importantly, from this process the *Selknam* or *Onas* indigenous groups were dispossessed of their land, sent to *reductions* and repelled by private police operating on the edge of any law, in a true process of discipline and land cleaning characterised by *laissez-faire*. This situation led to the genocide of the indigenous groups who were hunted as part of the everyday activities of the cattle and mining companies, because of the competition that they represented over the control of land and resources.

“Either we leave the territory in the hands of savages, or we bring civilization! The Chilean Government gave us large expanses of land, knowing that the land was in indigenous hands” (Mauricio Braun; in Martinic, 2001: 140-141; *my translation*)

The colonisation brought by the cattle companies was understood as an efficient strategy of settlement and prosperity in relation to the international context of high prices for wool. By the year 1906, 92% of regional exports were livestock commodities, and of that 75.2% was wool (Nicholls, 2010: 42). But the process of colonization was not only on land. At sea, the policy of *laissez-faire* was manifest in the whaling companies which implied the exploration and the extension of the sovereignty of Chile along the coast of Patagonia and the Antarctic Peninsula. The key role in this occupation process was played by the Norwegian pioneer, sailor and businessman Adolfo Andersen through his association with other pioneers and members of the Magellan oligopoly such as Mauricio Braun and José Menéndez (Martinic, 2001). The *Whaling Company of Magallanes*, which operated from 1906 to 1916, produced oil for fuel and lubricants to supply mainly European markets (Nicholls, 2010; Quiroz & De la Fuente, 2012; Quiroz, 2011). According to the International Whaling Commission, between

1905 and 1914 904 whales in Magallanes were hunted by the *Whaling Company of Magallanes* and 2,043 in the Antarctic, producing 97,400 barrels of oil (Quiroz, 2011: 51).

As a result of this process of economic expansion, the incipient Magallanes bourgeoisie based their lifestyle on the British Victorian era, with commodities and products which came from Europe, and social activities which emulated the European way of life. They copied the fashions which were shown on their travels to Valparaiso, Buenos Aires, Montevideo and the main cities of Europe. Menéndez along with Braun and others pioneers, founded the freemasonry, social clubs, the equestrian club, the first private electric company in 1898, the telephone service and the bank of Punta Arenas (Martinic, 2001). Thus, the process of occupation and circulation reinvented the land and the sea in Patagonia, constructing subjects, fabricating a culture, building an infrastructure, normalizing the territory through land grants and haciendas, claiming sovereignty using flags in the towns and on ships, expanding the ocean's control to the south, and opening and connecting southern Patagonia with the wider world.

The discourse of *damn Patagonia* (Vicuña Mackenna, 1880) was destabilized to occupy Western Patagonia, through a new discursive construction as a result of the explorations ordered by the Chilean state. These Chilean explorations were started by Benjamin Muñoz in 1848, followed by Francisco Hudson in 1856, Enrique Simpson in 1870-1874, Bertrand and Fischer in 1896-1897, and Hans Steffen between 1892 and 1902 (Martinic, 2005). The discourses about Western Patagonia were constructed as an integral part of the Patagonia saga to conquer, liberate, occupy and put land and resources into circulation. This change in the discourse and the way of representing Western Patagonia was part of the attempt by Chile to exercise sovereignty, and to populate and to integrate it onto maps. This new Patagonia was related more to the concept of “wilderness” than “desert”, as I show in the next quotation:

“The picture we watched was for us both new and beautiful. Resembling a huge vegetable valley, we saw the forests that dominate almost the entire length” (Bertrand, 1886: 25; *my translation*).

“Surely there are few landscapes in Chile that can be compared in beauty” (Steffen, 1910: 288; *my translation*).

“...the region which Darwin in 1833, Barros Arana in 1871 and Vicuña McKenna until 1880 declared uninhabitable and sterile, being heralded and proudly lamed for its determined

disciples, and transmitted, like concentric waves to thousands of people” (Larraín, 1930: 4-5; my translation).

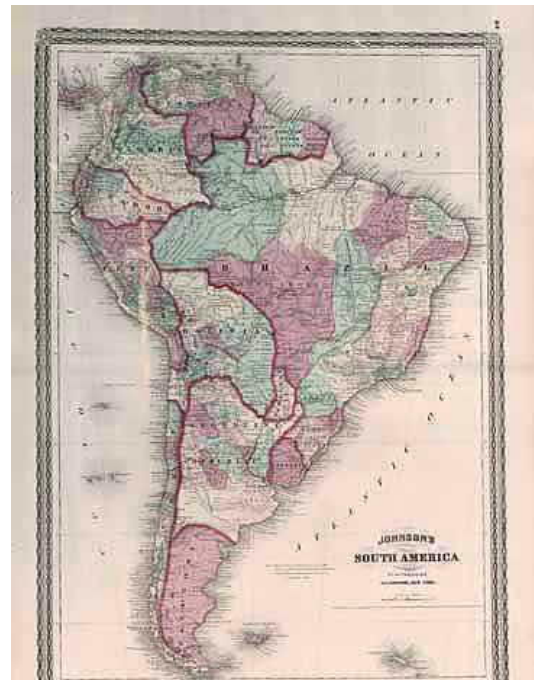
This new Patagonia was integrated into knowledge, circulated in maps, and defined in centres of calculation such as London, Buenos Aires and Santiago (see figure N° 18). As with the other topics explored in this chapter, Patagonia was undergoing a process of transformation through occupation and circulation even in those parts that were still unknown by the Chilean state. Proof of this is found in Hans Steffen’s account. He explored the coast of Western Patagonia between 1892 and 1902, finding the abandoned infrastructure of an ice company, gold extraction, sea lion hunting, whale hunting, and forestry exploitation. All of this appeared as an iconography of private business, located in a territory without any control of the state, consequently in the margins of the law, and disputing resources for the indigenous people who were still surviving in those parts (for example, on the coast of Western Patagonia the Alacalufes were living). The geosymbols of this process were the ice fields and glaciers, which legitimized old stories about Patagonia created by the Spanish, Jesuits and British.

Through this process of exploration it is possible to see how the Baker River was constructed (the place where HidroAysén could build two dams). According to Steffen, in the explorations of the Jesuit José García (1766-1677), the river appeared under the name *Meiser Estuary*. In 1888 Adolfo Rodríguez identified a “large estuary” in the area, and Ramón Serrano in an exploration a couple of years before called it *Calen Estuary* because of the name of an indigenous tribe which were living there. This estuary was presented by the Argentinean Francisco Merino in the *Geographical Journal* of 1899 and at the conference of the *Royal Geographical Society* in May of the same year, with the name of *Las Heras River* as a product of his exploration in 1897. However, the same river was presented by Hans Steffen in the journal *Petermanns Mitteilungen* in March of 1899, and then published in the *Royal Geographical Society* in June of the same year, with the name of *Baker River* (figure N° 19), in honour of Sir Thomas Baker, commander of the British Navy in South America during Charles Darwin's voyage in HMS *Beagle*. In this way, the Baker River entered into the geography of the world, and started to be called by this name by the sailors and then recognized by the arbitration award (Steffen, 1910: 340). In the same exploration, Hambleton, and Count Von der Schulenburg discovered the *Pascua River* (figure n° 18), called by that name because it was discovered on December 25th, at Christmas, which in Chile is called Pascua (Steffen, 1910: 349).

FIGURE N°18. PATAGONIA IN THE 19th CENTURY



James Gilbert (1840). This map shows Patagonia separated from Chile and Argentina



Johnson (1862). This map shows the west of Patagonia as part of the Colonial Territory of Magallanes as belonging to Chile



Drioux & Leroy (1872). This map shows Western of Patagonia as part of Chile

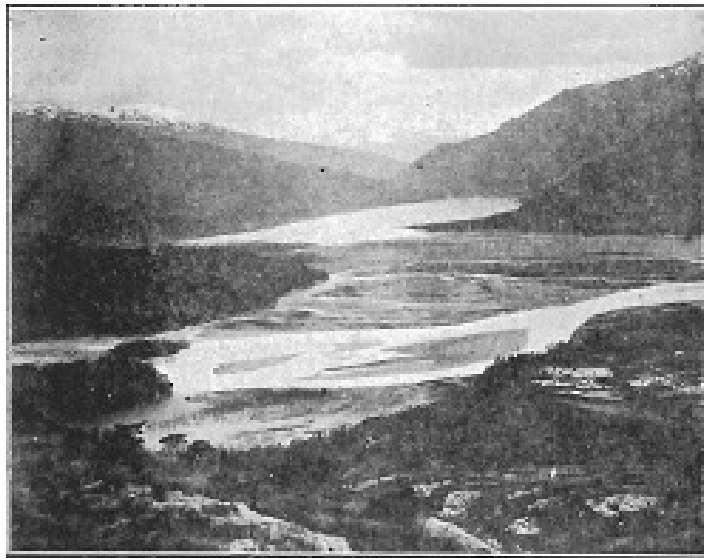


Standard World Atlas (1890). Showing the boundaries between Chile and Argentina

FIGURE N° 19. IMAGES OF HANS STEFFEN'S EXPLORATIONS (1910)



Baker River



Pascua River

4.5. Territorialisations

4.5.1. The Market

Until the beginning of the twentieth century Western Patagonia was occupied by a nomadic indigenous tribe which lived in the coastal channels, valleys and pampas. However, Patagonia was already integrated into the circulation of capital: on the coast there was an incipient forestry activity to cut cypress for the telegraph and railways, the hunting of sea lions and whales to produce oil for use as a lubricant for machines and fuel and skin for the clothing industry. These activities created a *laissez-faire* situation, predatory and destructive which affected the cultural ecology of the indigenous groups, who were repelled and saw their number reduced. The process of transformation of Aysén brought major environmental degradation because thousands of hectares of forest were burnt to create soil. This environmental damage still persists in a large part of Aysén as a testimony to the dramatic transformation induced by the state and capitalist firms. As part of this process, in the mid 19th century the first village in North West Patagonia was founded on the Guaitecas Archipelago, and called *Melinka* (“my little dear” in Russian), by the German entrepreneur Phillip Westhoff, in order to hunt sea lions and whales, and thereby giving work to almost three thousand people (Martinic, 2005). The first settlement inland in the North of Western Patagonia was created in 1888 and called *Palena*, which failed because of its complete lack of connection to the coast (Ibañez, 1973: 298; Martinic, 2005: 115).

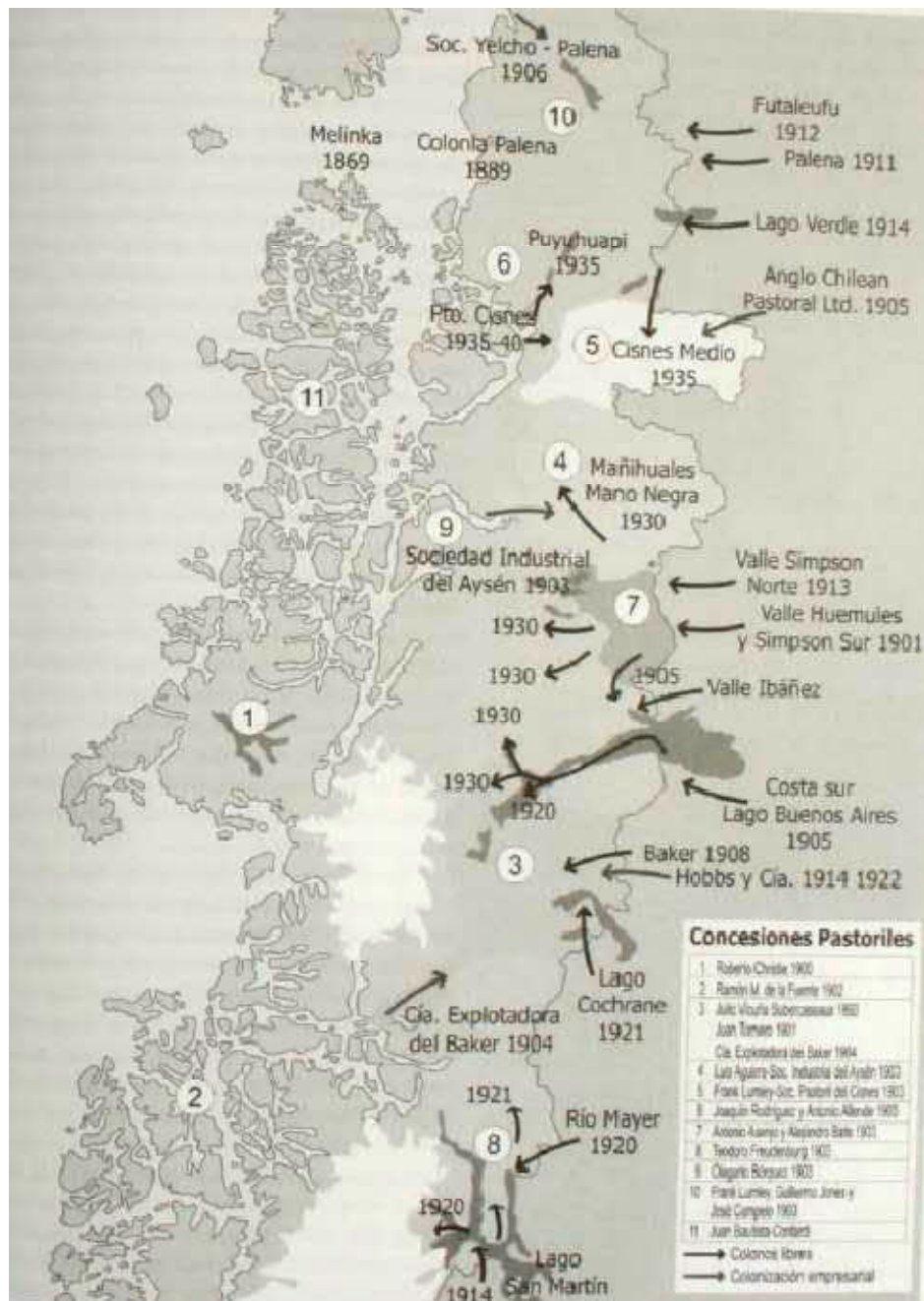
Before the *arbitration award* of 1902, Western Patagonia remained practically without significant change regarding the occupation and implementation of production. The first iconography of the territorialisation of the Chilean state was as a product of the Boundaries Commission: unreliable routes in the interior, shelters, bridges, and some trials for vegetables cultivation were built in the Aysén basin and Baker River, discovered later by private explorations. But after the arbitration award, the Chilean state “discovered” that it had 10,000,000 uninhabited hectares. Consequently in 1903 the Chilean Government leased land to private companies (with stronger political and economical connections) for twenty years in the territories located in Western Patagonia, from the Estuary of Reloconví in the north to the Pascua River in the south. The Chilean Government mandated these private companies to settle *Saxon* families of farmers to initiate the colonization, to establish maritime connections with Puerto Montt and Punta Arenas, to exploit the forest and sell wood to the state at low cost, and to create and maintain the infrastructure in the occupying territory. Twelve private parties, among them *The Anglo-Chilean Pastoral Company* later called *the Livestock Society*

of *Río Cisnes*, the *Industrial Society of Aysén* and the *Exploitation Company of the Baker*, awarded Western Patagonia, generating “livestock fever” between 1904 and 1905 (Ibáñez, 1973, Ivanoff, 1996; Martinic, 2005).

Following the colonisation strategy used in Magallanes, cattle companies were used by the state to occupy the land of Western Patagonia. They were conceived in terms of the *rational mastery of land*: private companies associated with foreign capital functioned as a source of information for the geography of places. The cattle companies were a force of transformation of the land through the burning of thousands and thousands of hectares of forest, the construction of roads, infrastructure to develop productive activities, and to show the current occupation with “Chilean” settlers against any Argentinean pretension over the land. The cattle companies exercised power over the territory: they monopolized the land, the rivers, and the border crossing and they blocked the Pacific. Thus, the new map of Western Patagonia was populated by the material and symbolic presence of the cattle companies as the extension of the sovereignty of the Chilean state.

The colonisation of the centre and the south of Western Patagonia was the result of the expansion of the pioneering Magallanic oligopoly (Braun, Menendez, Hobbs and Blanchard). In 1902, Mauricio Braun instigated exploration studies for soil, hydrography, the quality of fields, forage and forestry resources, and accessibility and potential for traffic with the aim of rearing sheep, cows and horses. The report said that the Aysén basin contained around 250,000 hectares for the productive use of “*hard and dry land, very mellow and with plenty of water. There is no better land in Patagonia like this*” (Aguirre en Martinic, 2005: 125; *my translation*). Thus, *The Industrial Society of the Aysén* was created in 1903. Meanwhile in the Baker zone 70,000 hectares were identified as ready to be worked by *The Exploitation Company of the Baker*, established in 1904 (Figure 20).

FIGURE N° 20. OCCUPATION OF AYSÉN BY CATTLE COMPANIES BETWEEN 1900-1940



Source: Martinc, 2005.

In the same way in which Magellan gave the name to Patagonia, and Darwin constructed the Patagonian cultural landscape, Braun was the first who started to describe Western Patagonia as the *Region of the Aysén* (Martinic, 2005: 130), thereby individualizing the territory and capturing its characteristics in terms of the *Industrial Society of the Aysén*: "...I plan to organize the Company to exploit these virgin areas, providing a new source of wealth for the country, but involving a fight against all odds" (Mauricio Braun, 1903; in Martinic, 2005: 129; my translation).

The occupation and circulation of Aysén began thus, focused on the production of cattle and the creation of grazing land, the exploitation of wood for buildings, telegraph and railways. The territorial, social and cultural normalization of Patagonia followed a "British Style". *The Industrial Society of the Aysén* and *The Exploitation Company of the Baker*, as well as the cattle companies of Magallanes and Argentinean Patagonia, were British enclaves. To occupy Patagonia a racial discourse was constructed about settlers: "*strong people are required, stout in body and mind, who could manage at all costs....by all accounts, proper pioneers*" (Martinic, 2005: 131; my translation), to penetrate the "*luxury forest of Aysén*" (Martinic, 2005: 133). This discourse was made public policy when the Chilean state mandated the cattle companies to settle "*Saxons race*" people who possessed the knowledge for the production of cattle, the educational level, and the industriousness and honesty (Martinic, 2005: 140).

These British enclaves were true feudal estates which existed until the middle of the twentieth century. They had a hierarchical masculine social order, led by the "administrator", who lived in the main house far from the rest of the people. The administrator was the link between the General Administration (located in Punta Arenas or Valparaíso), the administrations of other companies and the Chilean government. His relationship was only with the "sub-administrator" who was the visible face of the company and the person in charge of the "overseers", "cadets" and support staff (engineers, accountants, agronomists, and veterinarians). The overseers had different skills and they got the position based on his merit. Their task was to control the everyday work of the people, and he was able to live with his family and had some rights to the goods of the company such as fuel. For their part, the cadets were young men who were following a career to become administrators. At the bottom of the hierarchy were the Chilean workers, mainly from Chiloé, who were woodcutters, carpenters, stokers, dynamite experts, blacksmiths, mechanics, shepherds, woodmen and craftsmen (Martinic 2005, 2001).

The territorial planning of the agro-exploitation model had at its centre the “Estancia” (Hacienda), oriented exclusively towards cattle production, and hierarchical in its buildings and facilities which were both productive and habitable. Here was located the main house, occupied by the administration, sub-administration, supervisors and employees with family, workers' canteens, kitchens, and pavilions for accommodation of permanent and temporary staff, and other facilities such as the animals' pool, the stables, barns, kennels, pens and paddocks. Also, distributed by the land grants were located autonomous centres of life and work, connected by a basic network of roads and supplied by the headquarters using carts and later trucks. The architectural style of this infrastructure and the iconography of this process was adapted from Northern Europe to suit the conditions of Patagonia and Tierra del Fuego, and today this has become part of the historical heritage and cultural landscape of Patagonia.

The language was English, commonly used and required, and the population was overwhelmingly British male, from England, Scotland, Ireland, the Falklands, New Zealand, Australia and South Africa, and their Chilean and Argentinian descendants. All of them practiced British cultural habits.

"Here, amid the wildest solitude, surrounded by virgin forest and mountains, was a bit of old England, with its language, food and customs" (Carl Skottsberg, Swedish botanist: in Martinic, 2005: 137; my translation).

"To come back from Simpson Valley to the Aysén land grant is to move from an Argentinian environment to a British one" (Engineer José Pomar in 1920, in Martinic, 2005: 138; my translation).

"At first glance, he looked like an English country gentleman in "casual" attire rather than a man of the wild regions" (Description of Lucas Bridges by the Swiss traveller Aimé F. Tschiffely in 1935, in Martinic, 2005: 201; my translation).

The construction of the British cultural landscape occurred because the United Kingdom was the only buyer of wool, which increased its price during the First World War from 9 to 29 pence per pound of wool. These “British colonies” in Chilean and Argentinian Patagonia were not affected by the dispute regarding the boundaries of the postcolonial states. For example, the *Industrial Society of the Aysén* extended its domain on both sides of the boundary with almost 40,000 hectares in Argentina. Similarly, *Hobbs and Co* possessed “Estancia Posadas”

in Argentina near to the Baker area. The *Industrial Society of Aysén*, associated with the Magallanic pioneer Mauricio Braun, occupied the central valleys of the region connecting by land Argentina to the east with the Pacific Ocean to the west. To understand the magnitude of the material transformation: in 1905 this private company had 11,400 sheep, 4,439 cows and 999 horses; by 1913 the increment was 107,098 sheep, 7,776 cows and 2,233 horses, while the land became full of fences, wires, buildings and sheds for livestock production, occupying an extension of 430 kilometres. In 1913, an industrial infrastructure in the River Aysén was created to process livestock, and was later transformed into the settlement of Port Aysén, capital of the *Industrial Society* and by extension, of the region (Ibañez, 1973).

Meanwhile the administration office was set up in the sector known as Coihaique, which became the centre of trade and communications, through the installation of the telephone and telegraph office. In 1920 the *Industrial Society* was a powerful force of normalization; it had 138,282 sheep, an infrastructure, housing and transportation, and the monopoly of the roads and land, leaving this part as a feudal estate with only a private authority (Martinic, 2005: 143). The Chilean surveyor José Pomar declared: “(The Industrial Society) *has been a factor of order and progress for the whole region*” (Pomar, 1923: 45; *my translation*), “*they should be proud of having introduced civilization to these far regions*” (Pomar, 1923: 125; *my translation*).

But the *Industrial Society* faced problems because it exceeded the original 100,000 hectares of land grant given by the state in 1904, reaching 826,000 hectares in 1919. At the same time, they did not settle one hundred *Saxon* families, as was stipulated in the contract, but only the British administrator of the Estancia and some other people in key positions. Because the *Society* was part of the Chilean oligarchy, they could negotiate this situation, creating a new compromise to settle two hundred Chilean families in ten years, which was not fulfilled. The only settlement and colonisation occurred with its own workers in 1926: “*as a territorial colonisation agency its actions were a complete failure*” (Martinic, 2005: 197; *my translation*).

Meanwhile, in the north of the region *The Anglo-Chilean Pastoral Company* occupied the valley of Cisnes River in 1904. Its work, according to Martinic, was irrelevant for the region, because without an easy connection with the Pacific, this *Company* was oriented to Argentina, with an estimated production of 50,000 sheep and 2,000 cows (Martinic, 2005: 157). Because this *Company* did not fulfil any of the agreements with the Chilean Government, but only the

location of infrastructure for the exploitation of the land, its concession expired in 1917. Since 1919, the land grant of the *Company* was leased to John Dun, former administrator of the *Industrial Society of the Aysén*, who created *The Livestock Company of Río Cisnes*.

In the south of the region the *Exploitation Company of the Baker* occupied the Valley of the Chabuco, where the Baker River is found, and installed the Hacienda in the Colonia Valley, and a port in a sector called Calen or Bajo Pisagua (today's *Caleta Tortel*). Between 1905 and 1906, William Norris entered on foot from Argentina with more than 5,000 sheep to be raised and processed 300,000 hectares. By 1907, the *Company* had 10,000 sheep, 5,000 cows, hundreds of horses and an enormous amount of wood (Martinic, 2005: 148-151). Thus, the territory which is today in dispute because of the HidroAysén project, suffered a massive disturbance with the introduction of thousands of animals in a few months. The disciplining of the Baker was not only over the land but also over the workers. In the winter of 1906 the *Exploitation Company of the Baker* did not evacuate one hundred and fifty forestry workers who were at the mouth of the Baker River. Between sixty and eighty workers died of famine or were accidentally poisoned. The story was spread as a testimony to the precarious labour conditions of the settlers. At the end of this tragedy, there were 187 people living on the land of *Exploitation Company of the Baker* (Martinic, 2005: 151). Meanwhile in other parts of the region the census of 1907 credited this zone with a population of 436 inhabitants, located in the village of Aysén (298 people) and in the south shore of the Buenos Aires Lake (138 people) (Ibáñez, 1973: 299).

After this incident, the territory of the Baker fell into an uncontrolled situation when the investors decided to declare bankruptcy for the company over the high cost and risk that the colonisation of such isolated lands entailed. In 1908 the entire infrastructure built by the company, the settlers and thousands of cattle was abandoned. Since 1910, bandits conducted raids to catch the animals, and many of the people who were settled by the companies left the zone, while others, such as the Swedish landowner Von Flack, created a private police force to punish those who stole livestock. The presence of famine in the Baker and this new "far west" situation spread further, creating the image of a region on the edge of the law, a wild, savage and unoccupied land (Martinic, 2005: 152).

But in 1914, Ernesto Hobbs in association with *Braun & Blanchard* and *Bridges & Reynolds*, created the *Estancia Posadas* in Argentina near to the boundaries with Chile and the Baker. *Hobbs & Co.* was established there, with 400,000 hectares of land. The new Estancia was

located in the Chacabuco Valley, because of its central position between Argentina and the Pacific, and its administrator was Lucas Bridges. This was the second attempt to colonize the Baker, and Lucas Bridges (called “The Lord of the Baker” by Ivanoff, 2004) played a key role in building an infrastructure to navigate the river, with bridges, roads, sheds, houses, and fences, and the amazing living stone path *El Saltón*. This process of circulation took place via direct contact with Great Britain; the wool press was imported from London and the ships and boats from Glasgow and Rochester. Simultaneously, the police were funded to protect company owned land against the spontaneous settlers and indigenous coastal tribes such as the Alacalufes. However, the cost of connecting the *Company* to the Pacific was too high and consequently they started to use Argentina’s roads to connect the Baker with Aysen.

In 1928 the regional government of Magallanes ordered a census which was the first real attempt to exercise power by the state in the region, with engineers to measure the land, a Captain of the Chilean Army to register the men available for military service, and a police Lieutenant to register births, deaths and marriages. The state therefore took control over the population and its production. The results were 317 people living in the *Company* and free settlers. *Hobbs & Co.* possessed 76,000 sheep, 150 cows, 1,112 horses and 215 donkeys; meanwhile the free settlers owned 9,335 sheep, 3,888 cows, 1920 horses and 1,445 goats (Martinic, 2005: 205).

In the mid 20th century the territorialisation of mining activities in the Basin of Buenos Aires Lake was instigated. Mining activities included the extraction of tin, lead, zinc, silver and gold by the private *Mining Company of Aysen* (bought by the State in 1963, and transformed into the *Mining Enterprise of Aysen*), which founded the towns of *Puerto Cristal* and *Puerto Sánchez* in 1945, supported by the *State Corporation of Production Promotion* (in Spanish CORFO). The mining business incentivized the navigation of the lake, and promoted the colonization of the centre-south of the region. As was the case with the cattle companies, the mining camps were feudal estates, from where the centre-south part of Aysén was transformed, for the exportation of 800 tons of minerals and over U.S. \$ 200,000 a month (Ivanoff, 2007: 82).

In the camp there were offices, company stores, health service, a school built in 1951, a police station built in 1953, a radio station, a landing field for the company aircraft, cattle farms with about 2,000 sheep, canteens that served as cinemas, and soccer and basketball courts. The camp contained 330 workers and 470 people, and in contrast with the rest of the region, the

houses had electricity, water and a bathroom. The growth in mining activity and cattle production was the incentive for the development of the lakeside towns of *Chile Chico* and *Puerto Ibáñez*, which increased the population and the capacity of ports, hotels, restaurants and stores. Only in 1957 did the mining business open the road from Puerto Ibáñez to Coyhaique, to create a connection to the Pacific Ocean by Puerto Chacabuco. Thus, the commodities produced in the centre-south of the region did not have to be transported via Argentina any longer.

“When the path was opened and the first trucks full of minerals arrived in Coyhaique it was an historical moment, because it was no longer necessary to depend on the fluctuating relationship with Argentina. After more than a week of travel on, the 1st of September 1957, a caravan of trucks ...arrived in Coyhaique where numerous groups of people were waiting for them...with flags, music and full of joy, because that event in itself constituted a clear demonstration of sovereignty” (Ivanoff, 2007: 137; my translation).

FIGURE N° 21. THE CATTLE COMPANIES: THE INDUSTRIAL SOCIETY OF AYSÉN, BAKER EXPLOITER COMPANY, AND CISNES CATTLE SOCIETY



Source: The Industrial Society of Aysén, memoriachilena.cl



Source: Above, Estancia Baker; Below, Estancia Cisnes (Martinic, 2005)

4.5.2. *Spontaneous territorialisation*

The territorialisation of the postcolonial state not only instigated capitalism, but also the arrival of free settlers into the region. This could be understood as a process of counter-territorialisation because these settlers did not have any association with the cattle companies and, in many cases, they disputed the land and the opportunity to live in Aysén. This attempt at colonisation is known as *spontaneous* settlement (Ibañez, 1973; Martinic, 2005; Ivanoff, 2007). The process of settlement implies the burning of thousands and thousands of hectares of forest to create productive soil. This environmental degradation was also promoted by the state through colonisation laws and monetary incentives. After a hundred years, some of the ecosystems seem to exist in a natural state, which constitutes the discourse of the pristine. However, to support this discourse is to deny the dramatic process of Patagonia's environmental and social transformation.

The genealogy of Chilean migration to Patagonia has to take into account the context of war against the Mapuche led by the Chilean state (1880-1883), in which hundreds of thousands of hectares of land were occupied by the Chilean army. The indigenous population was killed, and the survivors were transferred to *Indian towns* ("*reducciones indígenas*"). Later on, the land was given to European settlers according to racist discourses about the inferiority of the indigenous people and the *mestizos*. This process started in 1845 when the President of Chile, General Manuel Bulnes, created the first law of colonization with the aim of populating Northern Patagonia with European immigrants, mainly Germans. From 1846 to 1880, 4,322 immigrants arrived in the south and were incorporated into the country as Chilean citizens.

In this context of displacement of the native inhabitants in the South of Chile, emigration to Argentina was the logical option for thousands of people. However, as has been mentioned in all the literature about the population of Aysén, the boundary dispute between Chile and Argentina made it difficult for them to settle down. The creation of Chilean Patagonia through the arbitration award of 1902 made it possible to return to Chile from Argentina through valleys and along rivers, resulting in spontaneous colonisation by Mapuche and Chileans. This situation meant a clash of land ownership between the cattle companies and the new settlers (Ibañez, 1973; Martinic, 2005; Ivanoff, 2002; Ivanoff, 2007).

For example, when Mauricio Braun ordered the exploration for the *Exploitation Company of Baker* in 1902, evidence of previous colonisations was found, and the place was named *La*

Colonia (The Colony). At the same time, other buildings and sheep were found presumably from a colonisation attempt from Chiloé. In the case of the Mapuche-Huilliche indigenous people, they settled in Simpson's upper valley at the beginning of 1900. But in 1908 they were displaced and forced to emigrate again, settling later in the Ibañez Valley where thirty two families were counted (Pomar, 1923). From there, they populated the banks of the Buenos Aires Lake, in today's Bahia Murta, Puerto Sánchez, Puerto Cristal and Mallín Grande (Ivanoff, 2007): "*Only in a place like Aysén, could the Huilliches find a place to develop their life with dignity and without suffering persecution*" (Ivanoff, 2007: 130; *my translation*)

From these processes of territorialisation and counter-territorialisation two dominant discourses were created about colonization and land ownership: *large-scale ownership*, symptomatic of private capital, and characterised by being Chilean (even if they were British feudal estates they were populated by workers from Chiloé), patriotic, well-connected, associated with Santiago, Valparaíso, Puerto Montt and Punta Arenas, urban, ordered, traditional, both men and women, and able to mobilize manpower; and *small-scale ownership*, referring to men or families who came from Argentina, characterised by having been repatriated, rural, anarchic, poor, and masculine and with Argentinean traditions.

"*The Events of the Buenos Aires Lake*" or "*the War of Chile Chico*" was the most important clash between these two forms of territorialisation. During confrontations with Chilean police, thirty eight settlers were killed, and the newspapers in Santiago put the incidents at the centre of the discussion about the colonization of Western Patagonia in Santiago and Valparaíso. As a direct result of this, the Chilean state created a new policy over land in this part of Patagonia, recognising the existence of small properties. The census of 1920 was only carried out in the accessible areas of the Simpson and Buenos Aires valleys, and it resulted in 1,660 inhabitants, of whom 1,066 were men, most of them from Chiloé. There was no information about the north and the south of the region, which for those years had experienced spontaneous colonization from Argentina (Ibañez, 1973).

Chileans, people from Chiloé and the Mapuche-Huilliche indigenous people, started to colonise the centre and southern part of Aysén. For example, in 1918 in Chile Chico there were more than two hundred people with 70,000 animals (Ivanoff, 2007). But the stage of colonisation was more advanced in the late 1920's and early 1930's, with the introduction of boats: "*This boat (called "Andes") was the most valuable tool for colonisation along all the banks that surrounded the lake*" (Ivanoff, 2007: 25; *my translation*). The boats enable people

from the boundaries with Argentina to be transported to the most isolated parts of Western Patagonia, and at the same time, facilitated the incipient exchange between the settlers and the new towns and villages.

All the towns on the banks of the Buenos Aires Lake, with the exception of *Puerto Cristal* and *Puerto Sánchez*, were the direct result of spontaneous colonisation (figures N° 21 and N° 22). This counter-territorialisation was a way of realisation of the state power, because the people grew up surrounded by a school, built by the settlers themselves on a piece of land that was donated by one of the settlers. This is how *Chile Chico*, *Puerto Ibáñez*, *Bahía Murta*, *Puerto Tranquilo*, *Puerto Guadal* and *Mallín Grande* were established. This very act of the foundation of towns with a school represented the advance of civilisation and a powerful symbol for self-discipline in the absence of the state. The school became the iconography for Chile in Western Patagonia, and it was reinforced with the Chilean flag and later by the presence of the police. Further on, this process of counter-territorialisation was legitimized by the Civil Register, the most important tool for proving early settlement for Chileans, the effective occupation of land and the distribution of the population in the territory (Martinic, 2005). Thus, in contrast with the “Patagonian” created by the capitalist pioneers, a “new Patagonian” was created from below, as a result of the mixture between Chilean, Mapuche-Huilliche and people from Chiloé, arising from the spontaneous settlement and from the former workers of the cattle companies. Since the 1920s, when the engineers commanded for the state went to analyse the situation of the cattle companies and the conflict with the settlers, it has been possible to confirm that Aysén region, without any support from the public sector, was populated for Chilean inhabitants who demanded the presence of the state to support its new citizens and their villages. This discourse has been an integral part of the *Social Movement of Aysén* (2012), and also of the social movement of Magallanes (2011) and Chiloé (2013), demonstrating that the territorialisation of the Chilean state is still in progress and that the inhabitants of Patagonia have developed a strong governmentality.

"All these people in early colonisation had to struggle against nature, isolation, poverty, a lack of market for their products and only their tenacious will allowed them to succeed" ... "In some ways, it could be said that these people were the first and foremost surveyors of Aysén, as they sought the route first by horse and then using wagons. With time these footprints became roads "... the settlement of the Aysén region was not without great ordeals and sacrifices. The whole region was difficult to conquer. The men and women who populated it were people with too much character" (Ivanoff, 2007: 104-105; my translation).

Since the 1980s, new spontaneous nomadic fishers have arrived from the central coast of Chile, following fish shoals and banks of shellfish. They were installed in *Seno Gala*, *Isla Toro* and *Puerto Gaviota*. The state has taken a role only since 1994, through housing policies and the installation of public services (Martinic, 2005). The human occupation of Patagonia is still in progress

FIGURE N° 22. SPONTANEOUS SETTLERS IN BAKER (1930s)



Source: www.memoriachilena.cl

FIGURE N° 23. GERMAN SETTLERS IN PUYUHUAPI (1930s)



Source: <http://patagoniaaustralchile.blogspot.co.uk/>

4.5.3. “Chileanisation”

In the history of Chile, the occupation of territory had been part of an official exercise: takeovers, acts of foundation or installation of military force (Matinic, 2005: 257). In all of them, discourses and iconography were deployed on the territory through the installation of institutions, public works, law, and everything necessary to ensure the state control of the population and land. This process of integrating territory into Chile is known as “Chileanisation”, and was applied in the former Peruvian and Bolivian territories conquered through the *Pacific War*, as well as on Easter Island and in the Mapuche territory. This Chileanisation is the territorialisation of the postcolonial state through material and symbolic appropriation, and the disciplining and normalisation of the space based in nationalist discourse. In the case of Patagonia, the territorialisation of the postcolonial state began by using cattle companies to colonise, populate and control a vast territory which required an increasing amount of resources that the Chilean state was not willing to spend, because the national, economical and political interests were concentrated in the mining provinces of the north.

“Aysén did not come to constitute for the state a special aspect of its politics, but was another province to administer. Poor and distant, without influences to press on its behalf” (Ibáñez, 1973: 368; my translation).

The government commissions that were surveying Patagonia made this situation obvious, and claimed an active role for the state:

“I wrote these notes and memories of geographical, historical and statistical interest to contribute to the knowledge and Chileanisation of this abandoned part of Chile” (Pomar, 1923: 11; my translation).

“Either the state designates the land currently leased to the national colonisation and takes the responsibility for building roads, for navigating the river, for acquiring the necessary fleet and the necessary staff for its management and maintenance, or it auctions it again, demanding that the tenant opens and maintains the roads, navigates the river, purchases the fleet, etc” (Oportus, 1928: 19-20; my translation).

The pioneer Mauricio Braun was the first who called Western Patagonia the *Region of Aysén*. According to local historian Mario Gonzales the name Aysén came from the indigenous language and it means “inland”. In an interview with Gonzales in 2006, he told me that the

name Aysén could also come from the *Hispanisation* of “*Ice End*”, in reference to the ice fields located in the southern section of the current region. The process of occupation by the state started in Western Patagonia, through the foundation of the *Territory of Aysén* by Colonel Carlos Ibañez del Campo, President of Chile in 1927-28 (Ibañez, 1973; Martinic, 2005). The capital of this new territory was *Puerto Aysén* (the office of the *Industrial Society of Aysén*), and the region was divided into four communes: Yelcho, Aysén, Buenos Aires Lake and Baker. The *Province of Aysén* was created in 1929, and its boundaries were modified again in 1936, 1961 and 1974. The institutionalisation of Aysén was completed during 1932, when the region was integrated into the electoral system (Salvador Allende was senator for Llanquihue, Chiloé, Aysén and Magallanes between 1944 to 1953).

Thus “...through bureaucracy, the state located itself in a marginal zone of the territory” (Ibañez, 1973: 333). After almost thirty years of private colonisation, the new discourse was “everything has to be built from scratch”, emptying the construction of the large concession of land and replacing it with small concessions. Colonisation was based on public employees coming from the centre of Chile, among them engineers, agronomists, and policemen, and with the presence of the army. To support this process in Chile, but especially in Patagonia, a Minister of Austral Property was created in 1929, together with a set of laws including: the commission of land, the farmer’s colonisation fund, the colonisation agency, the occupation of Aysén through public employees, the free concession up to 600 hectares for Chileans; and farmer colonization for the unemployed. The aim of these laws was a rational colonisation according to the characteristics of the region, to secure the behaviour of the settlers according to Chileans manners, because they were under the cultural influence of Argentina, and to protect the sovereignty.

A first objective of the state was the creation of towns and the official recognition of places with spontaneous settlements. A second objective was the reorganization of land grants given by the state to the cattle companies and their incorporation into a new way of managing the land promoting colonisation through the creation of public services (schools, hospitals, police offices, courts, banks, and with a property registration administrator). A third objective was investment in public works to break the isolation between the region and the rest of the country. Thus, the town *Baquedano* (then known as *Coyhaique*) was founded in 1929 near to the central office of the *Industrial Society of Aysén*. In the same year *Futaleufu* and *Alto Palena* were created in the north of the region where more than five hundred settlers were living. In the same year *Chile Chico* and probably *Puerto Ibañez* were created in Buenos

Aires Lake and *Las Latas* in the Chacabuco Valley (known then as *Cochrane*). To overcome the isolation, radio-stations and telegraph were installed in these new villages. Meanwhile, in 1936 the *Farellón* (the cliff) was opened the most important iconography of this early process of occupation in Aysén, which enable the connection between Puerto Aysén and Coyhaique. In 1946, the National Airline connected Aysén with Santiago in six hours.

According to the census, in 1930 the region of Aysén had 8,700 people in total: 6,835 were living in the district of Puerto Aysén (with Coyhaique and Balmaceda), 1,211 people were living in Buenos Aires Lake, and just 569 were living in the Baker district (Ibañez, 1973). By 1940 the population of the region was 17,014 people, and in 1952 it was 26,262 (Instituto Nacional de Estadísticas). The explorations of the German geographer August Grosse (from 1933 to 1951) through the Aysén Region, found spontaneous settlements in many places such as *Chaitén* (founded in 1938), *Puerto Cárdenas*, *Puyuhuapi* (populated by Germans settlers since 1935), *Islas Huichas* (Chilean fishermen settlers), *Raúl Marín Balmaceda* (founded in 1940), *Cochrane* (founded in 1941), *Río Mayer*, *Murta* and *Mallín Grande* (populated by Belgian settlers who arrived in 1949) and *Puerto Cisnes* (founded in 1952). This growth in population and villages exceeded the capacity of the state to assist with direct influence over quality of life for the people who were living in the Region. In the face of this the Chilean Army took the responsibility for *Bajo Pisagua* in 1951 (today's *Caleta Tortel* is a place that could be affected with the construction of dams in the Baker River), with an emergency centre, a radio station and a local store. Another attempt of colonisation by the state took place in the Aysén Fjord through Chilean young professionals during the 1950s but it failed because of the isolation.

At the same time, the territorialisation of the state occurred through the deployment of the Military Forces in Aysén. The Navy was established in Puerto Aysén in 1923 through a radio-station and then with maritime governance, and with headquarters in Puerto Cisnes and Chile Chico, installing lighthouses and markers for interior and exterior navigation. The Air Force supported the development of geographical knowledge, through the installation of meteorological stations, runways, radios, and flights across the Region. The Army's influence was present in Coyhaique in 1939 and in 1942 the Exploration Group of the Fifth Division of the Army was inaugurated, later organized as the Regiment of Infantry N° 14 "Aysén" in 1956. Along with the territorialisation of the state, the Catholic Church could finally enter the region to evangelize, as part of the traditional institutions engaged in colonisation in South America. Thus, the Parish Church of Aysén was founded in 1934, supported by the *Industrial*

Society of Aysén. The Congregation “*De los Siervos de María*” of Italian priests arrived in 1937 and the next year the first catholic school was founded.

However, by the mid 20th century there were rural areas in absolute isolation whose settlers were autarkic. They supplemented their need for food and clothing with their own sheep and cows. But at the same time, they developed their own *Chileanisation* of the land without any real contact with the Chilean authorities, developing a practice of “belonging” to Chile which is an integral part of the current discourses of the social and environmental movements in Patagonia. For example, many of the settlers were born in Argentina during the migration process, so they did not have any experience of being Chilean. However they disciplined themselves through the memory of the stories told by their ancestors about a country that they did not know. Without the state and without the church, in many places the Chilean flag (made by themselves) and the schools (directed by them as well) were the only symbols of Chile. From these social practices a discourses of autarchy, self-maintenance, and independence have been constructed, which at the same time are based on nationalism, entrepreneurship and masculinity: Patagonians are Chileans because “they want” to be Chileans. From these discourses the Patagonians felt that the Chilean state is in debt to them, because they “fly the flag” of Chile in a territory still in conflict because of its boundaries.

These processes of territorialisation and counter-territorialisation generated a discursive division about Patagonia, separated between an “old one”, which is traditional, rural, masculine and oriented towards cattle production, and a “new one”, being modern and urban, concentrating on trade and new opportunities. Politically, when the state strengthened the Coyhaique-Puerto Aysén axis, to access the Pacific, it turned its back on the rest of the region. Thus, the contents of Patagonian discourses were emptied by the state, to be filled with another discourse and practice; the geopolitical: Aysén is different from the rest of Patagonia and is populated by *Ayseninians* (Ibañez, 1973).

4.5.4. Intervention of the state

At the beginning of the 1940s, Latin American countries started a process of increasing participation by the state in economic affairs, determining the patterns of growth and creation and distribution of wealth. The basis of this system was state-led industrialisation, the heavy regulation of the economy and protectionism against international competition, with the aim of breaking economic dependence through the implementation of the *Import Substitution*

Industrialization or the *ISI model* (see Chapter 5). Furthermore, the Chilean state started to take an active role in the economy and social development of the country, through the creation of key industries made possible by the *Corporation of Production Promotion* (CORFO). Thus, during the next four decades, the intervention of the state was the paradigm for development, with a special focus on the regions.

In this context, the territorialisation of the state in Patagonia also took place through the creation of a network of communication and transportation. Thousands of kilometres of roads were constructed, twenty three airfields were built in different parts of the Region, telegraph networks, post offices, telephone, hospitals and the services of drinking water and sewerage services were installed in Coyhaique, Puerto Aysén and Chile Chico, and these were extended to other populated centres. By 1964, thirty schools were open in the Region, attended by almost five thousand students, and public secondary schools were built in Coyhaique and Chile Chico. The same happened with the electricity under the administration of the State National Company of Electricity (ENDESA), and with the improvement of navigation through the State Maritime Company (Martinic, 2005).

Part of the process of territorialisation by the state was through the *chileanisation* of names given to geographical features: in 1956 the San Martin Lake in the south of the region started to be called *O'Higgins Lake* (the main independence hero) and in 1959 a new delimitation of the Region changed the name of the Buenos Aires Lake to *General Carrera* (independence hero). This required the construction of new maps showing the sovereignty of Chile over this part of Patagonia. Moreover the state exercised its territorialization through the creation of new settlements such as *Villa Mañihuales* (1962), *Caleta Andrade*, *La Tapera*, *Villa Ortega*, *Villa O'Higgins* and *Villa Cerro Castillo* (all of them founded in 1966), *La Junta* and *Caleta Tortel* (1967), *Villa Los Torreones* (1968), *Villa Ñirehuao* (1969) and *Villa Frei* (1970). To support this process the *Agricultural Trading Company* (Empresa de Comercio Agrícola, ECA) was created to expedite the supply of goods, and as a buyer of local production.

During the Government of Eduardo Frei, of the Christian Democracy Party, in 1961 the "*Rural and Urban Plan of Social Development of the Province of Aysén*" was developed (Martinic, 2005). Since 1962, *CORFO* has been supporting cattle production by small properties, through its plans for soil improvement, the acquisition of machinery, the introduction of new breeds of animals and training, and the control of forest fires to produce grazing lands. At the same time, national parks and protected areas were created, recognizing

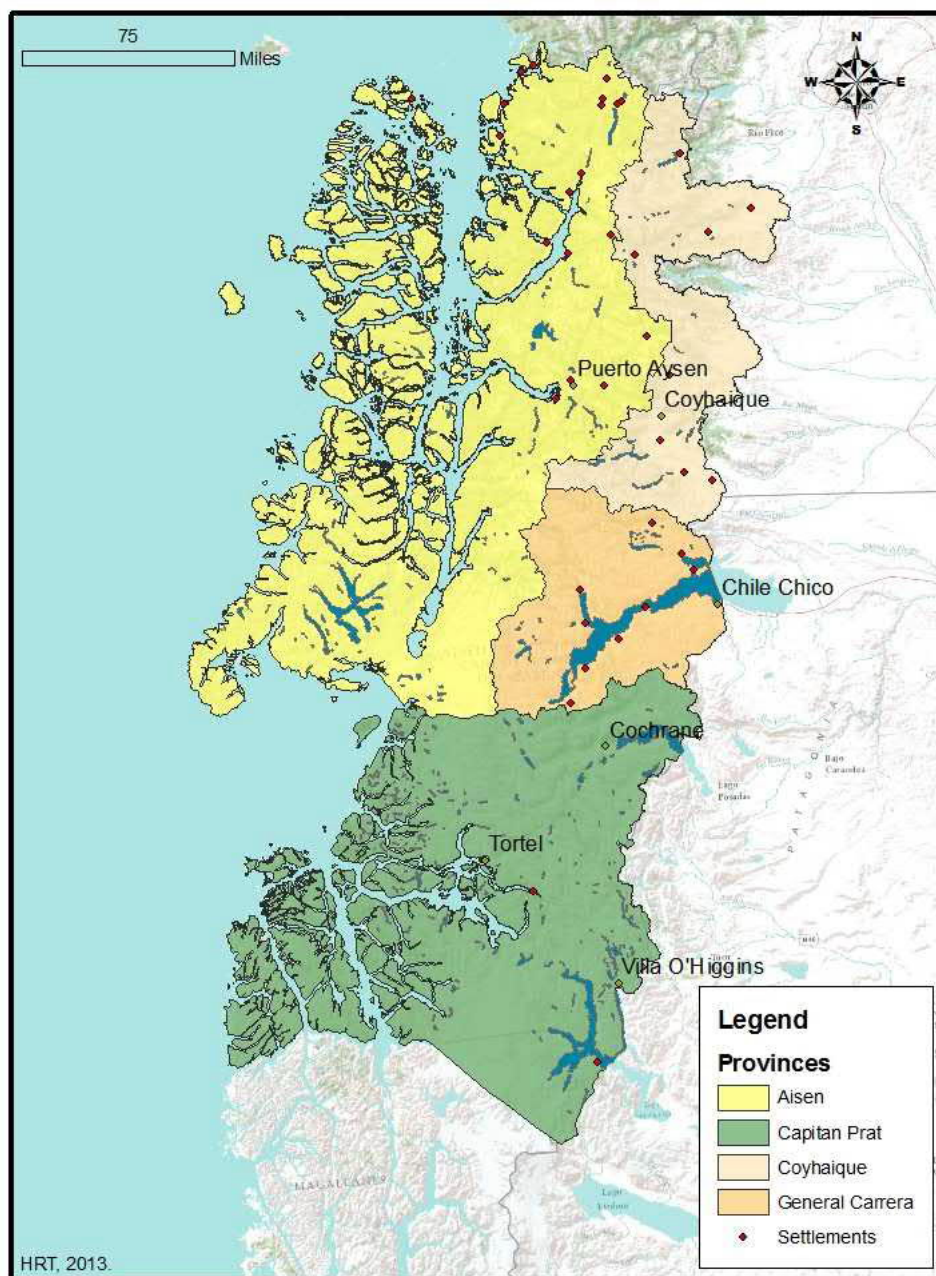
the forest as part of the natural patrimony of the Region. The Agrarian Reform promoted recognition of property rights for the consolidation of the regional population, recognition of the dispersed structure of settlements to secure Chilean sovereignty, and to stimulate local economic activities (Villagran, *et al*, 1997). To reinforce this process, the state installed an abattoir and refrigeration plant in Puerto Chacabuco, and a dairy plant in Coyhaique. As a result of Agrarian Reform the leasing of cattle companies was completed to stimulate the colonization process: *The Industrial Society of Aysén* was turned into the private *Aysén Farmer and Dairy Cooperative* in 1962, and the *Estancia Valle Chacabuco* (formerly *Hobbs & Co*) was bought by the state and transformed into the *General Carrera Cattle Cooperative* in 1965 (finally sold by the Chilean State to the Belgian Francisco de Smet in 1980, and then sold to the American conservationist and deep ecologist Douglas Tompkins in 2000). After almost seventy years, that was the end of the cattle companies in Aysén which had socially and environmentally transformed Patagonia, and created a cultural landscape which had been naturalised as a integral part of Patagonian identity, everyday culture and productivity. From these elements part of the rejection to HidroAysén can be understood: Patagonia produces cattle, not energy; and it is inhabited by settlers, Chilean peasants who live in harmony with their land. As I have shown, this discourse embodied environmental and social contradictions because there is nothing natural or harmonious about the construction of Patagonia.

After the military coup of 1973, Chile was drastically transformed, especially its political, economic and administrative management. In 1974, the *Administrative Reform Commission* (CONARA) divided the country into thirteen regions. The main idea was “*a deep change in the structures, functions and attitudes of the former administrations*” (CONARA, 1982²:1), through the restitution of the apolitical character of public administration and the creation of a decentralized, rationalized, modern and functional administrative apparatus, inspired by the values of individual freedom and social peace (CONARA, 1975). The philosophy of the reform consisted of the subsidiary role of the state supporting private investment, the decentralisation of state power, the implantation of social market economy, and the reinforcement of internal and external national security. In this way, the *Province of Aysén* was transformed into the *11th Region of Aysén* and Coyhaique was designated as its capital. At the same time, the new region was renamed and was divided into three provinces characterised by nationalist geopolitical military discourse; the name of the region today is *Region of Aysén of the General Carlos Ibañez del Campo*; its provinces are Aysén (capital

² Published without date, can be found at www.subdere.gov.cl.

Puerto Aysén), General Carrera (capital Chile Chico), and Captain Prat (capital Cochrane) (CONARA, 1975; see figure N° 24).

FIGURE N° 24. REGION OF AYSÉN OF THE GENERAL CARLOS IBAÑEZ DEL CAMPO



Source: My own.

The authoritarian regime started the construction of the Austral Road known as “Captain General Augusto Pinochet”. This is one of the most important exercises of the power of the state in Aysén and over Patagonia’s environment. Between 1976 and 2003 more than two thousand kilometres of road were built from Puerto Montt to Villa O’Higgins, and almost fifty soldiers died in its construction (Martinic, 2005: 406). At the same time, the military dictatorship created a *directed colonisation* in areas like *Melimoyu* (1983) and *Pitipalena* and *Guaitecas* (1989), with the aim of settling the population for its economic development. Just a few settlers succeeded in occupying it because of the large size of the land grants (116, 123 hectares for 79 families) and the lack of capital and training (Romero, 1986). A second case of directed colonization was in the villages of *Puerto Raúl Marín Balmaceda* and *Melinka* where the colonisation process benefit from the assistance of the democratic governments of Aylwin and Frei-Ruiz Tagle.

The military dictatorship applied a strict neoliberal program, which has meant large territorial transformation for the extraction of resources. These transformations have been incorporated into specific discourses about nature, to the support of the political and economic projects of the elite, mainly in the energy sector (Chapter 5). These reforms are creating a new geography of Patagonia using and confronting old discourses in order to commodify nature and politicize cultural landscapes (Chapter 6).

Summary

In this Chapter I have analysed the historical construction of the Aysén Region, where the dams for the HidroAysén project could be located. I have argued that Aysén can be understood as a direct result of the process of territorialisation by the Chilean state and the implementation of capitalism. My main argument in this Chapter was to prove that there is *nothing natural about Patagonia*, as it emerges as a consequence of state-led discourses and practices about political and economic expansion, environmental degradation and social inequalities. All of these discourses have created the palimpsest that is Patagonia today: they are also the basis of the HidroAysén conflict, and the social conflicts of the last three years in Magallanes (2011), Aysén (2012) and Chiloé (2013).

Chilean Patagonia was fabricated by the international cattle companies, which dramatically transformed the land and the people, creating a colonial British landscape, which is today

identified as the cultural landscape of Patagonia. Most of the Patagonia's native population was exterminated; the survivors suffered the dramatic interruption to their cultural ecology mainly by cattle production, but also by whaling companies, mining exploration and forestry exploitation. Hundreds of thousands of hectares of forest were burned to open Patagonia and create terrain for livestock, generating incalculable environmental damage. Thus, there is no pristine Patagonia, but instead a history of territorialisations and dispossessions. With the complicity of the state, workers, settlers and landscapes were exploited by private companies associated with transnational capital. According to Martinic, by the 1930s: *"...All this structure, which was thought solid and permanent, started to crack. Its main pillars were the submission of the workers, the good prices that generated substantial profits and the tolerance applied by the large state system (latifundio), and it all began to weaken"* (Martinic, 2001: 334; *my translation*).

Out of this process of social and environmental degradation arose the environmentalist discourse about Patagonia. On the one hand, the naturalisation of Patagonia's cultural landscape in terms of the meadows, fences, sheep and peasants seems to be the original Patagonia in contrast to dams, flooded lands and electric pylons. On the other hand, recognition of the violent process of occupation and circulation focused on the burnt forest. Thus, the landscapes of Patagonia in which colonisation failed has been transformed into a discursive construction that reinforces an understanding of what happens when the environment is exploited without regulations. Rejection of HidroAysén contents the historical degradation of Patagonia, and the protection of the environment in Patagonia is the extension of the domain of the state over those material spaces that were never fully integrated into Chile.

The emergence of spontaneous settlements served as a process of counter-territorialisation, and forced the state to recognise that Western Patagonia was in conflict because of the coexistence of two different spatial practices: large and small property, which represented two different political and ecological projects that still survive today. Furthermore, the small property imposed itself as the successful strategy for colonisation to gain the support of the state. This counter-territorialisation could be the basis for understanding the current local claims over HidroAysén which could be assimilated by the cattle companies (see Chapter 6). The discourse of the settler, and the re-appropriation of the discourse of the pioneer, are keys to understand Patagonian identity: self-discipline, autarchy, effort, daily struggle against

nature, patriotism and masculinity. It is possible to observe the prevalence of this discourse in the social movements of Aysén, Magallanes and Chiloé.

State intervention improved the living conditions of the people of Aysén, through the creation of a network of communication and transportation, public services such as schools and health services, and the assistance of the police, army, air force and navy in the most isolated places. But more than representing the needs of the settlers, the *Chileanisation* of land and people by the state was part of a geopolitical strategy to show the current occupation of Patagonia, securing the land with patriotic names, flags and infrastructure in every place that could be claimed by Argentina. Western Patagonia became a space to display power from outside as an exercise of formal powers: the military power of Carlos Ibañez del Campo and Augusto Pinochet, the power to attempt a political centre-left social system, the great and transformative power of capitalism to produce environments and landscapes, and the cultural power of the elites to construct and deconstruct the space according to their interests. Thus, Patagonia as a territory became a reserve of resources: cattle, minerals, forest, fish, electricity, conservation, sovereignty, heroism, and mythology. All of these become part of the vast Patagonian territory and were transformed into a flexible discursive ecological formation.

However, there is another Patagonia as a discursive ecological formation which has emerged “from below”, constructed by the “new Patagonians”: These Patagonians have been *fabricated* according to the interests of the market, mainly from Chiloé, and have re-appropriated the territory into their everyday day life for the last hundred years. They also include those who created themselves as a product of *spontaneous settlement*, who came from the Centre-South of Chile through Argentina bringing the culture of the *pampas* and the *gaucho*; those decedents of the Mapuche-Huilliche who escaped from the war with the state and re-appropriated the land according to their ancestral culture; and those new settlers who came from the north coast following fishing activities and who brought their own cultural elements. Other important settlers are those who were part of the territorialisation of the Chilean state such as public officials and military and police staff. All of them considered themselves as Patagonians, and took part in the recent demonstrations demanding improvements to their quality of life and their sovereign right to exploit their environment (especially in the case of fishing), identified as an integral part of a large Patagonia with Magallanes and Argentina, and as a regional discursive formation. What these locals understand by Patagonia, its environment or conflicts is marginalised in the debate about the construction of dams in Patagonia.

Given this reconstruction of the history of Patagonia I will now expose how the two dominant discourses about the possibility of its environmental transformation have been created. A key element is reproduction of Patagonia and Patagonians as “other” by the state, market, environmentalist movements and society in general, without self-determination. In material terms, Western Patagonia still remains isolated today, its population is concentrated in Coyhaique and Puerto Aysén, with a dispersed population enjoying only a precarious public service in their little villages. Aysén is not integrated into the global dynamic of Chile and has stronger relations with Argentinian Patagonia. Aysén still has no real influence in Santiago, the administration centre of the country. Moreover, even today the strategy of the state remains the same as it was in the time of the cattle companies: to attract private investment to conquer, control, produce and populate Patagonia. That is the situation of the salmon industry, and tourism for example, and it could also be the situation of the hydropower projects.

Therefore, the HidroAysén conflict represents two historical tensions about Patagonia: the first one comes from the role of elites and the construction of a flexible discursive ecological formation which recognises Patagonia as an extension of Chile, and its natural resources as an integral part of national political economy. The second tension is related to the historically marginalised people of Patagonia, who are not necessarily fighting against HidroAysén, but against their systematic exclusion from the rest of the country, the lack of public and private investment in goods and services, and the ability of foreign interests to represent and transform their environments.

FIGURE N° 25. THE BALMACEDA SCHOOL (1929)



Source: Martinic, 2005

FIGURE N° 26. COYHAIQUE (1940s)



Source: Martinic, 2005

FIGURE N° 27. THE AUSTRAL ROAD



Source: My own

FIGURE N° 28. CALETA TORTEL



Source: My own



FIGURE N° 29. VILLA O'HIGGINS



Source: My own



Chapter 5. The Territorialisation of *Hydropower* in Patagonia

Neoliberal Patagonia

The landscapes of Patagonia are part of a new transformation led by transnational capital. The old cattle and mining landscapes have been reconstructed into a new discourse: “*Asyén Reserve of Life*” (“Aysén Reserva de Vida”). The aim of that public planning policy was to create a commercial image around the natural conditions of Aysén, transforming Patagonia in a synonym of clean, untouchable and pristine space. Thus, the lands used by the former cattle companies located in the Baker Basin were transformed into a space of conservation and tourism of special interest: the *Hacienda Chacabuco* (the former Hobbs & Co.) is now the property of the American millionaire and deep-ecologists Douglas Tompkins and his wife Kristine, who are also the owners of the *Pumalín* and *Corcovado* natural parks (the second one donated at a later date to the Chilean State) in the north of the region, as well as hundreds of thousands of hectares of land in Argentina and Tierra del Fuego. In the case of the former mining camps, *Puerto Cristal* remains abandoned; meanwhile, *Puerto Sánchez* (still with inhabitants) was bought by the Walker family, related to the Christian Democratic Party. It is probably that both camps will be used for private tourism projects according to the development strategy of “*Asyén reserve of life*.”

If the capitalist strategy of the first period, narrated in Chapter 4, was the control over land (territory, people and the opening of routes between villages, cities and the Pacific), the neoliberal strategy has been the control of water for tourism (glacial, river and seawater), aquaculture (salmon production) and hydroelectricity (HidroAysén and Energía Austral).

Tourist activity has been growing rapidly during the last decades, focused on the tourism of special interests such as adventure (rafting, horseback riding, cycling, trekking, mountaineering and climbing) and recreational fisheries (conducted in private lodges). These activities have a seasonal foreign demand, with a dispersed supply of little added value, concentrated on tour operators located in Santiago and Coyhaique. These activities are characterized by “*low employment rates, low absorption capacity in the area, the small size of most companies, the low level of professionalism of a large part of human resources, uneven distribution of supply and variety*” (Regional Development Strategy, ILPES, 2009: 82; *my translation*). The income from the activity, according to ILPES, was US\$ 72 million, showing an increase of 46% in the period 2000-2007.

However, the most important transformation of Asyén in the last decades has been the production of salmon, to supply mainly the American and Japanese markets. The coastal landscapes of *Melinka*, *Puerto Cisnes* and *Puerto Chacabuco* have been dramatically produced and integrated into a “salmon cluster” with the neighbouring regions, converting Chile into the second producer of salmon in the world after Norway. The peak of activity was in 2006 with US\$ 2.207 million (Regional Agency of Productive Development, 2008). After this, production was affected by the ISA virus which forced the companies to restructure their production. By the year 2008, the fishing activity was 21.6% of the regional GDP, generating six thousand direct and three thousand indirect jobs (Ilpes, 2002). For 2012, it was expected that this industry could represent 40% of the national fish production (Regional Development Strategy, ILPES, 2009). This activity follows the same ecological historical patterns of the capitalist construction of Patagonia: “*With respect to the governance of regional cluster, it is important to mention that the Chilean salmon industry is having serious problems in terms of social validation. Prior to the difficult situation facing the industry, its practices had been questioned by*

labour sectors, environmentalists and politicians, which have been deepened in the current situation” (Regional Development Strategy, ILPES, 2009: 62).

The last territorial neoliberal transformation is the specialization of the region in hydroelectricity production. Two main projects are currently at the top of the discussion: *HidroAysén* (belongs to the transnational ENDESA/ENEL and the Chilean private company Colbún) and *Energía Austral* (belonging to the Australian company Origin Energy and Swiss Xstrata). Both projects are supported by a government discourse about the reinforcement of energy supply to support economic growth. They could add 2,750 MW (*HidroAysén*) and 1,000 MW (*Energía Austral*) to the *Interconnected Central System* which supplies Chile from Taltal to Chiloé, where more than 90% of the Chilean population is concentrated (*Asyén* has its own small electric system). Both projects could generate almost nine thousand jobs (a qualified labour force which will have to be brought from other regions), and both projects promise to improve the regional infrastructure, the main public services and connectivity. Thus, both promise a radical transformation of *Asyén* landscapes, with electric pylons, roads, ports and airports, the creation of artificial lakes, and the growth of the regional population led by transnational private companies. As in the past, Patagonia has been constructed as geography of resources.

Patagonia is a cultural artefact over which the power of the colonial and postcolonial state and the elites (economic, political and military) continues to be exercised. As a discursive ecological formation, Patagonia has been constructed -from the outside- as a subaltern “other” (Casini, 2007), a vast deserted and wild land (Falkner, 1774: Darwin, 2001). One part of Patagonia has been constructed as a territory under the control of the Chilean state (Bertrand, 1886; Steffen, 1910; Pomar, 1932; Oportus, 1928), a space “*empty but full*” (Bridge, 2001), that was ready for a transformation for the supply of commodities and the economic growth of oligopolies (Martinic, 2001, 2005) that transformed the land according to a specific cultural landscape. The human inhabitants of Patagonia were exterminated near to extinction and replaced by new subjects as the result of the expansion of capitalism. In the last one hundred years and in successive migrations from Europe, other parts of Chile, Chiloé and the Mapuche country of Araucanía, thousands of people have arrived creating dispersed settlements with particular cultures. These Patagonians have never had an influence on the Chilean order, strongly concentrated in Santiago (located almost 2,000 kilometres to the north). The subaltern position of Patagonia and Patagonians, and the discursive ecological formation of this territory are part of the “conditions of possibility” for the installation of large investment projects in Patagonia. During the forty years of neoliberalism, a group of actors have concentrated political, economic and institutional power and today they can expand themselves to places with natural resources. In my analysis, this place is Patagonia, which

meets the “natural”, historical and social conditions for facilitating the territorialisation of large investment projects.

This chapter is focused on understanding the territorialisation of *hydropower* in Patagonia, through the “conditions of possibility” created in neoliberalism for the construction of dams in that territory. I am going to expose how a discursive formation about dams has been created through the construction of political and economic conditions to produce large investment in hydroelectric power following a strict neoliberal frame, which allows the creation and consolidation of two privately owned hydroelectricity companies: ENDESA and Colbún. My argument is that these two electricity companies constitute a *hydropower*: a socio-ecological force legitimated by discourses about the central role of hydroelectricity in the development of Chile through the rights to use water by privately owned energy companies. These discourses have implied the transformation of the South of Chile and Patagonia, as an inexhaustible source of water to produce energy, which has meant the commodification of water, rivers and basins. This has given rise to the current productive transformation, with projects such as HidroAysén that reinforce and deepen the structure of power of Chilean society bequeathed by the military dictatorship.

In terms of the general picture about Patagonia, this *hydropower* has constructed its own version, recycled elements of the palimpsest in order to make sense with the neoliberal process. In this construction, Patagonia has been emptied of its historical contents; its settlers have been made invisible, and the population has been transformed into poor people which will improve their life because of the hydroelectric project.

In the following pages, I am going to reconstruct the history of hydropower in Chile in order to show the political and economic prioritization of hydroelectricity and the construction of social power founded on the ownership and use of water. This section of my work is located in a tradition of studies about water, power and society that can be traced from the work of scholars such as Steward and Wittfogel, revitalized by Worster (1982), Kaika (2005), Swyngedouw (2007), and Turpin (2008), among others.

5.1. A Genealogy of Neoliberal Hydropower in Chile

Electricity projects in Chile are facing growing social resistance and a constant intervention by the courts or “judicialisation” to solve controversies between citizens and private

companies. Several large investment projects for energy generation in Chile have been currently stopped. There include:

- The coal-fired power station of Barrancones, of the French transnational company GDF Suez (with an investment of US\$ 1,100 million, to produce 540 MW), located in the Coquimbo Region in the centre-north of Chile. This project had environmental approval, but because of the social pressure of environmentalists and local communities it was stopped in a private negotiation by the President of Chile, Sebastian Piñera.
- The coal-fired power station Castilla of the transnational MPX belonging to the Brazilian multimillionaire Eike Batista (with an investment of US\$ 4,500 million to produce 2,100 MW), located in the north and with environmental approval. This project was stopped at the end of August of 2012 by the Chilean Supreme Court. Castilla was paralyzed according to a claim presented by local communities because the environmental impact assessment did not consider the power station and the port as a unity, which had supposedly favoured its approval (Emol, 2012a).
- The wind power electricity project of the Chilean-Swedish company Ecopower (with an investment of US\$ 235 million, to produce 112 MW), located in Chiloé Island. This project also had environmental approval, but was stopped by the Supreme Court in March 2012, because of the opposition of environmentalists and local communities who argued that the project did not consult the Huilliche indigenous group, according to the Agreement N° 169 of ILO signed by Chile in 2008.
- The hydroelectric HidroAysén in Patagonia (with an investment of US\$ 7,000 million to produce 2,750 MW) had government environmental approval, which led to the rejection of environmentalist groups who presented a lawsuit for supposed irregularities and illegalities. In May of 2012, the Supreme Court approved the project, but recently it has been stopped by Colbún, the Chilean private company partner of ENDESA in HidroAysén, because of: *"the lack of a national policy that has broad consensus and guidelines given the energy matrix that the country needs"* (La Tercera, 2012).

In this context of growing rejection and paralysation of electricity projects (that amounts to 5,502 MW and an investment of US\$ 12,835 million), the electricity companies and the private sector in general are pressing the Chilean government for clear political signs to support these investments and the creation of a legal framework to facilitate the approval of

the projects. The reaction of the Chilean government has been slow: the main idea is the promotion of a new electric policy and the creation of a public “electric highway” to connect different projects in generation (which has not yet been officially presented). This measure has been interpreted by HidroAysén as an obstacle for its project because ENDESA controls the electric lines (Radio Santamaría, 2012); meanwhile environmentalist groups have interpreted the public electric highway as a “custom made dress” for HidroAysén (El Ciudadano, 2012).

But the situation is making visible the real dimensions of the electricity crisis in Chile. This “perfect storm” consists of drought, problems in gas supply from Argentina, the high price of oil, and the judicialization of electricity projects (Rudnick, CNN Chile, 2012). The solution at this moment, after thirty years of one of the most important neoliberal transformations in energy in the world, is the intervention of the state. Today the state is needed to solve the controversies between civil society, the electricity companies, environmental administration and justice administration; to recreate the conditions to support private investment in a climate of increasing social mobilisation; and to play a role in supporting the development of the electricity sector.

In this section I am going to analyze the process of construction of the current hydropower sector in Chile, from the neoliberal transformation of water and the electricity companies focusing on the formation of two different discourses on dams:

- The *foundational discourse* which supports privatisation and construction and the implementation of neoliberal institutions, mainly developed by economist scholars and business administrators in the Catholic University of Chile who studied in the United States (the so called Chicago boys). These scholars are linked with the right wing through *think-tanks* such as *Centre of Public Studies* and their book “*The Economic Transformation of Chile*” (Larraín & Vergara, 2001), and *Freedom and Development* with their book “*Private Solutions to Public Issues*” (Larroulet, 1991).
- A *critical discourse* in rejection to this process, mainly developed by independent researchers such as the journalist María Olivia Monckeberg and her works “*The Looting to the Chilean State by the Economic Groups*” (2001), the work on energy of the sociologist and international analyst Raúl Sohr “*Blindly Chile: The Sad Reality of Our Energy Model*” (2012), the work of the economist Hugo Fazio “*Current Map of the Extreme Wealth in Chile*” (1997), the work of the economist Mario Marcel of the

centre-left *think-tank* CIEPLAN “*Privatization and Public Finances: The Case of Chile, 1985-1988*” (1989). At the same time, I have integrated into the critical discourses work on the privatisation of water by Carl Bauer with publications such as “*Against the current*” (2002) and other scientific articles, and the different academic works of scholars such as Jessica Budds (2009, 2004).

In the current government, the first right-wing democratic government in fifty years, the tension between the neoliberal framework and its social legitimacy has exploded. The military dictatorship was careful to institutionalise neoliberal changes in legal arrangements represented in the Constitution of 1980. The Chilean Constitution explicitly limited the role of the state in economics and reinforced the right to private property and the freedom to pursue economic activities (Prieto & Bauer, 2012: 134). The Chilean Constitution represents an ideological project about society, state, economy and nature. Over twenty years, the four successive governments of the centre-left *Concertación* maintained the core elements of the institutional legacy of military rule, in particular the Constitution and the neoliberal model.

Today the problem for the government is social legitimacy, because the concentration of political and economic power lies in the hands of the right-wing actors and private business interests supported by this institutional framework, which could be understood in the energy sector as a *hydropower*. This concentration of power can be clearly identified in water, electricity, environment and cultural issues related to the installation of dams in Patagonia. This concentration of power has been favoured in Chile because the country has water. This water has been privatized and transformed into a commodity to produce profit. With the privatization of water, water rights were concentrated in a few hands, increasing the power of the owners in a political, economic, social, cultural and ecological way. The power to produce hydroelectricity has been expanded in a physical and symbolic way, occupying river basins and defining the production of whole regions; and today it is moving to the south of Chile, where Patagonia is located.

The expansion of this *hydropower* took place within a neoliberal institutional framework imposed by the military government that included reforms in both the water and electricity sectors, through the Water Code (1981) and the Electricity Reform (1982). According to Maria de la Luz Domper, from the right-wing think tank *Libertad y Desarrollo*, 80% of hydroelectric investment has been made with the current water legislation (Estrategia, 2010).

The aim has been to construct a neutral or apolitical model with respect to the allocation of water resources and the generation of electric power, which in turn is a very ideological strategy concerning economics, justice and distribution (Prieto & Bauer, 2012: 132). Thus, the neoliberal model in the energy sector could be understood as a determined strategy to transform fresh water and river basins in order to produce hydropower, in accordance with, and reinforcing, the current structure of economic and political power in Chile.

5.1.1. Destabilisation of the modernisation myth

Electricity and modernisation are closely linked. There is a large body of literature on dams to produce electricity which shows how dams (as an object and symbol of power), and electrification (as power in motion) have worked as a powerful political and ecological national project in capitalist and socialist contexts (Rosenberg, *et al*, 1995; Cummings, 1995; Howitt, 2001; Heming, *et al*, 2001; Kaika, 2005; Swyngedouw, 2007). There is a lot of evidence about the importance of dams and grids to modernise, industrialise, and the economic impact of expanding energy supply in developing countries. In the case of Chile, there is a hegemonic discourse about energy: “*the economic growth depends on the growth of the electric sector*” (Sohr, 2012). More energy implies more economic growth and more development for Chile. Thus, the government and the large investment companies agree that electricity production has to be set at least one percentage point above GDP: if the economic growth of the country is 5% per year, growth in the power sector should be 6%. Raúl Sohr (2012) has transformed this maxim in terms of watts: the Chilean energy system has 16,000 MW so the system has to grow close to 800 MW per year to cover growing demand.

At the beginning of the 1940s, Latin American countries started a process of increasing participation of the state in economic affairs, determining the patterns of growth and wealth creation and distribution through a *national modernization discourse*. The basis of this modernization project was government-led industrialization, the heavy regulation of the economy and protectionism against international competition, with the aim of breaking down dependence and overcoming underdevelopment. This process was strongly influenced by the theories of Keynes and Marx, which supported the development of the Economic Commission for Latin America and the Caribbean (ECLAC, based in Santiago, Chile) with scholars such as Prebisch, Cardoso, Faletto, Furtado, Do Santos, Lagos, Gunder Frank, Mauro Marini, among others. With a focus on the centre/periphery approach and the theory of dependence,

the *Import Substitution Industrialization* or the *ISI model* had been applied in Chile since 1940. Thus, the Chilean state started to take an active role in the economy, and it was radically applied during the socialist regime of the *Popular Unity* led by Salvador Allende (1970-1973).

The modernisation discourse argues that as a result of the lack of private investment the Chilean state should take control over national production (Bernstein, 1991). This meant the creation of key industries through the state *Corporation of Production Promotion* (CORFO), the steel company (CAP), electricity (ENDESA) and the sugar industry (IANSA). Others were created by law, such as the companies for agricultural trade (ECA), and mining (ENAMI) and an airline (LAN). Others were nationalised, like the copper industry (CODELCO), and others were expropriated or taken over by workers during the Popular Unity regime. The increased involvement of state enterprises in production indicated a tendency to socialise full ownership of productive resources, capital and natural resources. Before 1970, the state had 70 companies, and during the socialist government of Popular Unity the number was increased to 596 companies. By 1973, 85% of mining, 40% of manufacturing industries, 100% of public services, 70% of transport and communications, and 85% of the financial sector came to be controlled by public companies (Hachette, 2001). This process meant an extraordinary increase in public spending which, according to the *foundational discourse* strongly contributed to a greater deficit (Larrain & Vergara, 2001).

In this context of state intervention and modernization discourse, the state-owned *National Electricity Company* (ENDESA) was founded in 1943, as a subsidiary of CORFO. The aim of ENDESA was to build the national electrical infrastructure through the “Electric Plan” of generation, transportation and distribution, and then to plan the general development of the electricity sector (Bernstein, 1991). During the next three decades the state-owned company built eight hydroelectric, three coal-fired power stations and a transmission system to connect them into grids, particularly the large central system. It also acquired distribution systems to make electricity available to end-users and in the process deepened its technological and project management capabilities (Ghemawat & Del Sol, 2009).

For its part, the *Chilean Company of Electricity Distribution* (CHILECTRA) was first a private company founded 1921 with the name *Chilean Electricity Company*, as a product of a merger between *Chilean Electric Tramway* and *Light Co.* (created in 1889, the company was first British, then German, then Spanish-American and then Chilean) and the *National*

Company of Electric Power (1919). Between 1929 and 1931 the *South American Power Co.* bought the *Chilean Company of Electricity* and several other companies which covered together the area of Santiago and Valparaíso, which in that period contained half of the population of Chile. The company was nationalized in 1970, and bought by CORFO. Thus, from 1970 the state controlled almost the totality of electricity generation and a large part of its distribution (Bernstein, 1991).

The liberalisation process started in Chile in 1975, a decade before any Latin American country, during the Pinochet Military Dictatorship (del Sol, 2002). It was a dramatic turnabout in Chile, which changed from a local, regulated and protected government-led environment to a global and highly competitive one. Liberalisation meant a set of reforms that touched almost every aspect of economic, political, cultural and environmental life, affecting prices, the public sector (including taxation), trade and exchange rates, the financial sector, the labour market, privatizations, utility regulation and anti-trust measures (including electricity and telecommunications) and social security, education, public health and public housing. This process took place through a wide network of interwoven institutions explicitly designed to minimize the power of government and supported by a new constitutions and laws (del Sol, 2010). As del Sol explain: “*Chilean firms responded to the process by completely reformulating their competitive strategies, making a multiple set of choices regarding scope, assets, resources, capabilities and geographic markets. The most significant commitments made by these companies since the 1990s were their unprecedented outbound foreign direct investments (FDI) across Latin America*” (del Sol, 2010: 112).

The electricity sector in Chile was encouraged by the military government to follow free-market ideas, consistent with the notion that government control over the economy should be reduced, the role of the private sector enhanced, and the state’s main job restricted to regulating activities that are monopolistic. Between 1980 and 1985 Chilean reformers created one of the world’s first competitive markets in electricity (del Sol, 2002). Deconcentrating, decentralizing, and finally privatising the activities and property of the electricity companies has been recognised by the *foundational discourse* as necessary for the efficiency and stability of the system. Speeding up the process, international lending banks (including the World Bank), started to make loans conditional upon the initiation of privatisation or deregulation processes (Rudnick, 1998).

5.1.2. *The Construction of state “otherness”*

According to Sohr (2012), during the regime of Popular Unity led by Salvador Allende, capitalist entrepreneurs and traditional large-scale farmers were challenged through the nationalisation of property with the aim of breaking the hegemonic power of the dominant groups. The left-wing occupied the state apparatus, institutions (for example the University of Chile and the Technology University, both with presence in the regions) and national companies to create a counter-hegemonic power against the economic and political right-wing. For this reason, according to *critical discourse*, the aim of the right-wing groups was the participation on Coup d'état *“to dismantle and take away the state’s attributions, and privatise and deregulate everything possible, subjecting the state, even in terms of the constitution to a subsidiary role. At the same time, they transferred to the private sector the large volume of profitable economic activities”* (Sohr, 2012: 22; my translation).

The Coup d'état and consequent military dictatorship, allowed the possibility for radical economic and social changes framed in neoliberal ideas. *“El Ladrillo”* (The Brick), a document made by the neoliberal scholars in the Catholic University of Chile, who studied at the University of Chicago, was on the desk of the military junta on the 12th September 1973, one day after the military coup. In accordance with the authoritarian military government and its foundational discourse, the Chicago Boys, who were followers of the free market doctrine, received institutional support to practice by trial and error, and with two economic crises in 1975 and 1982, the political measure which transformed Chilean society (del Sol, 2002). The drastic reduction of the state apparatus had two major aims: to remove the support of the opponents and to allow a radical change in the axis of the economic activity (Sohr, 2012: 21). Moreover, it was necessary to secure that these economic and political changes were irreversible; providing the private sector with the possibility to invest without fear of political changes or the pressure of interests groups (Larraín & Vergara, 2001).

The foundational discourses proposed that since 1974 a process of financial recovery has been instituted among state-owned and private electrical firms: *“This process led primarily to the progressive recovery of prices for electrical energy. The management of state-owned enterprises was rationalized and responsibilities which could be better handled by the private sector were transferred to private firms. Thus, the construction activities conducted by ENDESA were actually implemented by private contractors”* (Bernstein, 1991: 181).

This discourse was focused on the “rationalization”, “normalization”, the “increase of efficiency”, and “management” of the electrical industry. To do that, the technocratic right-wing identified structural problems, which constituted a state “otherness” in the electric sector (Bernstein, 1991: 182-183):

- Significant state participation in the industry: almost 90% of electricity generation, 100% of its transmission and 80% of its distribution was in state hands.
- The practically monopolistic role of ENDESA in the development of the industry: the possibility of participation by the private sector or other state entities in the formulation of new projects was limited.
- The possibility for control was difficult: large state firms were greater than the governmental organizations charged with their oversight.
- There were political impositions on state-owned companies in un-profitable activities, such as the development of inappropriate projects or the hiring of excessive personnel.
- There were technological monopolies and occupational monopolies at the technical level, particularly in the fields of generation and transmission.
- There were trade union monopolies and the establishment of labour contracts which used to exceed the market conditions.³
- There was a certain degree of confusion in the electrical industry about the state's regulatory and business roles.
- There were inefficient rates from the economic perspective: there was a lack of a reward system for the most efficient companies, nor did the most inefficient firms pay the price for their extravagance as would be the case in a competitive market.
- The legislation failed to specify criteria for the establishment of rates within and among companies.
- Lastly, the enormously high inflation registered in Chile during the early 1970s further served to complicate the adjustment of rates in accordance with accounting principles.

Together with identification of the structural problems of the sector, the aim of the foundational discourse was *“to maximize social well-being by introducing increased efficiency into the industries in question within the conceptual framework of a subsidiary role for the State... The subsidiary role of the State means that the government does not act so*

³ This point is not in the English version of the text, but appears in the Spanish version, p. 182.

long as there are intermediary individuals or organizations in society which are capable of acting on their own initiative” (Bernstein, 1991: 183).

Within this framework state-owned enterprises were privatised in three historic periods (Hachette, 2001):

- 1975-1982: Devolution of 325 companies “illegally” taken; privatisation of 207 services companies such as financial, industrial, wholesale distributors.
- 1984-1989: The reinforcement of a society based on the free market economy, increased efficiency of companies, the re-privatisation of companies intervened by the crisis of 1982 (60% of the banks, 68% of the pension funds, part of the petrol industry COPEC, and the forestry industry Arauco), the development of capital markets, and the privatisation of *public services* (electricity, communications, water, gas), production (sugar, coal, nitrates) and the financial sector.
- 1989 to the present (in the democracy): the final privatisation of companies which still had some level of state participation such as: ENDESA, Colbún, ENTEL, CTC, and sewage companies.

Hence, responsibility for the development of Chile was transferred to the private sector and the government took a subsidiary role. The economy of the country was opened to the global market and resources were assigned in an efficient way according to market principle, meanwhile markets were liberalised (financial, industrial, labour, health, education and retirement). All of these changes were supported by the Chilean Constitution, which represents not only an ideological project about the state and economy, but also about the relationship between society and nature. One of the key aspects of these reforms was the process of commodification of water.

5.1.3. *The “purification” of water: The construction of water as a commodity*

In the case of Chile, the water rights framework is more *laissez-faire* than the electricity market, which is also pro-market (Bauer, 2009: 596). As with the electricity sector, water started to be highly regulated from 1967, expanding governmental authority over water use and water management in accordance with the policies for Agrarian Reform: in other words, the big driver at that time was the demand for agriculture within a broader project of distribution of production and wealth. The situation dramatically changed after 1981 with the

Water Code (with some reforms in 2005), which has been interpreted as part of the political complexity of the military dictatorship. The privatisation of water was an attempt to enforce the relationship between the economists and the more conservative right-wing which is part of the agriculture sector, with the aim of preventing state intervention in water management and the creation of economic incentives for private investment (Bauer, 2002, 2009; Budds, 2004).

The discourse to support the transformation of water as a commodity sought a mechanism to optimise the allocation and use of scarce water resource (Budds, 2004). Under free market principle, resources would be used efficiently, investment and productivity would be promoted, attracted toward highest-value use, through individual decisions adopted within self-regulating markets, which are more politically neutral than the state in resource allocation (Prieto & Bauer, 2012; Bauer 2009, 2002; Budds, 2009, 2004). To do that, property rights were created including the exclusive right to use water with the protection of the Constitution. This water right can be freely traded separately from land and traditional or historical uses. The Water Code does not establish any legal priorities among different kinds of water uses, such as domestic or agricultural uses. The owners of water rights can freely change the use of those rights without notifying the Government and without administrative approval. Moreover, water rights owners do not pay any taxes or fees to the government, and the owners have no legal obligation to actually use their water rights. Until 2005, they faced no legal or financial penalty for lack of use (Bauer, 2009: 599).

To fully transform water into a commodity two kinds of water rights were created to determine the destiny of water markets and water allocation:

- a) *Consumptive rights*: this is the extraction of water for activities that imply its consumption, for example, mining and irrigation for agriculture, both directly related to the export model, as well as urban uses.
- b) *Non-consumptive rights*: which means the extraction of water which after use is returned to the stream such as water used for hydroelectricity, fishing, recreation and environmental conservation.

According to Bauer, the creation of non-consumptive water rights constitutes an institutional preference for hydroelectricity. These new rights were intended to foster hydropower development in the upper parts of river basins in the mountains and foothills – without

harming farmers downstream in the valleys who had pre-existing water rights (Bauer, 2009: 601).

The *Water Directorate* (Dirección General de Agua, DGA) determines the allocation of new water rights as long as there is enough unclaimed water available. If there is not enough water, the interested user has to go to the water market. The original agreement did not consider any justification about uses, effective uses of water, volumes of water, or the construction of infrastructure for the extraction or payment for rights. As the market rather than state was intended to manage the allocation of water rights, the role of the DGA was purposefully curtailed to purely administrative, rather than providing executive and regulatory functions. Water rights are also governed by private law (which means that conflicts must be resolved between the parties concerned or in the civil courts) and DGA could only assume authority over private water use in emergency conditions of drought (Budds, 2009: 421).

As Bauer mentions, the original cost of water rights was free, and perpetual, and today non-consumptive rights are in the hands of the electricity companies. Thus, my argument is that a *hydropower* was created when the hydroelectricity companies used their non-consumptive water rights to control water flows, according to the demand for power within the national electricity grid. This situation directly impacts on the other possible uses of water in a given river basin, especially for irrigation:

“...the new water code of 1981 would manage water as a full commodity, susceptible to being traded in the market among different users for power generation. On the other hand, this activity would be regulated by the new electric law (LGSE), to generate free competition among generators. Both sectors were reformed into a highly private, market-based system to ensure political freedom and maximize efficiency in water allocation and electricity production” (Prieto & Bauer, 2012: 134).

Moreover, almost none of the non-consumptive water rights that are in use for electricity generation were acquired within markets; instead, they were acquired either from DGA through the system of original acquisition, or through the process of privatisation of the state companies, which involved privatising the rights to water that belonged to those companies. Rights holders pay nothing even today: this is the most important fact, because it implies a decrease in the average cost of hydroelectricity generation, making it more competitive in comparison with other technologies (Prieto & Bauer, 2012: 138). Thus, hydropower

production was reinforced by law, giving them competitive and comparative advantage over the thermo-electricity, and other possible way to produce energy.

From 1992 to 2005 reforms to the water code were proposed to stop speculation about water and to promote the use of the current water rights without use. The aim of the reform was to establish a progressive annual tax for the non-use of water rights. For the water owner this means paying the taxes, using the rights, putting their rights on the market for others to acquire and use them. According to Bauer (2009) the objective was to promote hydroelectric generation by removing the barriers to entry for new companies, and making difficult other possible uses like: environmental conservation, cultural uses or recreation propose would have to pay the corresponding taxes. In other words, water must be used and electricity can be stored as water, which directly reinforces the consolidation of hydropower.

5.1.4. Regulating the Deregulation: The Creation of the SIC

The law of 1982, known as “The Electric Law”, established general norms that were applicable to all the companies in the electricity sector without regard to their ownership. This law is a regulatory framework, with the aim of letting market forces determine prices, quality and the level of investment, whilst limiting the government to regulating those parts of the industry in which competition could not fully develop (del Sol, 2002: 438). As a regulatory frame, the Electric Law is pro-market but not *laissez-faire* as is the Water Code, and even when this law underwent some change, the core of the framework remains almost the same (Bauer, 2009: 616).

The transformation of the electricity sector in the 1980s included the legal and economic definition of the sector, the creation of organisms, the definition of a system of price, the division of the state-owned companies, the vertical and partial horizontal disintegration of the system, and finally privatisation (Maldonado & Herrera, 2007). The law provided general rules to govern the production, transportation, and distribution of electricity, the granting of concessions and easements, the setting of regulated prices, the quality and safety conditions of facilities, machinery and instruments, and relationships between the companies and the state and private sector. The lack of economy of scales for generation and distribution led to the opportunity for several companies to compete rather than only one dominant. Thus, the legal initiative opened up an opportunity for private companies to enter the sector on equal legal grounds with state-owned companies (Soto, 1999: 28). The changes in the law of 1982

ensured that the activities of generation and transport did not need concessions, however they could apply for them, because they were declaring themselves “not public services”. The situation is different in distribution where concessions were mandatory, allowing changes to old concessions, for example if a private company before the reform was focused on distribution, with the new reform it could use the line for transportation (Vergara, 2002, 2004).

The Constitution of 1980 guarantees the right to free access to hydropower concessions in its Art. 19, N ° 23 which says: “*Freedom to acquire ownership of all the property except that which nature has made common to all men, or that should belong to the whole nation and the law so declares*”. This is a key element of the materialisation of neoliberal reform and the conformation of *hydropower*, because together with the Electricity Law, generation and transmission are “deregulated”, and any person can spontaneously “establish” facilities to generate or transport energy, establishing a forcible occupation of land (Vergara, 2004: 90). The activities of generation and transport, as long as concessions have been applied for, are allowed to include the analysis and study of public and private properties (Art. 4, Electric Law, 1982). Thus, the companies undertaking hydroelectric generation and transmission have the ability to use public goods to build and install an infrastructure (Serra, 2002: 15). This would mean that private companies are always empowered to obtain hydropower concessions as long as they fulfil the minimal requirements expressly ordered by the law. This means that the decision to grant the concession is not left to criteria established by the administration, but it is part of individual freedom (Prieto & Bauer, 2012: 140). The infrastructure for electricity is not considered a use of land that is susceptible to regulation by different land-use planning mechanisms. They are currently not obliged by these mechanisms when it comes to deciding on the location, construction conditions, maintenance, or operation of their infrastructure: Thus, “...*the electric law permits the installation of any power station whenever the interested party wishes and without the requirement for any special previous administrative authorization*” (Prieto & Bauer, 2012: 140).

While transmission and distribution are natural monopolies, generation is more amenable to markets and competition (Bauer, 2009). Investments in electricity generation were thus freed from regulation, and generating companies were allowed to sell energy (watt-hours) and power (watts) to large buyers at freely determined prices (del Sol, 2002). Large buyers therefore negotiate freely with electricity generators regarding prices, service, and even joint investments in generation (Ghemawat & del Sol, 2009: 3). In the case of hydroelectricity, the

capacity of generation strongly depends on the concentration of non-consumptive water rights.

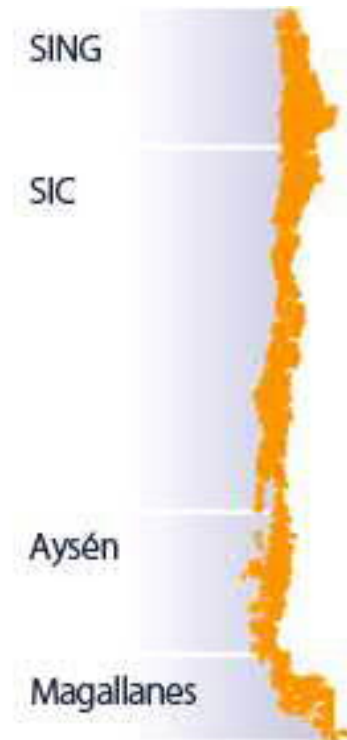
To coordinate this system, in 1978 a public regulator organisation was created, the *National Commission of Energy* (CNE), that depended directly on the President (in those years Pinochet) and was integrated by seven ministers and an executive secretary (who oversees technical activities and management). At the same time, the *Superintendence of Electricity and Fuels* (SEC) was created, a public audited organisation in which the projects of generation are presented. The law established a centralized pool to coordinate all of the generating plants, which included hydro and coal thermal power plants. These grids are the Interconnected Systems North (SING) and Centre (SIC). Because electricity cannot be stored, the total energy generated by the interconnected system must vary continually to match the demand for electricity at each moment. To complete the process of transformation, in 1985 the Economic Load Dispatching Centre (CDEC) was created, integrated for all those companies with a minimum generating capacity of 60 MW. The companies of generation and transport located in the same zone should be integrated, according to the authority, and coordinated by a CDEC, minimizing the operation costs of the electricity system, and ensuring the right of the generators to sell energy at any point of the system, preserving the security of the service. Thus, the CDEC is a coordination unit, responsible for dispatching energy from generation plants to distributors on the basis of minimum marginal costs. This unit plans the operation of the combined generation-transmission system, and is in charge of defining the sector's policies and development strategies, and studying and proposing economic and technical norms (del Sol, 2002; Serra, 2002). Given the geographical concentration of population and production in Chile, there are two CDEC: CDEC-SING is located in the north of the country where the mining activities are situated; and CDEC-SIC where more than 90% of the Chilean population lives⁴ (figures N° 30 and 31).

According to the Electricity Law, a grid or interconnected system (like the SIC) is the system to minimize the overall short-term marginal cost of power generation, and the CDEC is the organization responsible for implementing the policy, and monitoring the cost of operating each generating plant, as well as the cost of operating the grid as whole (Bauer, 2009: 620). To operate the system, the CDEC uses a mathematical model, specified by the law and

⁴ The Interconnected Central System covers the centre and centre-south of Chile. In the north is located the Interconnected System of the North (SING) which produce thermoelectricity. In the Aysén and Magallanes there are little systems without connections between each and other and with the rest of the country.

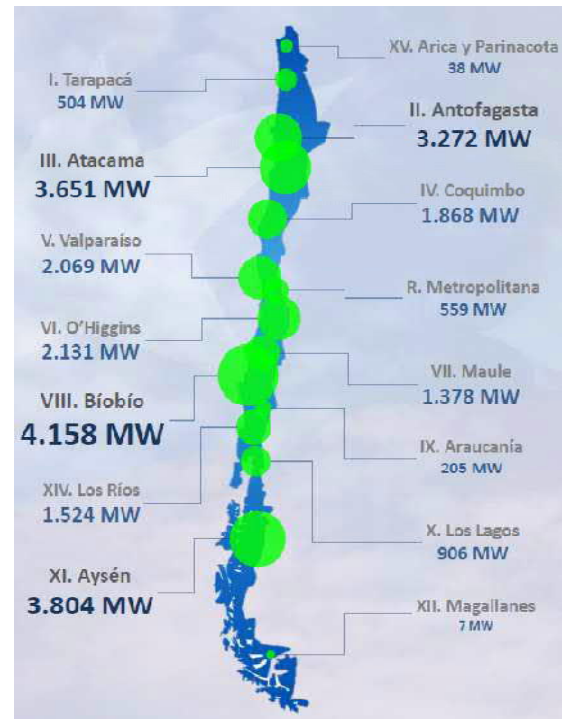
regulations, which is focused on the climate conditions which affect the reservoirs, the cost of thermoelectricity in the present and future, and the new plants being planned for the future. In general terms, in the SIC more water means lower cost of production and the lowest price on the spot market. In a wet year hydroelectricity can supply 100% of the SIC, in a normal year 80% and in dry years 40% (Bauer, 2009: 622).

FIGURE N° 30. ELECTRIC GRID IN CHILE



Source: Edelmag (2012)

FIGURE N° 31. ENERGY MAP OF CHILE



Source: SOFOFA (2010).

Through CNE a mechanism of rates or tariff was created, which was applied through a system of determination of transference prices between generation companies, which operated in Chile because of the existence of large reservoirs of water that manage conditions for the operation of the whole system. A system of rates for the use of transmission lines was established. In this way, the CNE designed a system of rates which divided the clients into two types:

- *Free clients:* Those who demand more than 2 MW, where it is possible for competition between different distribution companies. In this division are located large clients such as mining and industrial companies.

- *Regulated clients:* Those who demand less than 2 MW, which take part of the natural monopoly in electric distribution. Such as residential, commercial, and small and medium industrial customers.

The system was divided into three different prices and markets:

1. *Spot (spot market):* It is the price generated when the deficit generators buy energy and power to the surplus generators to instantaneous marginal cost or spot price. The Electricity Law imposed the mandatory dispatch in a strict order according with the marginal costs of short term agreement, declared independently of commercial agreements by each company. This operation is coordinated by the CDEC. The spot price is the minimum of energy fixed per hour, and corresponds to the marginal cost of operation of the central with the highest operation cost. Meanwhile, the spot price of power is equal to the capital of a gas turbine, which is the most efficient technology to be used in the peak of the system.
2. *Node (regulated market):* This is the price for valuing the sale of energy from generators to distributors, which is then charged to the small clients (less than 2 MW). In the SIC, almost 60% of the energy is sold at node price. This price is fixed by the CNE every six months using a model according with the marginal cost of the system over the next 48 months, considering demand, generation supply, the optimum program of entrance of central plants, the cost of coal thermoelectricity central plants, and the reservoir of the Laja Lake, the largest tributary of the Bio Bio River. This lake is the largest reservoir in Chile and the only one big enough to store water from more than one year's river flow, which makes it the "reserve battery" for the entire central grid (Bauer, 2009: 622).

The law mandates, in the case of compensation for deficit supply to the regulated clients for energy not delivered. The most important factor to interrupt the supply is a drought, and also rigidity of the system with the changes that may occur in those 48 months in terms of supply and demand.
3. *Free (unregulated market):* This corresponds to clients who demand more than 2 MW, and who are free to establish prices with the electricity companies. The price is fixed according to market conditions in the long term. Almost 40% of the energy in the SIC follows this scheme.

In the case of the spot market and the work of the CDEC-SIC pool, which is a mixed hydro – thermal system, the lowest operating cost is generating by run-of-the-river hydropower plants which do not store water. These plants provide part of the SIC baseline power supplies. The second one to enter in the system is the gas-thermo power plants, which are the cheapest thermo fuel. However the basis of the SIC is the hydropower dams that have reservoir storage, which can decide if they use or save water. If it is not possible to have enough supply (for example because of a drought) the thermoelectric plants enter in the system in the following order: coal and then oil or diesel.

As is clear, water is a critical issue for the work of the Chilean electricity system. However, water used as fuel is only managed by the Water Code, which established in turn who are the owners of water and what kind of management they can undertake. For the electricity system, the value of water is defined as an opportunity cost of water stored in reservoirs (Bauer, 2009: 623). In general terms, the cost of the energy in the SIC depends on climate conditions and hydrologic variability, and the value of water is only one focus in the production of electricity. For that reason, the Chilean electricity system needs more water, and it is logical to expand the hydroelectricity to the south, especially in Aysén, where large natural reservoirs of water are located, such as the case of the system of ice fields (north and south), the lakes (Carrera and O'Higgins) rivers (Baker and Pascua), and the rest of the large rivers located in Patagonia. As I will show in the following sections, the real application of this model designed under the dictatorship has come with the democratic governments since the 90s, when the privatisation of the electricity companies was completed.

5.1.5. Deconcentration, deregulation and privatisation

To open the electricity industry to competition and the participation of private firms, the electricity market in Chile was opened up in the activities of generation, transmission and distribution of electric supply. These activities started to be developed in full by private companies. The Chilean state, according to the neoliberal approach, only took a regulatory role, monitoring and planning functions, indicating investments in generation, and suggestions in transmission.

“Perhaps the most dramatic example of the sectoral reforms undertaken under the military government (before it was replaced with a democratic one in 1989) was that of Chile’s electricity sector, particularly electricity generation. Chile’s electricity reforms also

exemplified the systemic nature of the Chilean reform process and the mechanisms used to make reforms virtually irreversible” (Ghemawat & del Sol, 2009: 2).

The privatisation of the electricity sector started with ENDESA and CHILECTRA, the two state owned integrated companies that accounted for most of the industry in 1978, which were broken up into number of parts and then subsequently privatised. This privatisation, which was consistent with the concept of a subsidiary state, was possible in part because of the implementation of a new pension system (known as AFPs), based on individual capitalisation rather than on the traditional distribution system. The state transferred the responsibility of administering these funds to the private sector, for which the electricity companies became an attractive investment. This made it genuinely possible to privatize large distribution and generating companies at a time when foreign firms showed little interest in investing in Chile. The privatization process began in 1981 with the sale of some distribution companies and small generation plants through public tenders. Although the 1982 economic crisis in Chile delayed the process, it was successfully taken up again around 1985 (Del Sol, 2002: 439).

The *Pension Fund Management Companies* (Asociación de Fondos de Pensiones, AFPs) is a private pension system used as a strategy for economic growth. This system started in 1981 and has been mandatory since 1983, as part of the framework for reducing the role of the state and increasing the scope for individual and market freedom for the creation of wealth. The aim of this reform was to protect resources from any political and economical pressure, especially from trade unions or other interest groups making demands over social security (Acuña & Iglesias, 2001). Basically the system consists of an individual monthly saving of 10% of incomes to be used in retirement. The final amount of money depends on the individual level of incomes, the facilities of every private administration company which the workers are free to chose, voluntary saving through these companies, and insurance. The money saved by the workers each month is invested by the AFPs in the market⁵. Thus, the accumulation of the pension fund works together with the development of the capital market and has a direct effect on national saving. In this way the savings of the workers were put into circulation.

⁵ Since 2002, the money is put in different risk levels chosen by each worker. If the investment is in the high risk level in the long term the worker should have more money than other who chose less risk.

Together with the AFPs (so called *institutional capitalism*) other strategies were developed for privatisation: to gain the support of the companies' workers the government initiated a form of *labour capitalism*, by which the workers could buy packets of shares with priority over other possible buyers. At the same time, the government encouraged *popular capitalism* which meant the distribution of shares to be bought by the population, who in turned were transformed into small shareholders. The traditional method was also used through purchases and the stock market (Hachette, 2001).

Since 1979, ENDESA has been required to operate at a profit and to pay dividends to its owner, the Chilean government. That meant an improvement in its efficiency through the reduction of the employees, numbering from 8,470 to 4,270 by 1980; it started to hire other companies for project construction, and handed over the role of central planner for the Chilean electrical system to the newly constituted *National Energy Commission* (CNE) (Ghemawat & del Sol, 2009; del Sol, 2010; Serra, 2002). In the 1980s, as part of the privatization process, ENDESA was obliged to divest all of its distribution operations as well as some of its power stations. By the time its privatization was concluded, ENDESA had about 60% of the total generating capacity connected to the central grid, which in turn accounted for more than 80% of the total generating capacity in Chile. In addition, it had signed long-term contracts for most of the water rights required for hydroelectric projects. Its leading competitor, with roughly 20% of the capacity connected to the central grid, was CHILGENER, which prior to privatization had been the generation arm of the other fully-integrated Chilean electricity company, CHILECTRA. In the course of the privatization process, ENDESA also managed to keep ownership of the central grid since there were no official restrictions on such cross-ownership. Subsequently, the investment group ENERSIS also held a major stake in ENDESA. The AFPs played a key role in financing what could, in some respects, be regarded as a massive management buyout of leading positions in all three stages of the Chilean electricity system.

Meanwhile, the privatisation of the *Chilean Company of Electric Distribution* (CHILECTRA) began in 1981. To separate the distribution from the generation, CHILECTRA was divided into one matrix and three companies: Chilectra Valparaíso (today's Chilquinta S.A), Chilectra Metropolitana (Chilmetro) and Chilectra Generación (Chilgener). In 1985 some workers and staff of the company could buy part of the CHILECTRA property through advance compensation for years of service. In 1987 a group of senior executives and staff could, because they were owners of small packets of shares, achieve the control of the company

through the management of five investment societies, called the *Chispas* (Sparks) which had 29% of the total shares of CHILECTRA. Other shares were bought by the AFPs and small shareholders. The first part of the process of the current hydropower was completed.

CHART N°1. THE OPENING UP AND PRIVATISATION OF ENDESA AND COLBÚN

Company	Division	Activity	Fuel	Grid	Privatization					Current name & ownership
					AFP	Stock Exchange	Workers	Tender	Other	
ENDESA	ENDESA	generation & distribution	Water/Coal/Wind	SIC	X	X	X		X	ENDESA SPAIN/ENEL
	EMEC	distribution						X	X	CGE, Chile
	EMEL	distribution					X		X	CGE, Chile
	EMELAT	distribution						X	X	CGE, Chile
	PILMAIQUEN	generation						X	X	Empresa Electrica Pilmaiquen
	PULLINQUE	generation						X	X	ENEL
	EDELMAG	distribution				X	X		X	CGE, Chile
	EDELNOR	distribution				X	X			ENDESA
	COLBUN	generation	Water/Gas/Oil/Coal		X	X	X		X	COLBUN, Chile
CHILECTRA	CHILMETRO	distribution			X	X	X		X	ENDESA SPAIN
	CHILGENER	generation	Coal/Oil/Water/Gas	SING	X	X	X		X	AES Co
	CHILQUINTA	distribution			X	X	X		X	Sempra Energy

Source: My own

This *hydropower* in Chile was created as follows: the business company ENERSIS gained more and more participation in CHILECTRA and COLBUN, and the business manager Jose Yuraszeck started to be called “the Czar of Electricity”. Through ENERSIS the acquisition of ENDESA Chile began (achieving its control with 25.3% in 1995 and 60% in 1999). This process of acquisition was covered by a mantle of “interests conflicts poorly resolved” (Sohr, 2012: 34). Since 1994, ENERSIS has bought shares of distribution companies in Perú, Argentina, Brasil, Colombia. In 1999 ENDESA Spain got the 64% of ENERSIS, and finally in 2007 the Italian company ENEL took control of ENDESA Spain and, thereby, the control of ENERSIS. Through these operations, today ENDESA controls 42.75% of the capacity of the *Interconnected Central System* (SIC), and 61% of this grid is hydroelectricity.

In the case of Colbún, the second component of the hydropower, the concentration started in the democracy, when the government of Eduardo Frei Ruiz-Tagle (1994-2000) decided to privatise Colbún. The Matte group had presence in the electricity sector through Guardia Vieja and Aconcagua power stations, and investments in Chilquinta (11%) and ENDESA (no more than 3%). Then, in 1996 the Matte group took control of 41.5% of Colbún (Fazio, 1997). Finally, from 2005, Matte took absolute control of the company (Colbún, 2012).

Together with ENDESA, they are today developing the HidroAysén project. Colbún controls 25% of the market in the SIC with 2,600 MW (the economic group Angelini had a participation in Colbun of 9.6%). Currently, this company produces 70% with hydroelectricity and in the coming years they can have 80% of its electricity production with water (Revista EI, 2012).

In this way, the privatisation of the electricity sector ends with the conformation of a *hydropower*. This means that the monopolies and oligopolies markets are controlled by political-economic groups. ENDESA Spain/ENEL is the largest generating company in the SIC, has the monopoly on hydroelectricity transmission, the largest reservoir of water for electricity generation and the monopoly of distribution in the Metropolitan Region of Santiago. Meanwhile, Colbún has been transformed in the second actor, controlling the complex Colbún-Machicura with the presence of Matte and Angelini.

The third electricity actor is AES Gener, today in the hands of the American AES Corporation, with the presence of the Angelini group through the oil company COPEC. AES Gener mainly produces electricity through thermo power stations, but is developing a hydropower project in Upper Maipo, near to Santiago.

5.1.6. The physical expansion of hydroelectricity

The most common discourse about hydropower states that Chile has natural exceptional conditions for the development of hydroelectricity (Energy Policy, Tokman, 2008; National Energy Strategy, 2012). These natural conditions relate to the physical geography of Chile: the south of the country is under the influence of the Polar south westerly wind, generating temperate and sub-polar oceanic climates, the Andes range captures rainfall and snowfall from the Pacific, which flows through Andean lakes that act like reservoirs. These lakes drain into rivers that run a short and steep distance between the range and the Pacific. In the case of Patagonia, the rivers run through small and deep Andean valleys which facilitated the projection of dams and power stations. In this geographical context, the hydropower discourse states that for Chile water is an inexhaustible and national source of energy that is cheap, renewable and clean in comparison with other sources such as oil, gas and coal. Thus, hydroelectricity is producing energy at low cost which produces a national competitive advantage (Economía y Negocios, 2012).

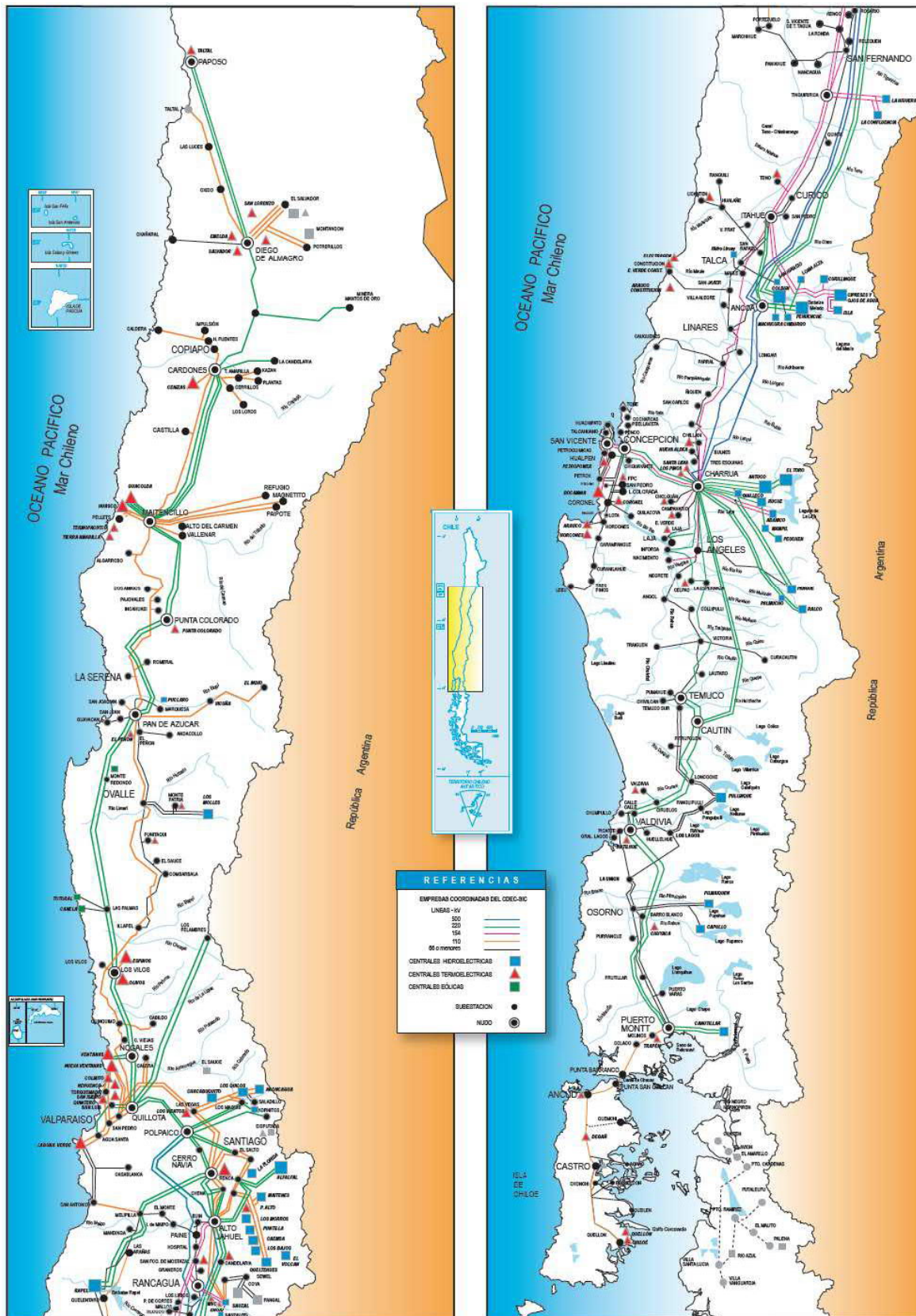
The historical development of Chilean hydropower has been at the core of Chile's national electricity system since 1940s (Bauer, 2009: 610). Thus, hydropower was an integral part of the modernisation myth. In the period 1940s-1990s electricity was re-scaled into a national project, the state was focused on hydropower and the construction of a national grid to connect generation in the south and consumption in the centre through the *Interconnected Central System* (SIC), which supplies energy for 90% of the Chilean population, as shown in figures N° 30, 31 and 32. For this, the hydropower transformation of nature was located close to centres of consumption in the rivers Maule and Laja in the centre-south. In 1980s both rivers contributed to 70% of the SIC. The geographical consumption of water for hydroelectric production was distributed in 1998 in the Maule Region (46%) where Colbun-Machicura and Pehuenche are located, O'Higgins Region (17%) where Rapel was located; Los Lagos Region (14.9%) where Canutillar and other nine hydropower stations were located, Bio Bio Region (12.8%) with El Toro and Antuco, and the Metropolitan Region of Santiago (7.1%) where Alfalfal and Quelitehues were located. The situation significantly changed with Panguel and Ralco in Bio Bio and could change again with the construction of dams in the Los Lagos Region (in the rivers Valdivia, Bueno y Yelcho) and Aysén (in the rivers Palena, Aysén, Cuervo, Baker, Pascua y Lago Cóndor).

From the late 1990s to the present, hydropower started its expansion to the south, with the Panguel and Ralco projects which belonged to the privatized ENDESA in the Upper Bio Bio River. The construction of these projects was the most enduring environmental conflict during the Frei and Lagos presidencies. The 690 MW facilities were controversial not only for their environmental impacts but also for the fact that their 3,500 hectare reservoir required the flooding of territory belonging to the Mapuche-Pewenche indigenous people and the relocation of roughly a hundred families (Latta & Cid, 2012: 174).

In last 20 years, therefore, the geographical hydropower structure of Chile has changed with the territorialisation of large investment projects concentrated in the southern region, traditionally marginalised from the national production system. In 2002, 60% of the electricity for the SIC was generated by water (Aedo, *et al*, 2004). Chile's substantial hydropower potential, with the technically exploitable capability estimated at about 162 TWh/yr, of which about 15% has so far been exploited. Hydro output in 2005 was 25.9 TWh, equivalent to just over 50% of Chile's total net electricity generation (World Energy Council, 2007). The current President of Chile, Sebastian Piñera, has argued that the country will increase the

national supply (SIC and SING) with hydroelectricity from 34% to 50% in the next two decades. This means, affecting 0,2% of Patagonia through the HidroAysén project and Energía Austral (Mercopress, 2012). However, the southern rivers are in an isolated part of the country, far from the centres of electricity consumption, requiring a massive investment and transformation of the southern landscape to generate and transport energy.

FIGURE N° 32. INTERCONNECTED CENTRAL SYSTEM (SIC)
(blue square hydroelectricity, red triangles thermoelectricity, green square wind)



Source: Anuario 2001 CDEC-SIC (2011)

**CHART N° 2. PERCENT OF COMPANIES' PARTICIPATION
IN THE INTERCONNECTED CENTRAL SYSTEM (SIC)**

Company	% in SIC
ENDESA	68%
Colbun	18%
AES Gener	5%
Ibener	3%
Puyehue	1%
Others	5%

Source: Based on Prieto & Bauer, 2012.

The concentration of hydropower could be identified through the current goods of ENDESA, mainly focused in the centre-south section of Chile, according to the physical geography of the country and close to centres of consumption. The thermoelectric plants are located mainly in the north where the mining and large industries are. ENEL/ENDESA (today the second electric group in Europe) controls the following hydropower and thermo plants in Chile with a total of 5,620 MW:

CHART N° 3. ENDESA'S ELECTRIC PLANTS (AT DECEMBER 2012)

Hydropower Plant	MW	Thermo power Plant	MW
Rapel	377	Tarapacá	182
Sauzal	76.8	Taltal	244
Cipreses	106	San Isidro	756
Isla	68	Atacama	780
Curillín	89	Bocamina	128
Pehuenche	570	Quintero	257
Abanico	136		
Antuco	320		
El Toro	450		
Ralco	690		
Pangué	467		
Total	3,273		2,374

Source: www.endesa.cl

Meanwhile in hydropower, at the northern end of Patagonia the *run-of-the-river* (ROR) Neltume (Los Ríos Region) will be located, that will have 490 MW and an investment of US\$

780 million, and the ROR Choshuenco (Los Ríos Region) with 128 MW and an investment of US\$ 380 million. Also in hydropower, but in the Maule Region, could be located the ROR Los Cóndores, with 150 MW and an investment of US\$ 270 million. The main projects of ENEL/ENDESA in thermoelectricity are Bocamina II (located in Coronel, in Bio Bio Region), with a capacity of 370 MW and an investment of US\$ 620 million, and Punta Alcalde (located in Huasco, Atacama Region) with a capacity of 740 MW and an investment of US\$ 1,400 million.

For its part, Colbún has the following hydropower and thermo plants with 2,452 MW:

CHART N° 4. COLBÚN'S ELECTRIC PLANTS (at December 2012)

Hydropower Plant	MW	Thermo power Plant	MW
Colbún	474	Nehuenco	874
Machicura	95	Candelaria	270
Canutillar	172	Antihue	103
Rucúe	178	Los Pinos	100
Blanco	60		
Hornitos	55		
Quilleco	71		
Total	1,105		1,347

Source: www.colbun.cl

CHART N° 5. GENER'S ELECTRIC PLANTS (at December 2012)

Hydropower Plant	MW	Thermo power Plant	MW
Alfalfal	178	Ventanas	338
		Laguna Verde	73.5
		Los Vientos	126
		Santa Lidia	139
		Renca	100
		Nueva Renca	379
		Norgener	277
		Angamos	518
Total	178		1,950.5

Source: www.aesgener.cl

The Matte group also has two hydroelectric power stations which will be in operation during 2013: the Angostura project located in Santa Barbara and Quilaco (Bio Bio Region) with 316

MW and an investment of US\$ 650 million, and the San Pedro project in Los Lagos and Panguipulli (Los Ríos Region) at the end of north Patagonia with a power of 144 MW and an investment of US\$ 450 million.

Meanwhile, the third actor in the electric sector, AES Gener (AES Corp) with 2,128 MW is mainly focused on thermoelectricity. They are planning to build the Los Robles thermoelectric projects (750 MW) in the Maule Region and Campiche (270 MW) in the Valparaíso Region. At the same time, they have two hydroelectric projects: Alfalfal II (264 MW) and Las Lajas (267 MW) with an investment of US\$ 700 million.

5.2. “Hydropower”

As a consequence of this process of privatisation and deregulation, new Chilean economic groups played an active role in the imposition of the neoliberal extractive model. They took part in buying the goods of the state, they created an association with transnational capital, and they expanded their business to other countries in Latin America (Fazio, 1997). Today, those economic groups have representatives on the list of the richest people in the world: according to Forbes, from 1,153 wealthy people, the widow of Andronico Luksic is the number 32 with US\$ 17,800 million, the Matte family are in number 86 with US\$ 10,200 million, at the number 98 is Horst Paulman with US\$ 9,200 million, the President of Chile, Sebastian Piñera is number 521 with US\$ 2,400 million, and finally Roberto Angelini, is at the position 1,015 in the world with US\$ 1,200 million (24 Horas, 2012).

All these groups have interests in all the economic activities of Chile, but they are specialised in mining, energy, fishing, forestry, and services (see chart N°7). There are other economic groups, and the dynamic in the last 40 years shows important changes in names and activities. In the case of energy, the Matte and Angelini groups have played an active role in Colbún, and together with transnational companies such as ENDESA/ENEL have been acting as a hydropower, transforming the southern landscapes of Chile in order to produce and increase their hydropower on a global scale (in the northern landscapes thermal power has been developed for other companies such as GDF Suez and the Brazilian MPX).

CHART N° 6. PARTICIPATION OF THE MAIN CHILEAN ECONOMIC GROUPS BY SECTOR

SECTOR	GROUP
Mining	Lucksic
Energy	Matte Angelini
Fishing	Angelini
Forestry	Matte Angelini
Services	Lucksic, Paulman, Piñera

Source: My own

With the return of democracy the neoliberal elements of the Water Code were seen as socially unjust. For example, private parties profited from public resources even without using them and thereby deprived others from doing so. The right-wing argued that any significant changes in the Water Code are unconstitutional because they would violate the security of private property by placing new restrictions without compensation (Bauer, 1997; Budds, 2004). The transformation of water into a commodity has not been a neutral process, but is strongly politicised both at the national and the local level (Budds, 2004: 336).

To clarify this point, *non-consumptive* water rights have caused at least three important political and economic problems in Chile:

- *Concentration:* These water rights have been concentrated in the hands of relatively few owners who have enjoyed significant monopoly powers. These owners have been involved with the electricity sector and political debates over water rights have been closely tied to debates over electricity regulation. This concentration of ownership was partly due to the fact that, until the 1980s, nearly all hydropower water rights –as defined under previous legislation- belonged to the state-owned National Electricity Company (ENDESA). Those rights were included when the military government sold the company to private investors in the late 1980s (Bauer, 2009: 601-602).
- *Speculation:* They granted free water rights to private applicants who were not required to actually use their rights; and they did not impose any taxes or fees on water rights ownership (Bauer, 2009: 602).
- *Management:* There are controversies over the relationship between consumptive and non-consumptive water rights –that is, between agricultural and hydropower water

uses. These conflicts were over how to manage dams and reservoirs to regulate the flows of shared rivers, i.e. different water uses. As Bauer explain: *“farmers want to store water during the rainy winter to use during the summer growing season, while power companies want to store water during the summer to meet high national electricity demands in winter”* (Bauer, 2009: 603).

According to the transformations in property rights generated by the Water Code, water rights were initially allocated for free and in perpetuity to the electricity companies. This situation allowed the concentration of non-consumptive water rights that have produced monopolies and barriers for new competitors. For example, ENDESA controls 55% of all the non-consumptive water rights in Chile and 10% of the rights pending allocation. In the case of the Aysén Region, ENDESA owns 98% of the current rights and 16% of the pending rights (Prieto and Bauer, 2012: 137-138). In this way, ENDESA controls the installation of hydropower projects, the possible electric supply and therefore the price of electricity. ENDESA generates about 68% (4,688.8 MW) of the total potential for hydroelectricity installed in the SIC, followed by Colbun (17.9%), Aes Gener (5%), Ibener (5%), Puyehue (1%) and others (5%).

Moreover, the electricity law allows the installation of any power station whenever the interested party wishes and without the requirement for any special previous administrative authorization (Electric Law, Article 4). The idea of private freedom to generate power is strengthened by the fact that the infrastructure for electricity is not considered as a use of land that is susceptible to regulation by the land use planning mechanisms. Thus, the electricity companies are not obligated by any legal instrument to decide the allocation, construction conditions, maintenance, or operation of their infrastructure (Prieto & Bauer, 2012: 139). In this way, the hydropower companies had a special status for the neoliberal project which allows them for example: rights to enter private and public land to study the viability of a hydropower project, and they can flood other people's land for the construction of reservoirs even against the will of the proprietors.

The critical discourses that today reject the construction of large electricity projects in Chile can be traced to a lack of social legitimacy for the privatisation process. Privatisation in Chile happened in an authoritarian and non democratic government, without a Parliament, and with limited debate. This has enabled social, political and economic groups to access privileged information, allowing them to act very quickly with a lack of transparency that could perhaps

not be tolerated in a democratic society (Mönckeberg, 2001; Marcel, 1989). I think this could explain the discourses of the opposition which are an integral part of today's social and political resistance to large electricity investment projects. The critical discourse argues that the dictatorial government "gave away" national property to a few select individuals, national patrimony was given away to the private sector; and there is contradiction in private sector participation in the electrical industry given that electricity is a public utility (Bernstein, 1991).

Part of the reaction against privatisation has to be understood in the context of the structural adjustment proposed by the IMF to Latin America and other countries. However, in the case of Chile, the justifications for privatising state owned companies were ideological more than technical: the state companies were efficient and profitable even during the 1970s and they never reached a high level of bureaucratisation and politicization, because the Chilean companies were created by technical people and this gave them stability over any ideological orientation. The privatisation of state companies in Chile was an ideological measure associated with neoliberalism against the exaltation of public property which justified the nationalisation in the early 1970s (Marcel, 1989: 7). According to Marcel, this idea about the ideological role of privatisation is related to the defeat of Pinochet in the election of 1989, which meant an acceleration in privatisation: ENDESA, ENTEL (telephone company), Laboratorio Chile (pharmaceutical company) and LAN (airline) were privatised, meanwhile other such as the water companies, the Santiago underground company, ENAMI (mining) and ENAP (oil) started their privatisation process.

The critical discourse about the privatisation of the electricity sector in Chile came not only from the left-wing. Political resistance could be felt even from groups which supported the dictatorial government. Some of them feared that they would lose the ability to manage the industry politically; others were company employees who feared for their jobs and the so-called "social achievements". There were also company professionals and executives who controlled the day-to-day operations of the companies as a result of the weak, temporary, directors appointed by the state. There were sectors within the Armed Forces which perceived the electrical industry as being of particular strategic importance, others who were embedded in a statist culture, and finally, there were business groups who perceived the state-owned electrical companies as a vehicle for obtaining subsidies through prices (Bernstein, 1991: 197-198).

Critical discourse has also targeted the strategies of privatisation. The strategy of popular capitalism was in fact limited in terms of percentage (together they only had the right to possess 20%), and in terms of control over the decisions, because they were marginalized from the directions. Thus, popular capitalism was a means of having the resources to influence the private sector, to have cohesion for the transformations and to co-opt the trade union leaders. At the same time, the money to privatize came from the incomes of the workers through the AFP system and advance compensation for years of service. With time, the shares bought by the workers were sold to holdings such as ENERSIS, and many of the workers who advanced their compensation for years of service to buy shares were fired in the reformation of the new private companies, without any other compensation. At the same line, the money to buy the state companies came from credit given by the State Bank, so basically the state lent the money to buy its own companies (Mönckeberg, 2001).

But perhaps one of the most significant elements in the critical discourse is the identification of how political and economic power are concentrated in a few hands related to the right-wing. The situation and problems of the electric sector are not technical or natural, but political. This is one of the explanations as to why some of the scholars applaud the achievements in economic terms (del Sol, 2002, 2010) while others highlight its failure in social, geopolitical and environmental terms (Sohr, 2012). The majority of the key actors are still in key positions today, which were created, developed and consolidated due to the privatisation.

Mönckeberg (2001) identified four kinds of key actors:

- The ideologist of the model for whom the privatisation was a fundamental strategic objective for power perpetuation
- Ministers and ministerial employees who designed the programs and made the privatisations possible
- Advisors of private policy and the regulator frame
- Workers and public employees of the privatised companies who were a deciding factor in the execution of the programmes

All of them are in general civil engineers, military people or with right-wing sympathies, former military men and employees of the dictatorial government, who controlled former state

companies in representation of AFPs. Mönckeberg called this group the *Alliance UDI⁶-Chicago-Military* (see chart n° 8). But this group not only concentrated power in the electricity sector; they also did so in health, education, security, building, mining, forestry and the media.

If one of the objectives of privatisation was to break the electricity monopoly of the state, the resulting privatisation of the electricity sector was the concentration of economic and political power on the generation, transmission and distribution activities in the same business societies: ENERSIS. Thus, the electric sector reflects the economic structure of neoliberal Chile. This sector is concentrated in a few hands which obtain considerable profit: three generation companies (ENDESA, Colbun and AES Gener) control 90% of electricity production (Sohr, 2012: 30). This situation has forced a social tension between to accept expensive and environmentally damaging projects or the possibility of facing an energy crisis which could leave the country in “darkness” (as is shown by a HidroAysén TV advert of 2011).

⁶Independent Democratic Union (Unión Demócrata Independiente), the largest right-wing party in Chile.

CHART N° 7. PART OF THE POLITICAL AND ECONOMIC STRUCTURE IN THE ELECTRICITY SECTOR

Name	Position	Link to Electricity Sector
Hernan Büchi	Treasury Minister (1985-89) Presidency candidate (1990)	ENDESA (vice-president, 1979) ENDESA (president, 1982)
Jorge Cauas	Treasury Minister (1974-76)	ENDESA (1952-1968)
Carlos Caceres	Treasury Minister (1983-84) President of the Central Bank (1982-83) Minister of the Interior (1988-90)	ENERSIS (1997) CHILECTRA METROPOLITANA (1993)
Bruno Philippi	Member of the National Electricity Commission	Pilmaiquen (today) CHILGENER (1990) GENER International (Colombia and Argentina, mid 90s)
Juan Hurtado	Büchi Advisor Business Manager	ENDESA (early 80s) CHILECTRA (1977-81) CHILMETRO (1982-83) CHILQUINTA
Jose Piñera (brother of the current President of Chile)	Labour Minister (1979-80) Mining Minister (1981-82) One the creators of the AFP	CHILMETRO (1987) ENDESA (1992-1993)
Alvaro Saieh	Pro-president of University of Chile Dean of Economy Faculty	CHILGENER (1983-84)
Jose Yuraszeck (so called “the Czar of Electricity)	Business Manager	CHILMETRO/ENERSIS (1983-91) ENDESA (1991-97)

Source: Based on Mönckeberg, 2001.

5.2.1. Hydroelectricity

The hydropower discourse is not only technical, it is also geopolitical. It is argued that having few reserves of fossil fuel, Chile depends on domestically sourced energy. Hydroelectricity provides energy sovereignty and national security, particularly as imports of natural gas from neighbouring Argentina became an insecure form of energy dependence in late 1990s (Latta & Cid, 2012; Tokman, 2008). Even though Chile has coal sources, since the years of Pinochet there has not been investment in this source, and today it is cheaper to import coal from Colombia than to develop a national industry (Fazio, 1997; Bauer, 2002).

But if geographical and climatological conditions are an explanation for the Chilean hydroelectricity potential, they are also the main risks. The importance of hydroelectricity for

generation creates an element of risk because of the variability in annual hydrology. In a rainy year the capacity of generation could be 30,000 GW, while in a dry year it could be close to 10,000 GW (Tokman, 2008). The worst episode of drought in Chile occurred between 1998 and 1999, as result of lack of rain and the occurrence of “La Niña” phenomena, which directly affected the generation of hydroelectricity. The dams located in the centre-south of the country did not have enough water to produce energy, and the thermoelectric power station *Nehuenco*, property of Colbún, was not running. As result of this situation, the Government generated a policy of electricity rationing, and instigated changes in the Electricity Law mandating the electricity companies to take responsibility for lack of service and to not consider drought as an event of “force majeure” or an “unforeseen event”⁷. At the same time, this situation also brought about transformations in the electricity supply using gas imported from Argentina, and contributed to an important political crisis (together with the Asian crisis and the drop in the price of copper).

The future of hydropower development in Chile lies in the Region of Aysén, and in general terms Patagonia (see figure N° 33). Aysén has less than 1% of the nation’s population and more than 30% of Chile’s total precipitation, runoff as hydropower potential (Bauer, 2009: 585). ENDESA has subsequently sold some of its water rights to other companies such as Colbun, AES Gener and Xstrata, but it continues to be the most important owner, especially in Aysén (Latta and Cid, 2012: 175). Also in Patagonia, the Australian company Origin Energy and the Swiss Xstrata are developing “Energía Austral” to build hydroelectric power stations in the Cuervo, Blanco and Cóndor rivers with 1,000 MW. The energy which may be produced in Aysén will be connected to the SIC and its use will be for industry, services and residential purpose.

The aim in Bachelet’s government, according to the former Minister of Energy, was to increase hydropower to 34% (4,400 MW) in the SIC and SING, through the Patagonian HidroAysén and Energía Austral projects (Tokman, 2008). The same line has been followed by Piñera’s government, which wants to create a special plan for Chilean Patagonia to mitigate and protect the environment and heritage, and at the same time, to develop the hydroelectricity potential from Palena to the south (National Energy Strategy, 2012). This discourse about the expansion of hydroelectricity in Patagonia was presented to the Nation in the annual speech given by Michelle Bachelet in 2008:

⁷ Artículo 163 inciso 4° de la Ley General de Servicios Eléctricos (DFL 4/20018).

“As I have already said: as time passes we will need more and more energy to keep growing. We cannot afford to waste resources in terms of electricity generation. And especially we cannot do so in times of climate change, when all countries must promote less contaminant sources, as for example hydroelectricity... We will go ahead resolutely. And we will do so with absolute respect of the environmental laws, and with the celerity that Chile demands” (President Michelle Bachelet, speech to the Congress, 21th of May, 2008; my translation).

A similar idea was presented by Sebastian Piñera three years later in the same ceremony, but after the approval of HidroAysén:

“Consequently, we cannot renounce thermal or hydropower. We know very well that the approval of new power stations and transmission lines generates passionate debates. The easier way would be to postpone the decision making and leave the problem for the next government to solve. But to act in this way would endanger the deepest challenge and most deeply rooted desire: to become a developed country and to overcome poverty. A President must be capable of looking ahead, beyond the next elections and to accept responsibility towards his country... I am clear about my responsibility to the environment, but I also am clear about my responsibility to development! ...Chile is a wealthy country in terms of water resources and water is clean and renewable energy. It does not produce polluted emissions or the green house effect. Having access to hydropower generation during the past fifteen years, 106 thermoelectric power stations have been approved, most of which use coal or oil with the highest contamination rates and without the due environmental protections... But also, hydroelectricity generation is cheapest. This is very important, because the cost of energy in Chile is double that of neighbouring countries and over 50 percent more than in developed countries. This is paid for by all Chileans, every month in their electricity bills, and also by the economy with a loss in competitiveness. We cannot say what kind of energy we need, consumed in abundance and, at the same time, opposing all its sources” (President Sebastian Piñera, speech to the Congress, 21th of May, 2011; my translation).

To reinforce these ideas, the *National Energy Strategy 2012-2030* proposed by the government of Sebastian Piñera aims: *“to develop clean, renewable energies, which are also abundant in our country. In fact, water is a major component of our electricity matrix, and in 2011 it represented almost 35% of the energy produced. We are, therefore, decidedly*

promoting its development because of the great potential offered by this resource” (National Energy Strategy, 2012: 9; my translation).

In another part of the quoted document, Piñera’s government argued: *“We are firmly convinced that the hydroelectric component of the matrix must continue to grow steadily and that hydroelectricity will be the main source of electricity for Chile in the coming decades”* (National Energy Strategy, 2012: 24; my translation).

With this institutional support for hydropower development in Patagonia, one hegemonic discourse has finally been constructed: *“Chile is a developing country, which has the right to progress and pay attention to its economic growth. Economic growth is closely related to the necessity for energy. The urgent necessity for energy must be supplemented with a criterion of sustainability, efficiency and safety, and we have the conditions to do so. As a country we must have a solution for the dichotomy: gas/coal/diesel imported, or on the contrary, resources that are renewable and that are our resources* (water and non-conventional renewable sources) (HidroAysén, 2007: 21).

In this way, the development of Chile is tied in with the realisation of *hydropower*. The future of the country has been inevitably linked to the success of private investment, with a framework and the support of the government. A private project like HidroAysén has been embedded as a national project, to do it is a responsibility of the government, and to accept it is the duty of the Chilean people. Any disagreement with HidroAysén is an obstacle for the development of the country. But since 2011, this hegemonic discourse that belongs to the centre left-wing and the right-wing started to be challenged: the social legitimacy of hydropower development was refuted in a climate of social mobilization against the neoliberal model, and hydropower was assimilated as *lucro* (personal profit), and against the will of the people.

FIGURE N° 33. HYDROPOWER PROJECTS IN PATAGONIA
(in orange under construction, in green to be constructed, and in red potential projects)

Los Rios Region



Los Lagos Region



Aysén Region



Magallanes Region



5.2.2. The HidroAysén Project

The fundamental reason for the HidroAysén project is to support the economic growth and development of Chile. The project will add energy to the SIC, where more than 90% of the Chilean population is located, as well as the mining, forestry and fishery activities. In the next years there is expected to be an increase in the mining and industrial activities in the centre of Chile, especially in the centre-north. According to the Chilean Commission of Copper, the consumption of energy by the copper industry will be increased by 7.4% per year, from 7,864 GWh in 2010 to 16,063 GWh in 2020 (Central Energía, 2012). The state company CODELCO, the main producer of copper in Chile, consumes 8.2% of the SIC (and 23.4% of the SING). The National Energy Commission (CNE), for its part, determined that total demand for energy in the SIC will increase 5.5% from 43.431 GWh in 2011 to 78.625 GWh in 2022 (Minería Chilena, 2010). Today, hydroelectricity represents 64% of the SIC, and thermo electricity 36%. In the words of the HidroAysén campaign: *“If Chile does not double its energy today, in ten years time it is going to operate at only half of its capacity”* (HidroAysén, TV Spot, 2011c).

The Executive Director of HidroAysén, Daniel Fernández, said in 2011: *“it is necessary to input to the Electric Sector in Chile 12,000 MW to sustain the rhythm of the economic growth of Chile in the next fifteen years”* (Daniel Fernández, 2011b). The HidroAysén project will add only 25% of the supply, so it is necessary to develop all the sources of energy in the coming years, mainly hydroelectric, thermo and nuclear. The non conventional renewal energies such as wind and solar are necessary too, but as an alternative, because they are intermittent and they can act as a complement, so they cannot be the main sources to produce energy.

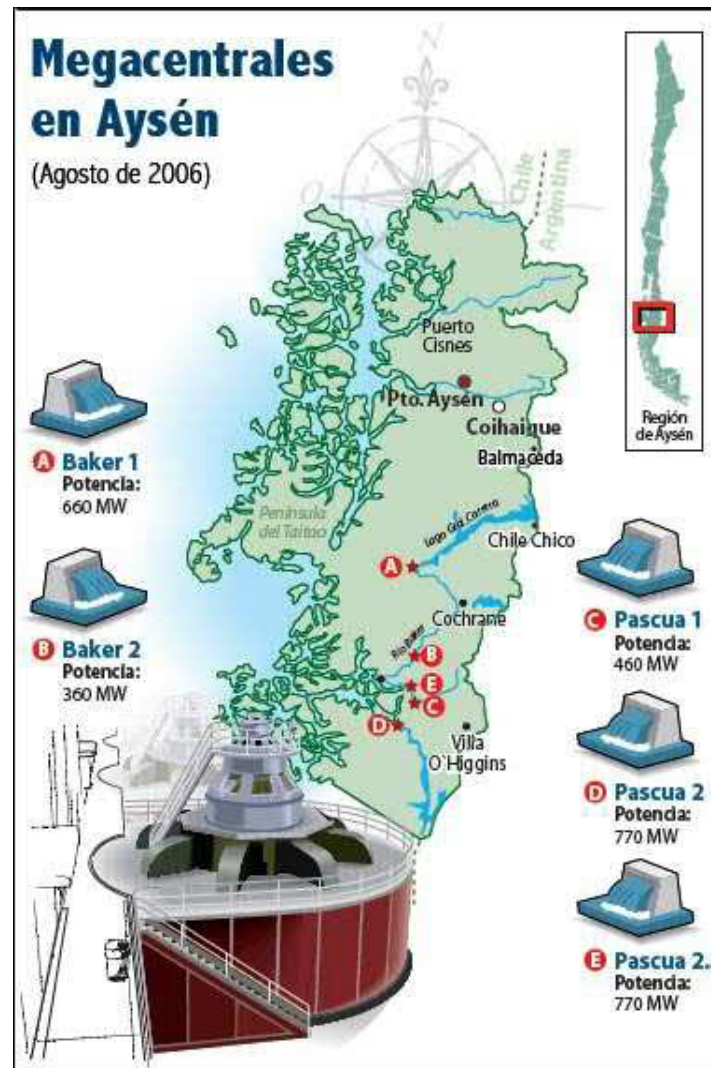
From 1947, at the beginning of the state-led modernisation process, the recently created public company ENDESA started studies in the Baker and Pascua rivers in order to exploit their potential for energy production. In the 1960s and 1970s, other studies complemented the information about the energy potential of Aysén, with an original project that could flood 30,000 hectares. In 2005 ENDESA, in the hands of ENDESA Spain, presented a project to flood 9,300 hectares in the basins of the Baker and Pascua rivers, in order to install dams. During 2006, HidroAysén was born as an alliance between ENDESA and Colbún, bringing together two of the three most important actors in Chilean energy production. Over the next

few years the Base Line studies and the Environmental Impact Assessment were started, with the aim of starting the construction of the dams by 2009. After a process of comments for public institutions, environmental NGOs and the local community, the original project was changed, reducing the area to be flooded to 5,910 hectares, and finally it was approved in May of 2011 (see figure N° 34). Currently the project is stopped by Colbún who have argued that there are no political conditions to develop HidroAysén, and the Chilean government must send clear signs of support in order to ensure the energy development of the country and create a national energy policy (Economía y Negocios, 2012).

The second main argument for HidroAysén is the physical geography of Patagonia and its natural hydroelectric condition. The discourse deployed by HidroAysén aims to highlight the vulnerability of the hydroelectric supply. With the exploitation of Patagonian rivers the hydroelectricity supply could have less variability because of their water regime. This argument is in direct relation to the impact of climate change over the lack of precipitation, the lack of snow accumulation in the high peaks, and the hydro volatility in Central Chile because of El Niño/La Niña. In the case of the centre-south of Chile, the peak of the rivers is in winter because of the rain, meanwhile in Patagonia the peak in the amount of water is in summer, because of the thaw. Thus, HidroAysén (and Energía Austral) may add hydropower to the electricity system, located in the centre of the country, even in those months of seasonal drought.

HidroAysén recognises that other sources of alternative energies such as sun and wind are a good option for Chile, but because they are not constant they are insufficient: “*Water has the energy for Chile, and Chile has water in Aysén*” (HidroAysén, TV Spot, First Semester 2011). According to HidroAysén, Patagonia has 14,533 MW of hydropower potential, of which 9,383 MW is in Aysén. This situation stems from the northern and southern ice fields and the presence of large lakes, namely General Carrera and General O’Higgins, which act as natural reservoirs of melt water and rain. Also, the rivers of Aysén are plentiful and fast-flowing, with minor fluctuations and stable flow, which goes to the ocean through narrow basins that can be interrupted easily (HidroAysén, 2007). Thus, the Baker and Pascua rivers have large low flows and less variability during the whole year, even in the dry season. This allows them to act as a complement to the Chilean rivers located in the centre-south of the country, bringing stability to the SIC. With the addition of the Baker and Pascua rivers the variability of water to produce energy will be reduced from 23% to 9% (HidroAysén, 2007).

**FIGURE N° 34. THE HIDROAYSÉN PROJECT: LOCALISATION OF THE FIVE DAMS
(2 IN THE BAKER RIVER, 3 IN THE PASCUA RIVER)**



Source: La Nación, 2008

The third main argument tries to link nationalism with energy independence. HidroAysén presents itself as a Chilean national project (Hernán Salazar, Former Executive Director of HidroAysén, 2008): the claim is that the project is 70% Chilean, because it belongs to Colbún, the AFPs and ENDESA (Daniel Fernández, Executive Director of HidroAysén, 2011). The aim of this is to reduce criticism about the role of transnational capital in the Chilean economy, and to create a national identification about the project. To highlight the national value of HidroAysén, publicity identifies how the project will use water, which is presented as

100% Chilean, as a clean and renewable fuel, which will help in reducing the dependence on fossil fuels such as gas, diesel and coal.

**FIGURE N° 35. HIDROAYSEN CAMPAIGN:
CLEAN, RENEWABLE AND CHILEAN**



Source: www.hidroaysen.cl

The fourth main argument is environmental protection. HidroAysén promotes itself as part of a strategy for sustainable energy that is renewable, clean, competitive and sovereign. It helps to reduce the burning of fossil fuel, because the HidroAysén project means the substitution of 16 million of tons of CO₂ per year if the same amount of energy is produced with coal. At the same time, HidroAysén will be a reliable source; the production of hydropower is not affected by economic and geopolitical externalities, such as the price of oil, and it is more predictable than wind and solar energy. Finally, the water is Chilean, its presence is abundant and it contributes to the energy independence of the country (today Chile imports 72% of the energy which is consumed using oil, coal and gas), it takes advantage of water resources in a similar way to other countries such as Norway which produces 100% with water and Brazil that produces 90% with the same resource (HidroAysén, 2007). As the President of ENDESA, Jorge Rosenblut, said: “*Water is the oil of Chile*” (Rosenblut, 2012).

In an interview the Executive Director of HidroAysén, Daniel Fernández, argued that HidroAysén is equivalent to seven thermo power stations, or four nuclear stations. And in the near future Chile will need four HidroAyséns more to supply the electric system (CNN, Chile 2012). Thus, Chile has to develop all its hydroelectricity potential in order to avoid the use of more polluting electricity production.

The fifth main argument for building HidroAysén is efficiency. Given the natural condition of the region, it is possible to produce with a world-class level of efficiency, flooding just 5,910

hectares: calculated as GWh per year per kilometre squares, the efficiency is 314, which is far superior than other hydroelectric projects in Latin America, such as Tucuruí in Brasil (23 GWh per year/km²), Itapú between Paraguay and Brazil (71,5 GWh per year/km²), and even in comparison with other dams in Chile such as Machicura (75 GWh per year/km²) and Ralco-Pangue 150 (GWh per year/km²). The discourse of efficiency is reinforced by the comparison between the large Rapel dam, located in the centre of Chile near to Santiago, and built by the state-owned ENDESA in 1968, which flooded 8,000 hectares and produces 377 MW, while HidroAysén is going to flood 5,910 and will produce 2,750 MW. Moreover, 1,900 hectares corresponds to the current bed, so basically the project will increase the flow by 4,010 hectares (HidroAysén, 2007: 32-33). According to the company, to produce the same 2,750 MW of the HidroAysén project with another renewable source it is necessary to occupy more surfaces. With wind generators it would be necessary to occupy between 90,000 to 100,000 hectares, with solar panels between 160,000 and 180,000 hectares; and if the option is small dams, the number will rise to 275 ROR power stations.

The sixth main argument for HidroAysén is the development of the Region. The works in Aysén region will imply the installation of camps for almost 4,000 workers that are needed for the construction of the dams, and the construction of an infrastructure to support the project: improvement of Yungay Port, facilities in Mitchell fjord to connect the sea with the Austral Road, the improvement of roads close to the town of Cochrane, the creation of new roads, and the improvement and construction of small airports. All of them would benefit the local communities indirectly.

There will also be direct benefits for the local communities:

- Development in the local economy mainly in the service sector, such as stores, shops, hotels and transportation.
- Employment.
- Education and training to stimulate the labour force and to support traditional economic activities.
- Improvement in regional knowledge, especially scientific and concerning environmental protection.
- The opening of new roads which can improve tourism to the ice fields, mountains, and the new lakes.

- The support the local communitarian projects to preserve culture and environment (such as the zone of research and conservation of Huemules).
- The reduction by half in electricity bills (today the people of Aysén pay the most expensive electricity of the country). This energy will not be the energy produced by HidroAysén.
- To promote local participation through the process of “Open Houses” in Cochrane, O’Higgins, Tortel, Chile Chico, Puerto Guadal, Puerto Bertrand, Puerto Tranquilo and Coyhaique, and dialogue to understand the requirements of the community.

There are other countries such as Canada, New Zeland and Norway which share similar characteristics with Patagonia: seasonality, extensive land and extreme climate, zones which have difficult access, large bodies of water and low population. One of the aims of HidroAysén is to improve the economic growth and development of Chile in that way, exploiting its hydroelectric potential as a synonym for development.

Despite these potential benefits, one of the main controversies of the project is the transmission line. The electricity line of HidroAysén has to connect the generation activities in Patagonia to the core of consumption in the centre of Chile where the SIC is located. To do that, the company has to install a transmission line of 1,912 kilometres, which means it will be one of the largest in the world. This part of the project does not have environmental approval, and is waiting for the “electric highway” proposal of the government. In other words, the dams were approved separate from the transmission line. The current information about the electricity line is this: the transmission line will have between 1,500 to 1,700 electricity pylons of 65 metres each, and a strip of 70 metres wide, and will extend from Cochrane and Chaitén (660 kilometres), and from this part to Puerto Montt there will be a submarine line of 160 kilometres (La Tercera, 2011). The same transmission line could be used for Energía Austral, the other hydroelectric project in Patagonia, and together them could be integrated to the SIC by the public “electric highway” (Radio Bio Bio, 2011). According to HidroAysén, the transmission line will not cross the tourist zones, and will not be visible for a large portion of the Austral Road. In Coyhaique, the capital of Aysén, it will be possible to see the electric pylons, and in other parts as mitigation measurement, the zone that will surround the line will be reforested to conceal it from residents.

In general terms, HidroAysén presents itself as a project that is necessary if Chile wants to have a solution to the dilemma of energy crisis, economic growth and climate change. In this

way, hydroelectricity is the future of sustainable development in Chile. But, at the same time, HidroAysén makes visible how it is absolutely necessary that the state plays a role in the coordination and planning of future development of Chile. The *hydropower* constructed in a discourse of free market, non-intervention of the state, efficiency and competitiveness, today is demanding intervention by the state in the coordination of private companies. The main role of the state means to lead the dialogue about the future of energy in Chile between different actors, including local communities, environmentalists, public authorities, political actors and electricity companies, and also promoting hydropower development via the project of an “electric highway”.

Moreover, the intervention of the state is today central to solving the problem of social legitimacy and “judicialization”, but it involves deep political and economic changes in Chile. The increase in social mobilization demanding an end to personal profit (*lucro*) in the Chilean economy, more participation in the decision making related to large investment projects, and more representation at local, regional, and national levels has one target: the Chilean Constitution. A change in the Constitution implies future changes in the Water Code and Electric Law, and in the whole material and symbolic infrastructure of the neoliberal system, threatening the alliance between UDI, Chicago and the military, and the power of the different economic groups which were born or were supported during the dictatorship.

However, as Daniel Fernández said: “*This project is not a plebiscite; this project is approved if it meets the requirements of the law and technical agencies*” (Fernández, 2011, interview with Jorge Navarrete). But today, more than ever, decisions in the electricity sector are not simply technical or neutral, but political, and they have to be understood in a climate of increasing social mobilization in Chile, especially in Patagonia.

Summary

In this chapter I have explained the conditions of possibility for the construction of dams in Patagonia through the territorialisation of the neoliberal policies in hydroelectricity, and the constitution of a *hydropower*. I have shown how the current electric companies, ENDESA (ENDESA Spain/ENEL Italy) and Colbún, are the result of a systematic process of decomposition of the state goods, in order to increase the efficiency and competitiveness on a technical and economic level. These processes were constitutionalised according to a

neoliberal framework which radically transformed the social, economic, cultural and environmental life of Chile, and put natural resources (such as water), and the responsibility of development (such as generation, transmission and distribution of energy), into private hands. But I have also argued that privatisation of the electric companies has been used to increase the power of a political elite, who took the control of the companies and developed a national and international strategy of concentration of political and economic power. This power started to be exercised in those spaces with comparative and competitive advantages, as in the south of Chile and today in Patagonia. In other words, a *hydropower* was generated and supported, which has increased and exercised its power in alliance with transnational companies. Thus, ENDESA and Colbún have started the transformation of Patagonia, assuming their responsibility as developer of the country, under a discourse of economic growth and sustainability, which has allowed them to concentrate on more economic and political power.

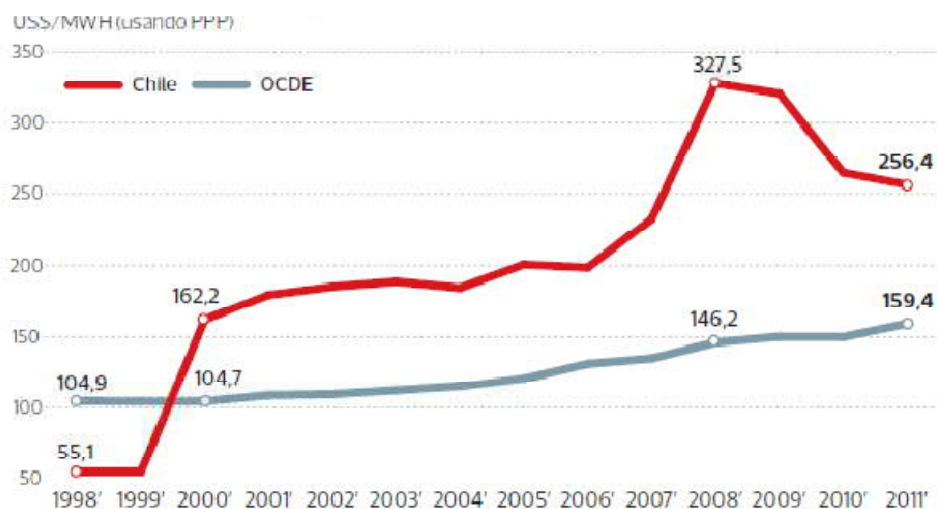
It is important to highlight the dramatic scenarios of the electricity discourses: the global economic crisis, a national energy crisis and climate change. To face these, *hydropower* states that Chile must act now, developing a clean, safe, sovereign, and efficient strategy embodied in hydroelectricity represented by HidroAysén, and also by Energía Austral. Politically, the link between development and sustainability is strong: the discourse says hydroelectricity is the way to create wealth without affecting the environment, in comparison with fossil fuels. But at the same time, the development of hydroelectricity represents a commitment to the economic and political forces in charge of the neoliberal model. The strengthening of hydropower is a political, ideological and environmental measure, which means to recognize the central role of the state in supporting this kind of strategy, supposedly highly competitive and efficient because of the removal of any public control or ideological barrier.

The discourse of hydropower says that powerful groups had the right (Electric Law) and the rights (Water Code) to exploit water as a commodity, through an alliance between the public and private sectors in terms of projects approved and political signs such as the electric highway in a frame of National Energy Strategy. Today, as never before, there is capital and a good investment scenario, to secure the monopolies in generation and transmission in Chile. The problems are about the material territorialisation of the investment projects: there is a question over the social legitimacy of the electricity sector, a loss of legitimacy of the environmental authorities that approved the projects, and the creation of social movements which negotiated with the government without any recognition in the Constitution.

The situation and problems of the electricity sector are not technical or natural, but political. The General Law of Electric Services of 1982 established three priority tasks: economic operation, the security of supply, and clean production. But today Chilean energy is expensive (one of the most expensive in the Latin American region and developed countries, see figure N° 31), the supply is not guaranteed, and the electricity generation is dirty because of increasing carbonisation (Sohr, 2012: 31). During 2011, 70% of the electricity generation was produced by thermo power.

ENDESA and Colbún constitute a *hydropower*; they are the direct result of the imposition of neoliberalism in Chile and their position has been warranted by the Chilean Constitution, the Water Code and the Electric Law. The two companies control most of the *non-consumptive water rights* of the Chilean rivers and are the owners of the former public hydroelectric infrastructure; they are developing more facilities reinforcing their competitiveness, they have the political support of the different political coalitions from the centre-left wing to the right-wing, they have the discursive support of scholars and technicians about the urgent development of hydroelectricity to hold up economic growth and the development of Chile, and to mitigate climate change. Thus, the exercise of *hydropower* in Chile does not take place only in accordance with the natural configuration of the country, but also reflects economic and political characteristics.

FIGURE N° 36. PRICE OF RESIDENTIAL ENERGY CHILE AND OCDE



Source: La Tercera, 2012.

Hydropower can build dams in Patagonia because it meets all the conditions, through a framework which is legal, economic and political. According to this discourse, Patagonian hydroelectric potential is necessary for the future and desirable in the current economic and environmental scenario, because of its competitiveness, efficiency and sustainability. And the construction of HidroAysén will increase the *hydropower* of ENDESA and Colbún even more in the Chilean electricity system, economy and politics, and also their position in Latin America (and in the case of ENDESA/ENEL in the global trade).

However, the consensus constructed and maintained about the role of hydroelectricity for the development of Chile has been broken with the attempt to territorialise the HidroAysén project in Patagonia. Four main discourses had emerged to contest this hydroelectric project, making visible technical, environmental, social, cultural and regional tensions: 1) The consolidation of Patagonia as discursive ecological formation oriented to environmental protection and the generation of local development through eco-tourism and other economic activities which are better suited with the environment and its “natural conditions”, 2) Anti-dams NGOs, environmentalist organizations and scholars started to criticize the “conditions of possibility” of the *hydropower*, presenting options such as “energy efficiency” and the necessity to develop non-conventional renewal sources to protect Patagonian environments and to break the *hydropower* monopoly, 3) The large social mobilization against self-profit allowed and supported by neoliberal public policies in education, large investment projects, health and the pension system, among others, 4) The regionalist movements in Patagonia (and in the north where the mining companies are located) arguing for more public investment in social services and an active role of the state in local development.

In the next chapter I will focus my analysis on understanding the discursive construction of Patagonia in environmentalist terms, and the incipient formation of an *ecopower*. In this process a dominant discourse about a pristine and natural Patagonia has been consolidated, based on previous social construction and supported by the idea of nation and nature as integral part of the territorial identity of Chile. Patagonia has been presented as a *Reserve Life*, a territorialization to conserve, to save for the future. The defence of Patagonia’s environment carries colonial and postcolonial content, and it implies political economical transformations of the environment for production activities based on tourism, monopolising landscapes and spatial practices.

Chapter 6. Counter-territorialisations in Chilean Patagonia

In previous chapters I have developed a genealogy of Patagonia following the territorialisation of the colonial, postcolonial and neoliberal state, in order to understand the historical, cultural, political and economic content of the HidroAysén conflict through the creation of dominant narratives. This last chapter will focus on the current discursive construction of Patagonia through the emergence of an environmentalist discursive formation (which I called *ecopower*) from which part of the rejection to HidroAysén project is being organized, and the existence of subaltern discourses constructed by the Patagonians who live in the places that could be transformed by the construction of dams. These discourses that contest territorialisation constitute a “counter-territorialisation” (Isager & Ivarsson, 2010; Lestrelín, 2011), that shows different representations of environments, local land-uses, cultural practices and the everyday life of communities. *Ecopower* is important because it is contesting the state classification of territories, allowing for different practices of management of the natural resources and changing the stereotype of local communities.

I argue that the HidroAysén conflict has to be analysed in terms of how the social construction of Patagonia has been understood as a cultural artefact, in order to contextualize the historical-territorial inequalities from which neoliberalism has been exercised. My main argument is that the conflict in Patagonia is more than an environmental issue, because it is related to historical inequalities, territorial exclusion, economic concentration and the lack of democracy, which could be expressed in environmental terms. The HidroAysén conflict is connected to the distribution of power in Chile, which has to be understood as the capacity to create consensus and transform symbolically and materially the space of “others” (indigenous, peasants and poor communities) in a non democratic way, through the use of laws and institutions in order to create self-profit. In this sense, the HidroAysén conflict could be understood from three main elements: a) it is a clash between the persistence of colonial discourses mobilised by national and transnational elites, b) it is a clash of discourses/power/knowledge within the elites about the strategies of economic growth and development of Chile in which Patagonia becomes a symbol (*hydropower* against *ecopower*), and at the same time, c) it is a clash between those that can create representations and transformations (located in the centre of the economic, political, cultural and territorial power) and those who live in historically excluded territories.

Thus, Patagonia appears as the result of a tension between two different ways of understanding this territory which have emerged from the palimpsest of historical social constructions: the “natural condition of Patagonia” (mobilised by the elites) and the discourse of territorial “inequality” (mobilised by the regional movements). This tension is at the core of the HidroAysén conflict, but it is the result of a historic and probably systematic policy of exclusion. In both discourses there is no discussion about economic mobilisation and the symbolic and material transformation of Patagonia and Patagonians; the conflict is about who will be the agent of transformation and how the transformation of “Patagonian nature” will come about.

Patagonia, and especially Aysén, has always occupied a marginal position in Chilean history. For almost four hundred years Patagonia has been understood as an empty space, and only in the last one hundred has it been constructed as a territory full of resources. “*Empty but full*” (see Bridge, 2001) was the discourse of the Chilean state to defend Chilean Patagonia against the Argentineans, and nature has been constituted as the central characteristic of Western Patagonia until today. The discourses of “natural condition” are focused on the cultural representations of Patagonian physical geography, allowing for the two main “development projects” for the region according to the neoliberal framework of Chile: *hydropower* and *ecopower*. I understand this *ecopower* as a socio-ecological force legitimated by discourses about the central role of the environment in the development of Chile, through the accumulation of land for conservation and the alternative uses of the environment and resources destined to tourism by private actors (global, nationals and locals). These discourses have implied the transformation of Patagonia, as an inexhaustible source of nature and beauty to produce wealth, leading to the commodification of water, rivers and basins in environmentalist terms. From this, it has been possible to achieve the current productive transformation, with projects on conservation and tourism such as *Pumalín* and *Estancia Chacabuco* the private parks (the former cattle company of the Baker), and tourism entrepreneurs, which has reinforced and deepened the structure of power of Chilean society in Patagonia.

According to my analysis of interviews with local authorities, producers, entrepreneurs and settlers, the discourse of “inequality” is based on the fact that the region of Aysén presents historic-ecological conditions based on *exclusion* and *isolation*; Aysén is the belatedly populated region of Chile, is the second largest region in the country with a small population highly concentrated in the urban centres of Coyhaique and Puerto Aysén. Until today the

region did not have land connection with Chile, and the lack of connectivity has meant high levels of isolation mainly in rural areas. All these critical elements help to understand the everyday cultural construction of Aysén, created from the idea and materiality of exclusion and isolation. The lack of public and private investment, the inexistence of large investment projects, the lack of competitiveness of traditional production based on cattle and forestry, and the extreme necessity of public support in rural areas, has constructed political ties of *welfarism* and *clientelism* between the local communities and the government. Until today, it has been impossible for small and medium-term entrepreneurs to produce from Patagonia without the support of the government or other economic agencies. Given the climatic conditions and the isolation, the production, transportation and commercialization of commodities is very expensive. At the same time, there are no important public and private investments which could improve the capacity of traditional production (for example there are not slaughterhouses, wool factories, refrigeration and packing plants, and sawmills). All these conditions have been socially produced. If the region today is not productive it is partially because the state has never turned it into a productive place, perhaps because the interest of the state was more focused on geopolitical defence than the social and productive development of this territory. This could explain the support for the large cattle companies in the last century and the existence of large extensions of land without human occupation but declared to be national trust. Thus, Aysén was recognized by the government as a “*Reserve of Life*” and in general terms Patagonia has been recognized as part of the natural heritage of Chile.

To improve the social and economic situation of Patagonia, and in general terms the inequalities of Chilean society, the state has promoted the figure of the *local entrepreneur*, who is key to an understanding of the local dimension of the conflict. In Chile, according to a framework for entrepreneur, there is an institutional architecture which highlights and supports individual effort in order to create wealth and productivity (InnovaChile, 2012, Empréndete Chile, 2012). For the Chilean government, the development of a region like Aysén not only depends on large public and private investment projects promoted from above, but also on the individual characteristics and contexts which propel entrepreneurship. In this way, there is a neoliberal conceptualisation of Patagonia in terms of hydroelectricity (from above) and tourism (from below) which seems coherent for the national government. The “nature of Patagonia” is strongly linked with ideas embedded in public policy.

Thus, hundreds of local entrepreneurs in tourism and related services have been created in the last years, which in the case of Aysén have transformed the scenic beauty into a landscape commodity supported by public policy in Patagonia. The creation of entrepreneurs in tourism has been possible because of regional government through its planning and promotion institutions, and with the community, created the trade-mark “*Aysén Reserve of Life*” to promote tourism and commodities that can improve their value because they were produced in a “clean and natural region”. Thus, at a regional level, part of the opposition to HidroAysén is because of environmentality that defends the environment not only as a possibility for business and local development, but because the protection of the Patagonian environment has been mandated by the state. To protect the environment is to secure the future of the nation.

In the next sections I will present the counter-territorialisation perspective through the emergence of the *ecopower* and the way in which the “natural conditions of Patagonia” has been articulated in discourse. Later I will present the “everyday” discourses of Patagonians in order to understand the discourse on “inequalities”. My aim is to analyse the various representations of discourses and to identify the social and political tensions between them. Therefore, the HidroAysén conflict has two levels related to the territorialisation of the state (colonial, postcolonial and neoliberal): the transnational and national scale related to the “natural condition” discourse as a result of the national territorial inequalities based on colonial discourses, and the local, which makes reference to how these historical and territorial “inequalities” work at ground level.

The data to be used in this last chapter came from different sources (all quotations were translated by me):

- The guideline of the regional government: “*Regional Development Strategies*” of Aysén (2000 and 2009), and the “*Aysén Plan*” (2010).
- Fifty interviews conducted in Patagonia during two field trips: the first in 2009 and the second one in 2011 to the area south of the region that could be affected by the dam’s construction (Coyhaique, Puerto Tranquilo, Puerto Bertrand, Cochrane, Caleta Tortel and Villa O’Higgins). The interviews that I am presenting are from the *settlers* (sons of the pioneers), *local authorities* and *tourism entrepreneurs*.
- Official information of *Patagonia Sin Represas (Patagonia without Dams)*. Using its website www.patagoniawithoutdams.com, including the twelve posters “*9 Reasons to...*”, and the book “*Chilean Patagonia without Dams*” (2007)

- Newspapers and journals from 2011 and 2012.

6.1. The Emergence of “*Ecopower*”

Large political-economic transformations, technological changes, and apocalyptic pronouncements of ecological catastrophe have been occupying the global political agenda since the 1980s (Braun & Castree, 1998; Castree & Braun, 2001). Contemporary and dominant discourses seek to articulate the current relationship between nature and society, promoted by global institutions such as the United Nations, the World Bank and the G8 (Escobar, 1996). Thus, mainstream discourses as “environmental damage”, “environmental planning”, “biodiversity”, “sustainable development”, “environmentally friendly”, “ecological footprints”, “global warming” and “climate change”, are governing the everyday life of the global society as a reconciliation between economic growth and environmental concern (Escobar, 1996, 1999). Non mainstream discourses on the environment have also emerged, including ecocentrist approaches proposing to “save” and “preserve” nature. Furthermore, concern about nature is not only related to the environment but also to a broad range of issues such as the genetically modified food, the rights of animals and non-human world generally (Castree, 2005; Braun, 2009). Thus, there are many kinds of environmentalism, often associated with class, race, gender, world division and knowledge and with a different understanding about the discourse of “development” (Martínez-Alier, 2002; Bebbington, *et al*, 2008; Bebbington, 2009; Bebbington & Humpherys Bebbington, 2009).

In historical political ecology the “environment” is understood as the physical environment as a manifestation of power relations, and as the result of material and discursive interactions of different kinds of actors. In this process, powerful actors often impose a political and ecological order over the environment of others, moving to different localities where they repeat the process using socially accepted or public transcripts in order to create legitimacy that articulate the governance of modern economies and societies (Peet, *et al*, 2011). Environmentality has emerged, modifying practices and ways of thinking and understanding the environment. People are concerned about the environment and demand greater knowledge, legal protection, regulation frames and planning (Luke, 1995; Agrawal, 2005).

In this scenario a global anti-dam concern has emerge which gathers the historical experience of different parts of the world, especially the modernisation within the Third World in the last three decades. The World Commission on Dams of the World Bank, the creation of

international NGOs to defend rivers and communities, the organization of social movements and large environmental conflicts, and the interest of scholars has created an anti-dam discursive formation. These discourses highlight, on the one hand, the negative effects of dams on the environment, economy, social relations, cultural ecologies and health of the resettled people; and, on the other, the strength of political and economic groups which promote the construction of dams (WCD, 2000; Kaika, 2006; Swyngedouw, 2007; McCully, 2001; Leslie, 2005; Nüsser, 2003; Turpin, 2008 and Cumming, 1995)

In the case of Chile, I am arguing that environmentalist organizations (among them international and national NGOs), ecologist entrepreneurs (large, mid-term and small), anti-dam organizations, scholars, think tanks and other local organizations can be understood as an emergent *ecopower*. This socio-ecological force promotes a consensus about the central role of the environment in the development of the country through legal reforms and institutions, changes in behaviour, the diffusion of an alternative relationship between culture and nature, the designation of areas for environmental conservation, and alternative uses for environments and resources. At the same time, this *ecopower* is material, because it produces and disseminates knowledge through books, publications and documentaries, public campaigns in the media, and public and private spaces, through the accumulation of land for the creation of private parks for conservation such as those located in Chilean and Argentina Patagonia, and through the use of environments and resources for tourism by private actors (global, national and local). Thus, this *ecopower* implies knowledge, consensus, physical and behavioural transformations, the creation and support of intellectuals and employees, institutional support from the state (environmental laws, institutions, commissions and employees), economic support (international NGOs, sponsors and donors) and social support (local organizations).

This *ecopower* has been applied to Patagonia since the 1990s with great success; it has implied the construction of Patagonia as a “*Reserve of Life*” and an environmental and global commons. I will present the constitution of this *ecopower* through the analysis of an institutional construction of Patagonia, the consolidation of the anti-dam campaign based on environmentalist organizations which support the discourse of the “natural condition of Patagonia” and which challenge public policies, and the formation of local organizations, among them those who work in tourism. My hypothesis is that *ecopower* has been successful in the construction of Patagonia as a simultaneously nationalist discourse of *national heritage* and an environmental discourse of some kind of *global common*, i.e. a resource domain or area which is outside of the political reach of the Chilean state, from where political

opposition against HidroAysén has been created. This construction of Patagonia as a global common leads to a discussion about the equality and democracy of territories and resources challenging the political transition of Chile from an authoritarian structure of power distribution to a new structure about property rights (especially water and the concentration of the electricity system) and connected with global issues, such as climate change.

6.1.1. Institutional construction

For four hundred years the official discourse has been around a “desert”, “natural”, “pristine” and “wild” Patagonia. In the last twenty years, through regional public institutions the “natural” condition of Aysén has been reinforced and promoted in order to produce a strategy of economic growth. I argue that this institutional construction is the basis of current claims about Patagonia, because it allows for the possibility of other representations about its land and people, which reproduces and exaggerates its natural and social conditions. The historical cultural construction of Patagonia started to be challenged and destabilized by HidroAysén and the national government in order to produce hydroelectricity. In other words, the social construction of Patagonia as nature, naturalized today by Chilean society, has clashed with the production of nature promoted by the state and market. The discourse of a natural Patagonia, as an integral part of the nation, and created by the elite in the past years, is not compatible with the development of hydropower promoted by today’s elites, which is in turn identified by Chilean society as a private business to produce self-profit for the transnational companies and the Chilean right-wing.

The discourse of the “natural condition of Patagonia” was promoted during the government of Ricardo Lagos (from the centre-left *Concertación*, 2000-2006) through the “Regional Strategy of Development 2000-2006” (*Estrategia de Desarrollo Regional*, EDR). This document is the guideline for the regional public policy and each region of Chile produces one according to its human, geographical and economic characteristics. In the case of the Aysén Region, the aim was create a plan as an instrument for citizen participation as “*the most powerful sign that the public institution gave to the private sector to discern its investment decisions*” (EDR, 2000; 3). This strategy was synthesized as a “*precise objective-image about the future that all the Aysenians wish for our region*” (EDR 2000; 3). This objective-image proposed was as follows: “*The region of Aysén aspires to be a decentralized region and to obtain a high quality of life, sustained in high and equitable economic growth, which will be based on the conservation of environmental quality and territorial integration*” (EDR, 2000: 11). As the

document says, this image is the result of a “natural evolution” of historic, social and economic events.

The previous development strategy from 1994-1999 was focused on resolving the deficit and access to education, health and housing by promoting small and medium scale production, and by attracting foreign capital. The new strategy was focused on the improvement of the quality of life and the conservation of the environment, through a clean production of food (cattle and salmon) and tourism for international markets. In these terms, “*the main competitive advantage of the region is its environmental quality*” (EDR 2000; 17). Because 76% of regional land is state-owned and 51% (56.000 km²) belongs to the national trust, there are large spaces without economic exploitation which have enormous potential for the development of the fish industry, tourism and forestry through the exploitation of native ever-green forest.

To promote this strategy of development base-line studies were proposed as well as land-use planning, and the training of human resources to improve the region’s economic capacity focused on environmental tourism and services, the environmental management of fishery, environmental livestock production and the management of the native forest. The main actors in this process would be small and medium sized entrepreneurs, with the strong support of the government. During this period of time a set of planning documents promoted by the regional government were developed. Examples of this are: “*Active Region*” and the *Land-Use Planning* with the German cooperation agency GTZ, the ACCA project of conservation and culture with the French Development Agency, and the declaration of General Carrera Lake as a tourist zone, among others. The target of them all was to highlight a development potential based on the natural conditions of the region, tourism, and traditional productive activities developed by small and medium sized entrepreneurs.

Similarly, during the government of Michele Bachelet (from the centre-left *Concertación*, 2006-2010) the new Strategy of Development was approved. This guideline was founded on the principles of sustainability, equity, efficiency, quality, and transparency and communication. *Sustainability* could be understood as a continuation of the previous regional strategy: “*the main competitive advantage of the region is its environmental quality to sustain the production of all kind of goods and services, but in particular those related to the industry of special interest tourism*” (EDR 2009; 15). Here, the aim was to reinforce the slogan of the region “*Aysén Reserve of Life*”, which tied development into the natural environment without

compromising future generations. This principle had to be adopted as a “*moral norm to face each investment initiative which could be proposed by different public services, to be mindful of the environmental sustainability of Aysén*” (EDR 2009; 15). The new strategy recognises that more than 5 million hectares are under the guardianship of the national trust, which represents 30% of Chilean national trust territory: 1.8 million hectares consist of ice and glaciers, and 1.14 million hectares consists of wetlands. 31% of the national’s water is located here representing an extraordinary natural potential for tourism, via the exploitation of water mainly for fishing and energy, and as a natural laboratory for science.

According to the EDR, the objective-image for 2030 should be: “*Aysén will have a high quality of life and a cultural identity consolidated in the sustainable use of natural resources, enriched by its diverse territorial expressions and for the input of new population and activities, with the capacity to adapt and integrate the worldview and rhythms of life of a new economic and cultural process*” (EDR 2009; 138). The main economic activities should be developed by small and medium entrepreneurs in special interest tourism, a sustainable fishery, and agro-forestry, and research activities related to glaciers, water, global warming and ecosystems. At the same time, these activities should be strongly associated with the trademark “Patagonia” which, according to the EDR, is globally identified with the abundance of natural resources, Patagonian culture, and small and medium entrepreneurship.

In terms of energy production, the EDR is focused on the exploitation of renewable energy, encompassing micro-hydroelectricity, geothermic, wind and tidal energy for regional use, contrasting with the national neoliberal framework which favours large hydropower projects. This document advertises the risks of the lack of negotiating capacity by the community in the face of large investment projects in energy and the low environmental responsibility of the companies and the community. The concentration of water rights in the hands of the electricity companies is mentioned as a risk, as well as the possibility of the construction of dams and the lack of legal agreement to protect the environment.

During the government of Sebastian Piñera (from the right-wing coalition *Alianza por Chile*, 2000-2014) “*The Aysén Plan*” was presented as a guideline for public policy. This plan is in agreement with the framework “the new way of government” which looks for better management, concrete and measurable results, and pragmatic decisions. It reduces environmental concerns about the natural resources of the region and its environmental quality to its minimum expression: “*A fundamental aspect of the Aysén Plan is to protect the*

environment and to promote a healthy living for those who live in the region. With these targets, the government will implement a plan to reduce childhood obesity and the consumption of alcohol. Thus, it will guarantee that the development of the region will be harmonic, taking into account not just economic growth, but also the environment, family and individual well-being” (Plan Aysén, 2010: 12). Sustainability here was understood as “*to have healthy individuals in a safe environment free of pollution*” (Plan Aysén, 2010: 32).

The government of Piñera agreed on protecting the environment of Patagonia, but at the same time, it wants to “take advantage” of all its resources, which implies support for the construction of every project that meets Chilean legislation (Radio Bio Bio, 2012). The last paragraphs of the *Aysén Plan* say: “*the plan contemplates the acceleration of large private investment projects*” (Plan Aysén, 2010: 39), concentrated mainly on energy. Following this framework, the HidroAysén project was approved by the regional authorities in May 2012.

Hence, national and regional governments have promoted the discourse of the “natural condition of Patagonia”, meaning public policies focus on sustainable development and the protection of biodiversity. Tourism has been presented as an environmentally friendly economic activity for Aysén, and many tourism entrepreneurs have been encouraged and trained by the state in the last thirty years. The discourse of the “natural condition of Patagonia” has enabled the territorialisation of *ecopower* via organizations which have highlighted and promoted the environmental quality of Aysén, organized tourism entrepreneurs and organizations in those places with dramatic landscapes (for example at General Carrera Lake). It has also led environmental conflicts against extractives industries such as aluminium and salmon.

6.1.2. *The environmentalist organizations*

The Chilean media have labelled “environmentalist” a specific political and cultural group, organized by several NGOs with international support, who belong to an elite and live mainly in Santiago. They reject the HidroAysén project, as well as other extractive projects such as mining, forestry, and salmon farms. The media uses “environmentalist” and “ecologist” interchangeably to identify people, organizations, discourses and actions (mainly legal actions rather than direct). I argue that many of these environmentalist organizations constitute an *ecopower*: an ensemble of discourses, knowledge, people, networks, political and cultural practices and monetary resources that are articulating the rejection of HidroAysén.

The slogan of the opposition to HidroAysén is “*Patagonia without dams*” (“*Patagonia Sin Represas*”). At the same time, the media have used this slogan to refer to the socio-environmental movement which was created to reject the hydroelectricity projects in Patagonia on a local, regional, national and international scale. I think it is necessary analytically to separate *ecopower*, which is specific and stable from the demonstrations associated with the socio-environmental movement which was wider and unstable. The association between *ecopower* and the discourses of nation and environmental protection of Chilean society has been articulated because of the HidroAysén conflict and Patagonia. The environmentalists are part of *ecopower*, but *ecopower* is more than the environmental organizations, because it articulates many discourses. Hence, the support of Chilean society for the ecologist candidate for the next presidential elections is below 1%.

The territorial presence of *ecopower* is the *Defence Council of Patagonia* which brings together national and international environmentalist organisations, conservationists and citizens. It includes organizations such as: *International Rivers Network*, *Free Flowing Rivers* and *Natural Resources Defence Council*, all of them playing an important role supporting the global anti-dam campaign (see chart N°8). There is no information about how many members there are in each environmentalist group, but during my research I identified that there are a few people, mainly based on Santiago, and in some other places like the *Fundación Pumalín* located in the Lake District, the *Citizen Coalition Aysén Reserve of Life* based in Coyhaique, and *Defenders of the Patagonia Spirit* located in Cochrane.

These organizations are funded by international NGOs such as the Natural Resources Defence Council, which has funded research into scientific knowledge about other energy alternatives (US\$ 35,000) and the media campaign. Other organizations are Tides Foundation and International Rivers which published the book “*Patagonia Chilena Sin Represas*”(US\$ 50,000). The Deep Ecology Foundation of the millionaire Douglas Tompkins (who is the owner of the private conservation park in Patagonia) contributed US\$ 2,5 million during 2007-2008 to support the campaign and legal actions against HidroAysén (El Mostrador, 2011). Other international organizations are Weeden Foundation (US\$ 20,000 in 2011) which also has land in Patagonia. Weeden contributed to the documentary *Patagonia Rising* (US\$ 15,000) and to different environmental organizations related to the defence of Patagonia, and to publicise the impacts of dams with at least US\$ 160,000 (El Mostrador, 2011). Similarly, Global Green Foundation donated US\$ 360,000 between 2008 and 2010. The anti-dam campaign also received contributions from important entrepreneurs with investments in

Patagonia such as Enrique Alcalde (cattle) and Victor Hugo Pucci (one of the most important actors in the Chilean salmon industry). In any case, information is limited because there is no one single organization receiving money, and sometimes the international NGOs have donated together (Tides Foundation, Weeden Foundation and Global Green Fund US\$ 2 million) (La Tercera, 2012). One of the difficulties is the impossibility of knowing how much money has been donated by European NGOs because there is no mandate to declare donations.

There are critics about the funding of the anti-dam campaign. For example, Daniel Fernández, the Executive President of HidroAysén, has said on many occasions that there is no clear idea how much money is spent, suggesting that the coal-thermoelectric companies are supporting *Patagonia Sin Represas* in order to compete with the hydroelectric project (Radio Cooperativa, 2011). Others, for example Jaime Mañalich, Minister of Health, said that *Patagonia Sin Represas* contributed money to the *Social Movements of Aysén*, funding the protest against the state (La Tercera, 2012).

The important thing in my analysis is that *hydropower* and *ecopower* are funded and politically supported from abroad and are connected to global networks of power. Thus, the HidroAysén conflict must be examined from different scales as a clash of discourses about environment and development, which involves the mobilization of a lot of capital, knowledge and political practices. For example, King Carlos of Spain visited Chile during 2012, and talked with President Piñera about the HidroAysén project in defence of the interest of ENDESA/ENEL. Meanwhile, Robert Kennedy Junior, Hollywood actors and world famous singers and artists have supported the anti-dam campaign.

At national level, the focus of this campaign is on the defence of Western Patagonia, and the creation of “*ideas and alternatives about options of development for this macro bioregion, which has as axis the respect for the environmental integrity of its nature and its cultural identity*”(Patagonia Sin Represas, 2012). Its aim is the global “defence” of Patagonia against the “destruction” generated by transnational companies: “*Today there are new threats to the territory of Patagonia, through initiatives which seem to be trying to give the coup de grace to such unique nature and culture. The hydroelectric megaprojects of Endesa/Colbún, with their floods and related works, would destroy basins with incalculable environmental value, and would contribute to the extinction of species such as the huemul (endemic Chilean deer), allegory of our national emblem, would affect one of the largest fresh water reserves in the*

world, would affect the climate, accelerating the melting of glaciers, snowfields, and compromising water resources shared with Argentina” (Patagonia Sin Represas, 2012).

At the same time, there are other organisations which do not take part necessarily in the *Defence Council of Patagonia*, but which are an integral part of the socio-environmental movement *Patagonia without Dams* in the local context. This is the case of the *Anti-dam Coordinator of Aysén*, integrated into different local organizations that reject the hydroelectric projects of HidroAysén and Energía Austral (see chart N°9). This second group of organisations took direct part in the *Social Movement of Aysén* and shared a similar point of view about the regional historical socio-economic claims, but today they are separated because the *Coordinator* does not want to negotiate with the government, which is identified as a “*accomplice of HidroAysén*” (Ecosistemas, 2012). One of the main points of the *Coordinator* is the creation of a regional referendum to decide on the installation of hydroelectric projects in Aysén, and participation in the decisions, through for example the regionalisation of natural resources, following the idea the Regional Strategy of Development of “*Aysén Reserve of Life*”. The *Coordinator* shares discursive elements of the *ecopower* and the discourses of “inequalities”.

CHART N° 8. ORGANISATIONS TAKING PART IN PATAGONIA SIN REPRESAS

Chile

Agrupación de Defensores del Espíritu de la Patagonia
Cámara de Turismo de Río Tranquilo
Centro de Estudiantes Universidad Pedro de Valdivia
Chile Sustentable
Coalición del Agua
Coalición Ciudadana Aysén Reserva de Vida
CODEFF
Conservación Patagónica
Corporación Chile Ambiente
Corporación Costa Carrera
Corporación de Desarrollo de Aysén
Corporación Kairos
Club CicloRecreoVía
Defendamos la Ciudad
Defensa Patagonia
Defensores del Bosque Chileno
Diálogo Sustentable
Ecoclubes
Ecosistemas
Escuela Agroecológica de Pirque
Escuela NOLS
Escuela de Guías de la Patagonia
Fiscalía del Medio Ambiente
Fondazione Culturale di Banca Etica
Ética en los Bosques
Fundación Melimoyu
Fundación Oceana
Fundación para la Tierra
Fundación Pumalín
Fundación Semilla
Fundación Sociedades Sustentables
Fundación Terram
Fundación Yendegaia
Generando
Geoaustral
Global Response
Innovación Eólica Cabrera
Instituto de Ecología Política
Instituto del Patrimonio Natural y Cultural
Obispado de Aysén
Radio Encuentro
RENACE
Programa Ecoregión Valdiviana

Spain

Asociación Cultural Agraria
Ecologistas en Acción
Ingeniería Sin Fronteras
Observatorio de Multinacionales en América Latina – Paz con Dignidad
Paz con Dignidad Madrid y País Vasco
SETEM
Viuda de la Tierra
Xarxa per una Nova Cultura del'Aigua

USA

Ancient Forest International
Blueditorial
Environmental Law Alliance Worldwide
Free Flowing Rivers
FutaFriends
International Rivers Network
Natural Resources Defense Council

Italy

Associazione Studi America Latina
A Sud
Campagna per la Riforma della Banca Mondiale
COAGRET
Mani Tese
Servizio Civile Internazionale

Others

Asociación Defensora de los Animales y la Naturaleza
(Colombia)
Centro de Documentación e Información
(Bolivia)
Fundación Greenpeace Pacífico Sur
Fundación Vaino Auer
(Argentina)
Greenpeace
Probe International
(Canada)
WWF

Source: www.patagoniasinrepresas.com

CHART N° 9. LOCAL ORGANISATIONS IN AYSÉN AGAINST DAMS

Organization	Location in Aysén
Chonkes	Caleta Tortel
Defensores del Espíritu de la Patagonia	Cochrane
Defensores de la Cuenca del Murta	Bahía Murta
Herederos de la Patagonia	Villa Cerro Castillo
Agrupación Ambiental y Cultural Río Pascua	Villa O'Higgins
Antukulef	Chile Chico
Jóvenes Tehuelches	Coyhaique (and national level)
Wallmapu	Puerto Aysén
Agrupación Mañíos y Baguales de Mañiguales	Mañiguales
Agrupación de Defensores de la Cuenca del Palena	La Junta
Autoconvocados de Villa Amengual	Villa Amengual
Comunidad Indígena Guaquel Marimán	Puerto Aysén
Colectivo Jóvenes Coyhaiquinos	Coyhaique
Coalición Ciudadana por Aysén Reserva de Vida	Coyhaique
Corporación Privada para el Desarrollo de Aysén	Coyhaique
Corporación Costa Carrera	Puerto Tranquilo
Mujeres Unidas por los Ríos Libres	
Asociación de Reporteros Independientes de la Patagonia	

Source: Ecosistemas (2012)

There are other organizations that can be considered to be taking part in *ecopower* but they are not part of *Defence Council of Patagonia*. For example, *Ecological Action*, which coordinated the demonstration in the capital of Chile against HidroAysén, organizations mainly related to urban issues such as “*Defendamos la Ciudad*”, pro-urban cyclist organizations such as “*Ciclistas Furisos*” and “*Ciclistas Unidos*”, and alternative political parties like “*Partido Ecologista*” and “*Partido Humanista*”. There are other organization linked to the anti-dam movement which are not taking part in *ecopower*, for example non-formal political organizations from the broad spectrum of the left and green, student political organizations, as well as Student Unions, an organization for a new political Constitution, regionalists, the Indigenous Movement, and dozens of others. All of them took part in the public demonstrations against the HidroAysén project.

At this point, a large number of the organizations that I have presented here were expected to take part in the social and environmental conflict in Chile. For example, many of the “environmentalists” took part in other anti-dam campaigns such as the one against the construction of the hydroelectric project in Mapuche-Pehuenche land in Upper Bio Bio River, as well as in the rejection of mining projects, and other extractive investments. The point that

is different here is the consolidation of discourses about Patagonia mobilized by *ecopower* through publications, documentaries, propaganda in the media and public and private spaces, the installation of the energy debate in the public agenda, and the organization of demonstrations. All of them were exercises of *ecopower* to construct a specific “natural Patagonia heritage of the world”. However, the massive reaction of the citizens against the HidroAysén project with dozens of thousands of people on the streets in four demonstration during May and June 2011 (see figure N° 37), could also be associated with the way in which Patagonia has been historically and social constructed, and how elites and institutions have been deploying discourses and geopolitical strategies to secure the integration of Patagonia into Chile. The mobilization of ideas about Patagonia did not come from nowhere, but drew upon ossified cultural constructions.

FIGURE N° 37. DEMONSTRATIONS AGAINST THE HIDROAYSÉN PROJECT IN SANTIAGO

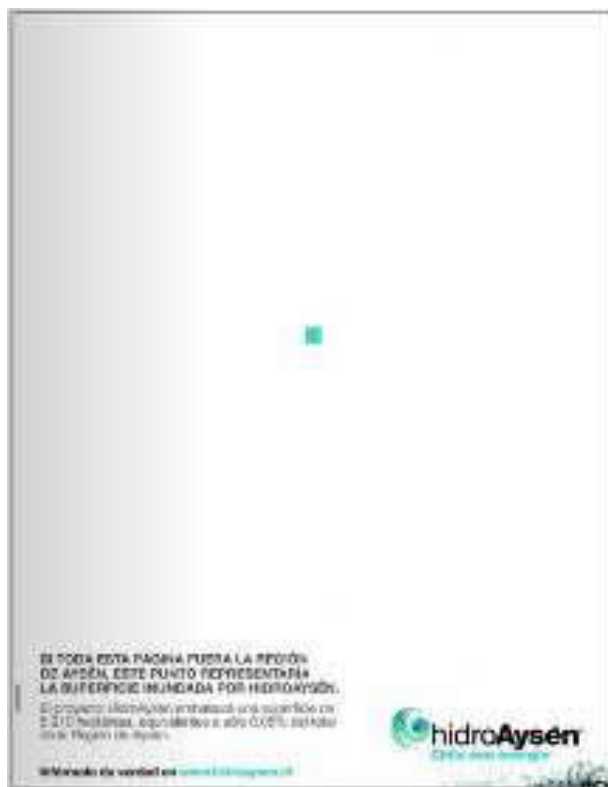


Source: La Tercera (2011)



Source: Terra (2011)

FIGURE N° 38. HIDROAYSEN'S PROPAGANDA IN REGIONAL NEWSPAPERS



Above left: *Do you believe that in Santiago there is lack of opportunities and lack of schools?*

Above right: *Do you believe that the people of Santiago is worried about the health issues in Aysén Region?*

Below: *If this entire page will be Aysén region, this blue point will represent the surface that HidroAysén would flood.*

Source: Veoverde (2011)

6.1.3. *Ecopower and Patagonian discourse*

In this section I will expose the main discourses that appear in the book *“Patagonia Chilena Sin Represas”* (Rodrigo & Orrego, 2007) published by *Defence Council of Patagonia*, and a set of paid propaganda of *Patagonia Sin Represas* published in newspapers during 2008-2012 with the name *“9 razones”* (9 reasons), that can be found on the website of the campaign. From these sources I have identified six elements that constitute a specific discursive formation about Patagonia. These discourses do not represent all of the organizations that are taking part in the rejection of HidroAysén, but make clear statements about what kind of Patagonia has been constructed and defended.

Patagonia is presented by *ecopower* as a “blessed land” and an “extension of the hand of God”: *“Its beauty, harmony, perfection and mystery is the result of the work of a superior being which gave it not only to the people of Aysén but to the whole of humankind”* (Rodrigo & Orrego, 2007: 13). Thus, to damage the nature of Aysén is to damage the whole humankind. These words belong to the Bishop of Aysén Luis Infanti, and are part of the opening of the book *“Patagonia Chilena Sin Represas”*. They are part of the framework from which the defence of Patagonia is supported: Patagonia is *anterior and superior* to us, and there is something supernatural about it, which is above human will. This discourse is presented in other parts of this book, now in the voice of the environmentalist movement: *“Magnificent landscapes literally created by the hand of God, its beauty and splendour will be disfigured by cables and high tension electric towers, created by the accelerated and clumsy hand of the human”* (Rodrigo & Orrego, 2007: 98). However, this discourse does not only belong to the environmentalists but also to the Chilean elite. Sebastian Piñera, current President of Chile declared: *“All we want is a clean and crystalline Patagonia, how our grandparents and our parents knew it. This government is going to protect our Patagonia, we are going to protect the environment, our nature, because it is a gift from God which all of us must take care of”* (La Tercera, 2012).

Patagonia in this discourse is a magnificent place which generates beliefs and emotions connected with *“how we and our environment used to be”*. It is strongly related to feelings and gender. This is more obvious in the Spanish language, because Patagonia is a female entity: *“la (she) Patagonia”*. Taking this important issue into account, the environmentalists constructed a string of concepts and ideas to value Patagonia which resulted in an unequivocal discourse about the *blessed land*. In the following paragraphs the positive (or turned into positive) characteristics of Patagonia are revisited from the process of imagination, liberation,

occupation and circulation (laid out in Chapters 3 and 4), to reinforce the institutional ecological and nationalist discourse about “*nature as a national heritage under threat*” and Patagonia as a *commons*.

- *Reserve of life*: This discourse aims to locate Patagonia within the environmental world concern, as a “*zone of conservation and tourism*”, and at the same time, looks to highlight its scientific importance for the world, “*because it is the ecosystem of species without scientific classification*” (“9 Razones más para conservar la Patagonia”).
- *State ownership and national heritage*: Because currently 80% of the land of Aysén is owned by the Chilean state, there could be a great opportunity to “*conserve this beauty and its input for the stability of the planet*” (“9 Razones más para conservar la Patagonia”). A large amount of this land owned by the state is national parks and natural reserves which not only can be used for biodiversity and landscape protection, but to make “*the natural beauties available to the community and to grant an ecological treasure for future generations*” (“9 Razones más para preservar la Patagonia sin represas”). This situation constitutes a *heritage for the Chileans* (“9 Razones para no destruir la Patagonia Chilena”) and any state or private interventions into the national parks undermines the rights of the Chileans and environmental law (“9 Razones más para preservar la Patagonia sin represas”).
- *Pristine landscape*: The idea of pristine is core to understanding the relationship between nature and homeland, but at the same time nature should be understood as something which belongs to Chilean society, yet it is located somewhere outside it: “*Patagonia is blessed with the most unpolluted rains of the planet. The water which runs from its rivers is so pure it is drinkable directly from the bed*” (9 Razones para conservar la Patagonia)... “*Our fluvial patrimony is unique, and there are just a few places in the world where large rivers still run free, pure and lively*” (“9 Razones más...para proteger nuestra Patagonia”).
- *Sublime landscape*: Patagonian landscapes are presented as tourist commodities for western culture: “*It not only has (environmental) quality but also beauty. The changing colours of General Carrera lake, the turquoise of Baker River, the vertiginous waterfall with rainbow veils, the bellow of the rapids*” (9 Razones para conservar la Patagonia). “*Chilean Patagonia has been defined as an ecosystem mosaic for its ecological diversity: giant ice fields, ancient glaciers, snowdrifts sliding down*

from enormous mountains, large lakes, mighty and pristine rivers, deepest wetlands, beautiful broad valleys, “cathedral-like” untouched forests, vast natural prairies, colourful steppes, fjords, archipelagos, and virgin islands” (“9 Razones más para conservar la Patagonia”). Here it is possible to observe the discourse of “how the world (Europe) used to be”.

- *Native culture:* The emptied Patagonian landscapes are filled with a historical land tradition which recycles the idea of Patagonians. In the absence of the Patagonian indigenous populations, the settlers and their cultural ecology are presented as an original part of this landscape: *“If there is a community in Chile which has a deeply rooted identity attached to their territory, is the Patagonians”...“The Patagonian culture is a fundamental part of the richness of Aysén. Its pioneer population live in the Baker basin. They are hardworking settlers who for more than one century of persistence, under rigorous life conditions and remoteness from central Chile, have developed a culture of self-identity, rich in values and traditions, which ennoble the country. The communities of Aysén are under threat by unnecessary hydroelectric projects which will dramatically disrupt the local culture and the valleys which support the main productive activities of the region” (“9 Razones para conservar la Patagonia”).*
- *Patriotism:* The “environmentalists” discourse is always supporting the idea of nature as integral part of homeland. Thus, Patagonia has to be understood as a patrimony of Chile and its protection as a *national imperative* (“9 Razones más para conservar la Patagonia”). This patriotism is based on three main elements:
 - a) *Emblems:* The animals of the national emblem live in Patagonia: *“The condor, the largest flying bird of the world, and the Huemul, the emblematic Chilean deer in danger of extinction, have their habitat in Patagonia thanks to its pristine condition which offers them the last refuge to exist...do not allow these species to be just ghosts in the national emblem” (“9 Razones para conserva la Patagonia”).*
 - b) *Water as strategic resource for the future:*

“The rivers Pascua and Baker are among the world’s largest rivers and are part of one of the most important reserves of fresh water on the planet” (“9 Razones más para conservar la Patagonia”).

“The North and South ice fields...constitute one of the largest reservoirs of fresh water in the world. This water, a heritage of incalculable value and with a vital strategic importance for the future of the country, is seriously affected by the

destructive dams of Endesa and Colbún” (9 Razones para conservar la Patagonia).

“It is probable that as a consequence of global change, many Chileans and other people will need to move to this blessed place in the future to settle” (Contreras, 2007: 33)

- c) *Nationalism: “The homeland is not something abstract. If there is something that is essentially patriotic it is to protect the place where you live. The homeland is built by the link with the territory and with all that gave character to a country. The homeland is built with a forward-looking approach because we need it to be integral for us and for the next generations. Patagonia is part of this long and narrow piece of land called Chile. The project that Endesa and Colbún want to impose represents one of the most important potential attacks on the homeland in its history”* (“9 Razones para conservar la Patagonia”).

This Patagonia unique, nature, pristine, sublime, native and part of Chilean territory, is under the “threat” of HidroAysén. The discourse of the anti-dam campaign says that HidroAysén “will destroy Patagonia” and “wants to destroy Patagonia”. It is a *“threat to the environmental integrity of this valuable territory”(…)* *“an irreversible transformation of a vast highly pristine territory –almost unknown, of unique beauty”*...it is going to be an “ecocide” against *“the cultural and natural integrity of Chilean Patagonia”(…)* *“we cannot be passive agents in the face of another imposition of economic power by territorial development models that have nothing to do with the interests of the citizens and the country”* (Rodrigo & Orrego, 2007: 28-29).

Patagonia and Patagonians are presented as the antipode of a capitalist society. The link between community, land, labour and identity is reconstructed as a unity, hiding the fact that the very reason for being of the Patagonian settlement was the capitalist transformation of the territory by the cattle companies. Furthermore, Patagonians are identified as just peasants, despite the fact that a large amount of the population lives in Patagonian cities (Punta Arenas, Puerto Aysén, Coyhaique, among others) and are not peasants.

The construction of Patagonia as a space under “threat” from outside forces is not new. The book *Patagonia Sin Represas* (2007) and the official documents published on its website present a genealogy of the relationship between Patagonia and Chile, focused on the effects of human action about land and people which have created irreversible impacts. In historical

terms, these threats against Patagonia come from the colonial age. The environmentalists argue that *“There are no antecedents which show that the original inhabitants of our Patagonia used fire to eliminate the native vegetation, on the contrary, they lived in harmony”* (Contreras, 2007: 33). Those native inhabitants, according to the narrative of the anti-dam campaign, resisted the arrival of the Europeans from the very beginning: *“In October of 1578 in the estuary of Reloncaví, on the threshold of Western Patagonia, a naval battle took place between the Spanish and Huilliches. Both sides sailed in large fleets of canoes or pirogues, which led to the death of hundreds of indigenous and the capture of the rest by the Spanish”* (Cabezas, 2007: 113). Despite this resistance, the indigenous people were killed or transformed: *“The first victims of the dispute for Trapalanda were the Chonos or Caucahues, obliged to clear their archipelagos which they had inhabited in harmony for centuries”* (Hartmann, 2007: 115). *“During the nineteenth and twentieth centuries the other indigenous people of Patagonia suffered the same fate. Tehuelches, Onas, Alacalufes and Yámanas were innocent victims of progress and of the European occupation of Patagonia”* (Contreras, 2007: 33)

There is consequently a critique of the territorialisation of Patagonia by the colonial state in which states that this territory was already destroyed by the Europeans who killed its indigenous population. However, the target for the environmentalists is the territorialisation of the postcolonial state, such as an attempt to destabilise national institutional discourse about Patagonia and to highlight the historic intervention of the state in that territory as a human and ecological disaster. The main elements taken into consideration were:

- The advance of the Chilean army to the south to eliminate indigenous tribes, mainly the Mapuche, and the displacement of people from the south of Chile to Patagonia (Hartmann, 2007: 115)
- Occupation with violence and fire (Contreras, 2007: 33).
- Land concessions for cattle companies (Cabezas, 2007: 113).
- The construction of public infrastructure such as the Austral Road (Holzapfel, 2007: 49).
- The promotion of hydropower

6.1.4. The contradictions of Chilean public policy according to *ecopower*

According to the discourse of *ecopower* the Chilean government has signed of international and national agreements for the defence of the environment with which it has not complied. One of the main points of contradiction about the role of the government in Patagonia is in the discourse of former President Michelle Bachelet (2006-2010), who promoted a “National Basin Strategy”. This public policy was supposed to identify and protect priority zones and to condition the approval of hydroelectric projects and/or mitigate their environmental impacts (“9 Razones más... para proteger nuestra Patagonia”).

“The challenge is to look for equilibrium between growth, development and environmental protection. We will promote a new environmental policy, more strict and modern, based on sustainable development and citizen participation. No investment projects should pretend to be profitable at the expense of the environment. Also, we will not evaluate isolated projects but we are going to integrate land-use planning, and the integrated management of basin areas as axes of our new policy” (Michelle Bachelet, Discourse to the Nation, May 21th 2006).

At national level, the “Basin Strategies” proposed by Bachelet’s government do not exist, and at this moment there is not a single plan for the development of the Baker and Pascua basins. But at regional level there already was an institutional construction of Patagonia as a natural space to be protected and developed according to sustainable principles. This will of the Chilean government was declared in the 2000-2030 strategies of development of “Aysén Reserve of Life”, which is oriented towards land-use planning and productive projects to highlight the natural condition of the region in the global market. In terms of regional development, the public policy guidelines of Aysén by Lagos and Bachelet were pioneering in terms of environmental concerns and citizenship participation at national level, highlighting the protection of the environment and regional culture and identity as an active principle of development (“9 Razones para no destruir la Patagonia Chilena”, 2009). However, according to the publications of *Patagonia Sin Represas* the Chilean government has been acting against its policy and the Chilean neoliberal Constitution by for example, accepting that the HidroAysén project could control 98% of the water of the Baker River. This monopoly breaches the right of the people and local communities to develop economic activities associated with environmental care and the sustainable use of resources (“9 Razones para no destruir la Patagonia Chilena”, 2009). According to *Patagonia Sin Represas*, the Chilean government has not guaranteed equal treatment in economic terms, because it will allow “the

annual loss of four thousand jobs associated with the tourism sector and it will impede the irrigation of five thousand hectares in Baker basin affecting the development of livestock and agriculture in the zone” (“9 Razones por las cuales el Gobierno NO debe admitir a trámite el Estudio Ambiental para construir represas en Aysén”, 2009).

One of the most important claims is that the project has been split in two: the dams and the transmission lines have been evaluated separately. According to *Patagonia Sin Represas*, this situation is against Chilean Environmental Law, because it does not allow the identification of the possible “cumulative impacts” of the whole project. At this moment, the dams have been approved but the transmission line approval depends of the “electric highway” project promoted by the Chilean government, which is still in discussion.

In global terms, what this *ecopower* is arguing is that the Chilean government is violating international agreements. That could be the case of the “Additional Specific Protocol About Shared Water Resources between the Republic of Chile and the Republic of Argentina”, legislation which is also part of the Free Trade Agreement with Canada. This could be also the situation with the “Biodiversity Conservation Agreement” (1991) because the HidroAysén project will affect the national trust areas where endangered species live. At the same time, the Chilean government could be violating the Washington Agreement about “Protection of Flora and Fauna and the Natural Scenic Beauties of America” (“9 Razones por las cuales el Gobierno NO debe admitir a trámite el Estudio Ambiental para construir represas en Aysén”, 2009).

One of the main accusations by *ecopower* has been the “lack of guarantees” in the process of Evaluation Assessment of the governments of Bachelet and Piñera. Before the HidroAysén approval, different Ministers and Public Authorities gave explicit support to this hydroelectric project. From the centre-left and the right, a pre-approval climate was created, which affected the legitimacy of the final decision, and strongly contributed to the social polarization of the conflict. The *Citizen Coalition Aysén Reserve of Life*, based in Coyhaique, published the names and faces of the people responsible for making the decision for the project’s approval in Aysén. The Director of the Environment Assessment quit, and in his place, the same person who approved the controversial Ralco and Pangué dams in the land of the Mapuche-Pehuenche indigenous people was appointed. This new Director arrived at Aysén just nine days before the HidroAysén approval with the task of reading thousands of pages of environmental, social and technical information. According to the discourse of *ecopower*, the

regional commission that approved HidroAysén, composed of the regional authorities for mining, housing, economy, environment, public works, planning, health, transport, energy and agriculture, was strongly tied to the company. A couple of days before the HidroAysén approval, CIPER, a Chilean group of critical research journalists, published the names and familiar economic links between the regional authorities and HidroAysén, which generated a debate about probity (CIPER, 2011). Later on, and during the decision of the court to authorize HidroAysén in April 2012, one of the judges had more than one hundred thousand shares in ENDESA (El Mostrador, 2012).

The territorialisation of *hydropower* in Aysén was thus made visible by *ecopower* and other critical voices. *Hydropower* concentration of political, economic and legal power is crucial to understanding the distribution of power in Chilean society in transforming HidroAysén into a perfect example of the political ecological inequalities of the country and the way in which the environmental transformation in Chile take place. The demonstration against HidroAysén at the national level rejected this *hydropower* and defended Patagonia as a *national heritage* and *global commons* which is in large part thanks to the emergence of *ecopower* that is creating a consensus about the role of the environment in the development of the country, through the anti-dam campaign *Patagonia Sin Represas*. However, the materialisation of *ecopower* also implies environmental transformations which have been possible through the discourse of tourism and the commodification of the Patagonian landscape. Thus, the “natural” and “pristine” environments of Patagonia are collapsed into capitalism, deepening the political ecological inequalities of the country.

6.1.5. The commodification of the Patagonian landscape

According to *ecopower* the origin of the ecological disasters in Patagonia has been the misunderstanding of the relationship between society and nature generated by an anthropocentric view and by economic growth, which were realised in public policies promoted by consecutive governments (Rodrigo & Orrego, 2007: 38). For example, cattle production has been negative in ecological terms, affecting the current performance of this economic sector in Patagonia, through the socio-economic problem of the simultaneous disappearance of both native flora and fauna and human inhabitants. To stop this, the former cattle companies, like the *Estancias Chacabuco* located in the Baker and other cattle regions, have been transformed into conservation areas to develop sustainable tourism (Gastó &

Rodrigo, 2007: 41). According to the Agricultural National Service of Chile, 25% of Patagonia is desertified or nearly desertified, mainly because of the “tradition” of over-pasture, which degraded the soil and reduced its productivity, thereby causing poverty (Rodrigo & Orrego, 2007: 44). However, I think it is necessary to take into account that the Patagonian historic and cultural landscape of the cattle-grazing steppe, which is today an integral yet contradictory part of the Patagonian identity, is a result of this process.

The economic strategy promoted by organised opposition to HidroAysén is tourism. Within this discourse, Patagonia has been emptied of its historical context of extensive cattle production and industrialism, to be reconstructed as a profitable “natural” landscape. From there, the strategy has been to reinforce tourism as a private activity, supported by the state in order bring about regional and local development. Patagonia as an exportable resource has been constructed as a natural virgin space, with diverse landscapes and rich ecosystem diversity. This Patagonia has a high economic value because of its landscapes, nature and beauty, associated with intrinsic cultural values which bring thousands of tourists every season. More than 140,000 tourists visited Aysén during 2007, spending US\$ 80 million, and it is expected that in 2016 income will be US\$ 2000 million. This is following the guidelines of the “country image” that the Chilean government promoted abroad, and the Development Strategies planned from regional government with the communities. These public policies have been supporting different private tourism entrepreneurs in recreational fishing, mountaineering, cabins and hotels, and they are directly related to the land use of the region, characterized by wild protected areas and vast national trust zones. In this sense, the hydroelectric project of HidroAysén is against the regional policies of nature conservation and tourism entrepreneurship (Rodrigo & Orrego, 2007: 29)

“National institutions and regional tour operators sell the beauty of the place, the scenery, the water, flora and fauna, its pristine, magical atmosphere...nobody wants to come from afar, either in northern Chile or abroad, to visit Patagonia knowing that instead of wonderful landscapes, they will face enormous high towers and cables waving on the horizon, crossing roads, rivers and lakes, permanently disfiguring the landscape” (Rodrigo and Orrego, 2007: 92).

“Patagonia has a worldwide charming image, associated with large open spaces, first class natural beauty and the spirit of adventure. It is a magnet for visitors from all over the world. Magic Patagonia! The intrusion of pylons and cables –icons that not only do not

represent wild nature and beauty, but ruthless industrialism, with all its implications, irreversibly break this magic and leave us with a great void” (Rodrigo & Orrego, 2007: 94).

“Will tourists be willing to pay to visit a dammed Patagonia and its landscapes pierced by towers and cables?” (Rodrigo & Orrego, 2007: 100).

To *Patagonia Sin Represas*, tourism is seen as a source to create quality jobs. More than 4,000 people work in tourist activities and many of them are independent workers and families, who have small and medium sized tourist enterprises. In this way, tourism is presented as a distributive economic activity and environmentally sustainable. But at the same time, Patagonian culture is presented as in harmony with nature, because of its traditional and small-scale cattle production, which has to be shown to the rest of the world as an example (“9 Razones Más, para conservar la Patagonia...Turismo y Desarrollo de la Patagonia Chilena”, 2009). This revisited cultural ecology argues that the environmental errors of the past resulted from a lack of knowledge about sustainable production rather than from a predator mentality:

“The communities of Chilean Patagonia have traditions, customs, lifestyles and modes of production characterized by a high attachment to the land and an assessment of life that has to do with harmony with nature” (Puchi, 2007: 155).

“It has been deployed as a unique opportunity to assign a direct economic value -no extractive and environment responsible- to our environmental patrimony, contributing to local and regional development, and at the same time, securing the preservation of species and ecosystems” (Mladinic, 2007: 157).

Against this discourse of hydroelectricity as the enemy of tourism, Eugenio Yunis, Vice-President of the National Federation of Tourism, declared in 2011 that HidroAysén could “*add value to tourism*” in the region, because it will improve connectivity and will not affect the tourist attractions: “*at the end it will be demonstrated that the dams do not have an impact on tourism*”(La Tercera, 2011). The problem, he said, will be the electricity line which could impact on other places in the country in a negative way. However, different Chilean scholars have shown how HidroAysén could impact the tourist activity in Aysén. According to Rovira, *et al* (2009), in the Baker basin tourist activity is based on the existence of pristine nature and beautiful scenery, which has provided opportunities for the practice of ecotourism and

adventure tourism in the last twenty years. Against this background, harnessing of the river by dams could really affect the development of this economic activity.

According to Salamanca (2008), the nature and beauty of Patagonia has a “high value” and it is of more social and economic benefit than the electricity project. The construction of HidroAysén will reduce the flow of people on the Austral Road, affecting the whole productive chain of tourism (hotels, restaurants, fishing lodges) and causing unemployment. At the same, HidroAysén will cause the depreciation of the land, mainly in the zone of the General Carrera Lake. According to Salamanca the losses in regional terms generated by HidroAysén will be US\$ 13 million. Salamanca (2010) has argued that the economic losses will be 297% more than the benefits, affecting employment (9% in livestock production and 91% in tourism), and generating economic losses per year of US\$ 40.336.000.

For its part, Sapiains (2010) surveyed 2,022 tourists in Aysén, 76% from whom rejected the HidroAysén project, saying that the electric project is not compatible with the preservation and development of Aysén as a “*Life Reserve*”. Of those tourists, 40% said that they will never again return if the dams are built, and 90% will chose another tourist destination. According to Sapiains, Aysén will fail to receive US\$ 23 million per year from tourism, and during the period of construction (five to ten years) the region will lose US\$ 38 million per year.

Thus, the environmentalist social construction of Patagonia is put together with its production as space. The value of Patagonia is calculated in terms of money; the Patagonian landscape is produced by cattle, tourism and fishery, in harmony with the local people, and denying the social relation of production of those capitalist transformations. Small and medium entrepreneurs are constructed as “*the people of Patagonia who will be affected*” and tourism as its natural productive vocation. This discourse has been polarized between “those who live and produce in Patagonia” and “those who want to destroy it”. But the people who work in tourism are only four thousand which corresponds to just 3.8% of the regional population. There is no doubt about the dramatic change that the transformation and specialization of Aysén in hydroelectric power will produce, and about the benefits that tourism will have on conservation and local development for a small portion of the regional population. But the transformation of Patagonia into a natural and pristine space has a social impact too. Both the “conservation” of Patagonia for tourist production and its “destruction” for energy production are based on the same discourse; the creation of profit without considering the necessities of

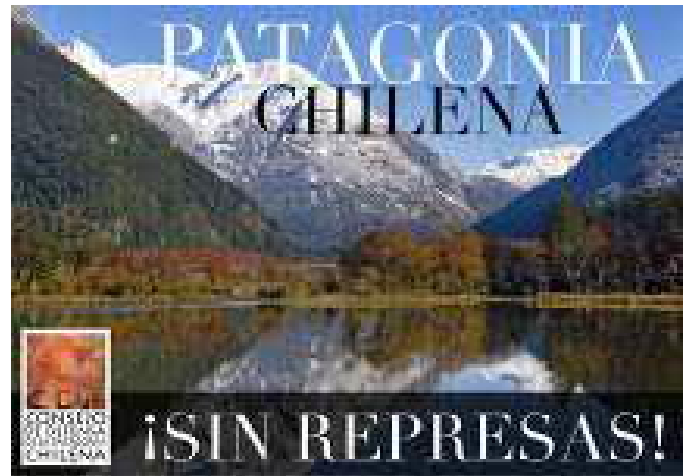
the population. Even where conservation is more aligned to local perceptions, this historically excluded and socially marginalized and isolated region demands the intervention of the state and an influx of investment for their benefit.

In this section I have argued that there is a discourse about the “natural condition of Patagonia” from which two contradictory discursive formations have emerged: *hydropower* and *ecopower*. *Ecopower* is an ensemble of discourses, knowledge, people, networks, political and cultural practices and monetary resources that articulate the rejection of HidroAysén, which is composed of a political and cultural elite based on environmentalism which has enough power to represent Patagonia. Its discourse is associated with an institutional construction which highlights the environmental quality of Patagonia to create economic growth through activities that are in agreement with its “vocation”, such as tourism, where the state has supported the creation of tourist entrepreneurs.

The rejection to HidroAysén is not only about a particular energy project, but about the defence of Patagonia and the creation of alternatives for development. With the monetary support of international NGOs, the discourse of this *ecopower* is based on scientific knowledge about alternatives to the dams, the development of publications, documentaries and a book, and the diffusion of the rejection of HidroAysén through a campaign in media and public and private spaces. Thus, *ecopower* has been gaining popular support and creating a consensus about the condition of Patagonia as a reserve for life, a national heritage with pristine landscapes that operate culturally as a connection with the past and the fatherland. This discursive formation has been presented under the slogan “*Patagonia Sin Represas*” that has brought together different environmentalist, social and political groups that together constitute a social movement.

Furthermore, the territorialisation of *ecopower* has implied the transformation of Patagonia to create tourism, which is in accordance with the government’s regional strategy. Thus, *ecopower* is being materialized through the concentration of land, the promotion of tourism and the full commodification of the Patagonian landscapes. This is the continuation of the construction of Patagonia from abroad, from new forms of colonialism that reproduce Patagonian “otherness” in order to control land and population and support discourses of transformation.

FIGURE N° 39. CAMPAIGN “PATAGONIA SIN REPRESAS”



Patagonia is presented as dramatic landscapes without human occupation. The geosymbol of the campaign is the Andes range, and the iconography the electric towers of the HidroAysén project. The pictures show a sunny land, with snowed mountains and green soil.



Patagonia as a girl representing the discourse of virgin female entity attacked an external force: “*Our beautiful Patagonia, What kind of savage did that? HidroAysén will do it.*”

Source: Patagonia Sin Represas (2013)

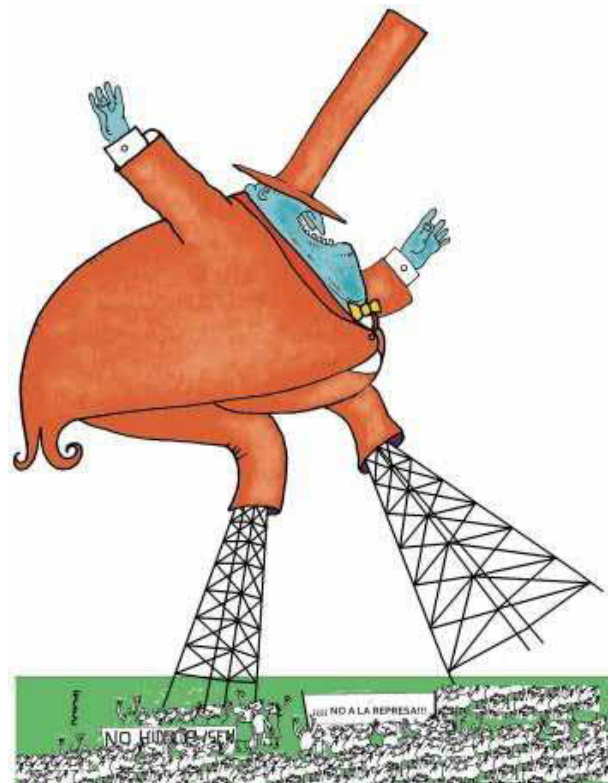


FIGURE N° 40. PATAGONIAN TOURIST LANDSCAPE



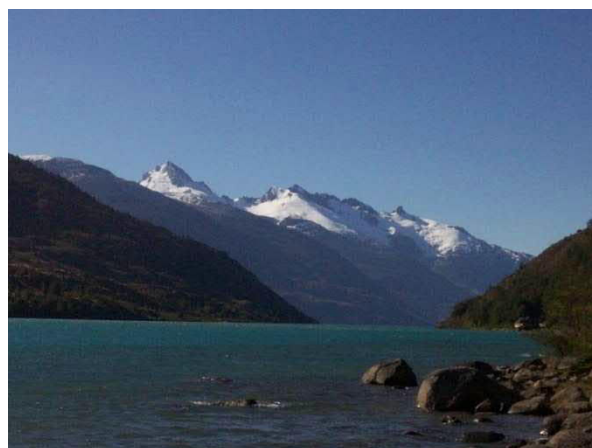
Source: Sernatur (2013)



Source: Emol (2012)



Source: My own



Source: My own

6.2. The Discourse of Inequalities

I have argued that the HidroAysén conflict has to be analyzed as the result of the persistence of colonial discourses about Patagonia mobilised by elites. This include the constitution of a *hydropower*, as a result of the implementation of neoliberalism, that can transform environments based in a political, economic, technical and environmental consensus; and the emergence of an *ecopower* which is contesting this consensus, and the possible transformation of Patagonia to produce energy, through the revival of cultural landscapes and specialisation in tourism. What all these conflictive elements share is that they have been historically constructed from outside Patagonia. At local level, the discourses of Patagonia are related to isolation and exclusion and their effect on the social and economic necessities of population. For this reason, if HidroAysén has been the most important conflict in Chile, it is not the most important conflict in Patagonia, or even in Aysén. This has been demonstrated in the social movements of Magallanes (2011), Aysén (2012) and Chiloé (2013), which demanded decentralization through public investment, public works and citizen participation. They were not movements for autonomy but for integration and the recognition that the people who live in southern Chile “*are also Chileans*”.

During the *Social Movement of Aysén* (February-March, 2012) the demands were for a regional university, improved hospitals, and better roads, for a special treatment as an extreme zone in terms of income and retirement because of the high cost of goods given the isolation; for subsidis in energy because of the extreme climate conditions (timber), the large distances (oil) and the high cost of services such as electricity (the most expensive in the country), and participation in the decisions about natural resources, centred around the fish industry and hydroelectricity. The *Social Movement of Aysén*, represented in the slogan “*Aysén your problem is my problem*”, was supported by all political sectors in the region, and won the sympathy of other social movements in Chile including regional organizations, students, artists and trade unions. At local level, the *Social Movement of Aysén* mobilized thousands of people in public demonstrations, occupying airports, roads, bridges and public offices, and the development of a large campaign via social networks which revealed the huge scale of the demonstrations, police repression and the emergence of new leaderships. Chilean artists and politicians based in Santiago developed the campaigns “*Aysén is also Chile*” and “*We are Aysén*” aiming to show how Patagonian claims reflected the situation of the country. Again, it was a not a struggle against the state, but a claim to be integrated to Chile, for more state presence and for more public investment.

Everyday discourses are therefore generated from the historical situation of exclusion and isolation which is radically different from *hydropower* and *ecopower* discourses that are created mainly in Santiago, the capital of Chile, located 1,616 miles to the north of the place in which the dams could be constructed. From Santiago the current operation of territorialisation and environmentalist counter-territorialisation is commanded through:

- Public authorities at local levels: *“While the Mayor is involved as the authority, we peasants have less access to getting our voice heard, because they are buying everyone here”* (Old lady, settler of the Baker zone; July, 2011).
“If the people observe that the authorities are supporting the project they will support it. Here the people are respectful of the authorities” (Local leader, Cochrane; April, 2009).
- Company staff (among them lawyers, social workers, sociologists and anthropologists): *“They have an army of people working, trying to identify the necessities of the population”* (Regional authority, Coyhaique; April, 2009).
“We do not have the capacity that the company can demonstrate. We hope that this action for the community –like financing the “Traditionalist Festival”- does not politicise the community” (Public staff, Cochrane; July, 2011).
- The opposition: *“Those people are financed by the “gringo” Tompkins and the ecologists in Santiago”* (Commercial entrepreneur, Cochrane; April, 2009).
“They are paying the people who are taking part in the actions. Everything is a business” (Tourism entrepreneur, Puerto Tranquilo; April, 2009).

Thus, because the economic, political and social models have been historically designed and applied from the capital of the country, Patagonian communities feel that they do not have the control of the territory that they inhabit. At the same time they recognise and accept a position of subordination in relation to Santiago, because of their exclusion and isolation. In this discourse, Patagonia as the national heritage of Chile does not play a role of conservation because of its natural condition, but because of the opportunity to produce wealth for the region and the development of the country. Here nationalist discourses work through the self-identification of Patagonia as a useful environment to produce energy supported by the

discourses and action of governments, which is in turn, identified as a promoter of the HidroAysén project.

“I believe that this is a national project, supported by the government, so it must be good (...) and the benefits will not be for me but for the country and future development” (Settler of the Baker; April, 2009).

“The governor, the Mayor, they have to explain to us whether the dams are good or bad. They are the big dogs. We are small dogs; we do not get anything by fighting for ourselves” (Settler of the Baker; April, 2009).

“This is a national issue, and they are endorsing the responsibility to us... to us who live at the end of the world (...) here it is not possible to fight, we need to negotiate (...) Everything is up for conversation, and can also be planned and managed with sustainability, to be good for everyone” (Large entrepreneur, General Carrera Lake; April, 2009).

Here we can see that the dams are perceived as a national necessity, according to what people have heard from ministers and public officials through the media. The quotations demonstrate a feeling that the government and the company were working together, even before the formal approval. Thus, with the government and the company working together the local inhabitants could understand that the construction of dams is a necessity for the country, and they could not oppose it. What they could do is to negotiate benefits for individuals and for the community associated with public infrastructure and basic needs. This local perception of HidroAysén as a public project is based on the nationalist discourse promoted by the state, which is used by the local communities themselves to facilitate social approval. However, if a community wants to negotiate with the company there are no formal or official mechanisms or protocols. Basically it depends on the will of the company and the negotiation with individuals according to their necessities and interests, which are in turn, related to their exclusion and isolation.

Given the historical processes of Patagonia that included the presence of large companies in the territory, many Patagonians believe that the solution for their problems is large private or public investment projects that could mobilize nature (as a tourist attraction, cattle production or hydroelectricity) and people (as workers and entrepreneurs) to create wealth, infrastructure and local development. However, the support of the people for HidroAysén also recognises

that the project could not be socially good for three main reasons: a) because Aysén is not part of the SIC, the energy that could be produced will not be used in the region, and because of this, there will not be a cheap price for energy, b) HidroAysén could be bad for the community, especially because of the arrival of a male population from other parts of Chile with other cultural practices, and c) HidroAysén could be bad for the environment especially in those zones which are little occupied by humans.

The territorial practices of *hydropower* and *ecopower* has tended to minimize human occupation of Patagonia based on understanding of the Patagonians as entrepreneurs. For example HidroAysén promote credits for entrepreneurship, and the environmentalist groups promote tourism. HidroAysén promotes an urban Patagonian who works in services, and the environmentalists promote a traditional Patagonian who works in small scale cattle production (figure N° 41). In both cases, the historical social conditions of the occupation and the current territorial tensions because of these processes have been limited to a contradiction of the dominant discourses.

FIGURE N° 41. PATAGONIANS ACCORDING TO THE DOMINANT DISCOURSES



Source: www.hidroaysen.cl



Source: www.patagoniasinrepresas.cl

Despite the dominant discourses about the Patagonians, there are subaltern discourses that have emerged during the territorialisation of the Chilean state and the territorial practice of *hydropower* and *ecopower*. The counter-territorialisation of Patagonians has allowed the identification of zones with settlers, the sovereignty of Chile in isolated territories, the construction of an regional identity different to the one promoted by the state and the emergence of discourses which highlight the colonisation process, the occupation of Patagonia, the life of the settlers and the possibility of opposition to environmental transformation by large investment projects. In order to understand the discourse of the Patagonian people I have analysed interviews that I took in the region of Aysén that show the tension that exists in the region within the local populations. The HidroAysén project not only could affect the environment but it is also disturbing the life of rural and urban communities, by generating reactions, organizations, opportunities and social conflict. In this section I will present three tensions that exist in region of Aysén, because of the HidroAysén project and the possibility of deepening historical inequalities. The first analysis is focused on the discourse of settlers that still live in the Baker; the second on the discourse that exist in tourism; and third on the discourses that exist in the semi-urban areas located near to the HidroAysén project.

6.2.1. Discourses of the occupation process

The discourse by Patagonians is strongly related to the oral and written history of the process of occupation and by the settlers in the last hundred years. Furthermore, many families still have members who took part in the transformation of the land and the creation of the Patagonian landscape and towns. They have experienced at firsthand the “construction of nature” as “producers of nature”, and the nature that they have conceptualised was either an opportunity or an obstacle in their everyday cultural ecology. Here lies the main difference from the dominant discourses based on the “natural condition of Patagonia”, which have been constructed from outside. Their representations of nature are quite different: while the elites represent a natural, pristine and empty Patagonia ready to be inscribed in political ecological projects, local people still struggle with the changing nature of Patagonia on an everyday basis. Thus, “nature” is not only an idea but a practice based on cultural construction connected to political, social and economic conditions which are produced and reproduced in an uneven way. What Chilean society culturally knows about Patagonia is in general the reproduction of the discourse of the elite, and not the discourse of the local people. However

the social movements, and the diffusion through the social networks, are allowing the possibility for access to other representations, as was demonstrated by the popular support for the claims of the *Social Movement of Aysén* through demonstrations in Santiago and other Chilean cities, through different campaigns on the internet and the 82% of popular support amongst Chilean society according to the Adimark survey (Radio Bio Bio, 2012b).

The Baker region was the scenario for the colonization process, discursively charged as an epic struggle against nature, and in some cases, against the large capital of the cattle companies. In the Baker region it is possible to find different streams of migration from Argentina, Chiloé, Punta Arenas and the centre-south of Chile that create the mosaic of today's customs understood and presented as Patagonian culture. The settlers that I have interviewed are the first generation born and/or raised in the southern part of Aysén. Many of them have arrived after their fathers, the pioneers, who were mainly people working for the Cattle Company of the Baker or part of the territorialisation of the state, such as policemen and official staff. The Baker cattle company decided on the location of Cochrane, and installed the first public infrastructure commanded by the state - the school. The old stories are linked to "the company", so the southern people of Aysén have engraved in their memory how important it is to have a main economic actor in the territory. The company still exerts a symbolic and material presence today.

The local social construction of nature is related to the difficulties of the settlement process in the Baker region. In complete isolation, the process of settlement depended on the good will of neighbours, climate conditions, cattle company facilities and the support of public institutions. The sons of the settlers went to other cities to study, and they were far from their families all year long. They shared the view that the past was good but difficult, without roads, facing a lack of communication and facilities for transportation (for many of them, the Baker River is until today a way of transportation). For that reason they have a strong awareness about what modernity is, when the first vehicles and airplanes arrived in Cochrane and the Baker area as a signal of progress.

Here, at local level, is where I think the core of the conflict lies. After many years of everyday struggle trying to have a proper life in a "new land", they have realized that improvements have not been enough: "*It was a healthy life but hard*" (Old lady, settler of the Baker zone; April, 2009). One of the old lady settlers told me about the hard life in the countryside, especially the role of the women as mother, father, producer, administrator and educator. With

only the support of the police and the school, they remember those years with sadness and they reject that kind of future for the next generation. Because of this history of isolation, a lot of people I interviewed in Aysén trust that HidroAysén will supply the necessities for the population which are not covered by the state. They have heard that HidroAysén will pave the roads, and will improve the emergency services and the hospital, as well as the schools and the quality of education. They are expecting improvements to their quality of life, with diversified trade, and better opportunities for jobs and even recreation. They have also said that a large part of the knowledge is now known about the region, has been constructed because of the hydropower project, such as the quality of the water, the ecology of the basin and socio-economic evaluations.

This could explain why many of the settlers are divided over HidroAysén. Some of them want to “defend” their land because of the history of occupation, as a prize after decades of effort: *“my father was the first here, we were the first in this zone, he built everything with his own hands. I raised my children here, my house, and my animals. How can I sell this land? ...This does not have a price”* (Settler’s son, Baker zone, July 2011). But on the other hand, and in the same family there are other people who said that after decades of isolation and exclusion “it is enough”: *“I have built everything with my own hands; I have brought everything from outside. Everything here is so expensive, and I am tired of this life. I want my grandsons to have a life without the sacrifice that I have been through”* (Settler’s grandson, Baker zone, July 2011).

The local old people can trace the history of HidroAysén from when ENDESA was state-owned. In one sense, the construction of dams of Patagonia is an old desire of the state and part of the history of the region. ENDESA commanded expeditions in the ‘60s and ‘70s, during the ISI model, in order to survey the rivers for future exploitation. That process was interrupted by the military dictatorship, which led to further expeditions and surveys. Thus, the idea of using the rivers of Patagonia to produce energy and the presence of ENDESA (today privatized and sold to ENEL) are not new. On the contrary it has always been a possibility:

“Since long time ago they have wanted to build dams. Probably the people did not know. But for years I have been hearing about the dams. Because I am now living in the town, I would like to sell my land and to buy a house here in the town”(Old lady, settler of the Baker zone; July, 2011)

“My son drowned at 17 years (...) he went with them...with the same people from ENDESA, in those years ENDESA was already here...it was 1975 (...) we say that the Baker is going to defend itself, it will not be possible to build dams in it...the river is not so big just for the sake of it” (Old lady, settler of the Baker; April, 2009)

As the quotes show, the project of dams is part of the history of this territory. From this situation a significant tension has emerged between territorialisations and counter-territorialisation. The construction of dams in Patagonia is understood by the local people as part of the territorialisation of the postcolonial state, because it will produce energy for Chile. However, it is considered as a project that is arriving late, when colonisation has been already consolidated. In this sense, there is a mistrust with the project - Why now?:

“Why didn’t HidroAysén happen in the past, when we really needed a large company? They are coming now when everything is ready. They did not come even when they had been the owners of the land and water for thousands of years. They are coming now when everything is clear to spoil everything... a cleaning of Patagonia. They will bring workers from outside who will come here to get money, and nothing more” (Old lady, settler of the Baker zone; July, 2011).

(...) this town was not built overnight and it cost so much...it was built by the people who lived here” (Old lady, settler of the Baker zone; July, 2011)

In these quotations it is possible to observe how HidroAysén is understood as a large project that could mobilize people and resources and be a threat to the stability of the towns that were constructed during a slow process by the settlers. This understanding is related to how the exclusion and isolation are seen as an absence of the state, large projects and modernization. Furthermore, they show a concern about the rhythm and forces of modernity against the everyday life in this part of Patagonia. There is sense that the state and dams are arriving late, which is understood as a social irresponsibility, because today for the settlers the *leimotiv* of the territorialisation of the state and *hydropower* is the possibility to create profit.

“The peasant was never taken into consideration. Today all the people talk about the flood of the Colonia (a GLOF event which happened in the last five years), but this happened over years and many peasants, their capital, animals and houses died there. And only now it is a

problem, do you know why? Because of the money (Old lady, settler of the Baker zone; July, 2011).

Thus, opposition to HidroAysén is about more than the dispossession of land and water, it is the history of exclusion and isolation. Hence, it is a material clash and it is also about the survival of representations and cultural practices created by the settlers. In this discourse the Patagonians mobilize the ideas of men, patriotism, victory against nature, a land created by them which could be transformed by foreign forces, destroying the history of the territory:

“I am defending the Baker...at this moment I am against the dams, against the abuse of the big lords who do not have pockets but bags in which to put the resources. That is why I have to defend it, because I fight the flight here (...) for this reason I defend the old people of the Baker, because they were good people, they were humble men, men with hearts...who never affected the wellbeing of anyone”(Old man. settler of the Baker; April, 2009)

“I am defending this land because it is the only part of world where you can live in peace. You can sit in the plaza and nobody is going to rob you (...) I will not sell my land to ENDESA who offered to buy it, but I will not sell. Before ENDESA we were living by ourselves...my life does not depends on ENDESA ” (Grandson of settler of the Baker; July, 2011).

This discourse is shared by many people because they contend how against all odds in exclusion and isolation Patagonia was constructed not by the state or large companies, but by individuals, families and communities. There are people who think that after years of waiting for the development and modernization it time to go and initiate a new process: (...) *I would like to go to another place, not for ENDESA, but because I am tired and I think my friends, all of them peasants, have the same thoughts”* (Settler of the Baker; April, 2009).

This process of decomposition of the cattle and farm land is not a consequence of HidroAysén. It happened during the times of the cattle company, and then with the arrival of mining, it happened again with the division of the land when the original settlers died, it occurred when the families needed money and cattle production failed, it continued with the tourism boom, and it is happening again with the construction of dams in Patagonia. This is a process of rural change that occupies an important tradition in the social sciences in terms of the penetration of capitalism in peasant communities, which has been traditionally developed by political ecologists.

In this sense, there is counter-territorialisation by Patagonians and their history of occupation. The hydroelectric project will not be constructed in a natural and pristine land, but in a land with the memory of occupation that still persist in people today. Opposition is not about HidroAysén per se, but about how Patagonia occupies a marginal position within the state and is only thought of as a source to create money by the elite. The opposition factions are about to recognise a history, the right of the people who occupied Patagonia and the preservation of culture and livelihoods. The same position is defended about the other main transformations of Patagonia defended by *ecopower*: specialization in tourism, which is implying the transformation of the cattle land into tourism facilities, and the Patagonians into tourism entrepreneurs and operators. This strategy, as with others designed from outside the region, can be understood as the reproduction of the historical social contradictions of Patagonia.

6.2.2. Discourses related to tourism

Patagonia, in terms of tourism, it is an imperial landscape which embodies many of the values associated with nature as virgin, wilderness and exotic, presenting possibilities to explore “natural” places and to know traditional cultures. This imperial landscape, promoted by the media and international tourism companies, has meant the commodification of nature to be conserved and observed, and consolidating a market which grows every year. The regional government of Aysén has promoted tourism in accordance with a national strategy that highlights nature as the heritage of Chile. At local levels there are over four thousand people who work in this economic sector that constitute a group of powerful actors in tourism and related services, such as food, transport and souvenirs. For this reason, many of the entrepreneurs in tourism have organizations located in the competitive zones and also in those that have potential. Tourism could be impacted by the HidroAysén project, which has generated a clash of alternatives for economic and social development for the region, and the conjunction between owners of land, tourism entrepreneurs and environmentalists. Thus, *ecopower* started to be territorialised, creating a consensus about the necessity to maintain Patagonia free of large investment projects that affect its environmental quality or that can threaten the “natural condition” of the region.

Many of the tourism entrepreneurs have constructed a discourse in defence of the environments of Patagonia because they appreciated its physical geography, characterised by dramatic landscapes, lack of pollution and the possibility for activities associated with

adventure (hiking, trekking, rafting). They are supporting the anti-dam campaign, arguing that tourism is the natural vocation of the region and that the possible construction of dams will have a dramatic consequence on the trade-mark of the region, affecting jobs and investments. This group of actors could be divided between small, medium and large entrepreneurs according to their land ownership and their business capacity. The way in which they represent nature is directly related to the occupation process and regional social stratification. Thus, at one extreme are the grandsons of the pioneers and at the other deep ecologist millionaires.

Many of the small entrepreneurs are local people who build their businesses on their own when the traditional activities such as cattle and forestry lost competitiveness over the last twenty years. These people are from the region or they migrated decades ago, and are today the owners of small facilities located in the village near to the Austral Road and close to main natural attractions. These people took part in the government programs to develop “entrepreneurship”, and many of them have received training and public grants to improve their businesses. The main activities that they are engaged in are related to accommodation and tourism transportation that do not require special equipment.

A young entrepreneur told me: *“I think the dams will bring benefits. But if they don’t, I will turn to other activities, because I am an entrepreneur”* (Tourist entrepreneur, Puerto Tranquilo, April, 2009). At that time, this young entrepreneur was developing a real estate agency, and his client was HidroAysén looking for land for possible relocations. He showed me lands at the back of Cochrane Lake, close to the boundary with Argentina, and then he told me: *“This is good land for the people...they can continue their lives here”*. This situation exemplifies the tensions of local people and the concern not only about self-profit but about the impact on the community. Along similar lines, an old lady who lives in Puerto Bertrand, where the Baker River begins, told me: *“Here I receive people who want to eat and sleep. Those people are from the government, the company, environmentalists, scholars, and tourists. And I have to serve all of them well. What happens if I don’t? The people will not keep coming, and I live of this”* (Tourist entrepreneur, Puerto Bertrand, April 2009). This person is taking part in all the tourism initiatives that the government and private organizations have created in the zone. She is a local leader, and has represented her community in different meetings with different agencies: *“The people here need development”* (Tourist entrepreneur, Puerto Bertrand, April 2009).

In both cases, the tourism entrepreneurs have hostels and are located near the Austral Road. At the time of my interview they were experiencing the increasing flow of people related to the promotion, opposition, research and curiosity that HidroAysén has created. For many of them HidroAysén presents an opportunity more than a risk, and they have said that their businesses will not suffer from the possible impacts of the dams or the transmission line: *“the Austral Road is the only road in this part of the region. With or without dams everyone needs to pass through here”* (Tourist entrepreneur, Puerto Bertrand, April 2009). For these people the important thing is to have more economic support, from the state or even from HidroAysén, in order to increase their business opportunities. They also recognise that thanks to HidroAysén today everyone knows about the region, and the number of people has been growing in recent years. For this group of actors tourism is the way to improve their incomes and it is probably not the only economic activity they are engaged in.

However, the situation is different with the medium sized tourist entrepreneurs who have facilities in the villages and work with the *“scenic beauty”* far from the Austral Road. They have migrated to Aysén in recent years; they are mainly young professional people, with capital, who have arrived in the zone with the aim of developing tourism, and today they are raising families. These entrepreneurs are involved with tourism, they have promoted organizations and many of them are taking part in *Patagonia Sin Represas*. This group of actors are often interviewed in documentaries and news reports, and are the visible face of the people *“who live in Patagonia”*. Following an environmentalist discourse they argue that *“nature is our business”* (Tourism entrepreneur, Coyhaique, July, 2011). They believe that the hydropower project will affect not only their investment but all the investment that government and private actors have made: *“Tourism will be affected by all the people that will be working in studies, evaluations and whatever, this will take...how many years? I do not know. Because, we know what happened in Ralco with all the years that they spent, and we know about the delay because of all the problems they had. So all these things could take ten years, could you image ten years more? There is not going to be anything (...) there are some people who think that these “things” (dams) are done and they do not want to come”* (Tourist entrepreneur, Puerto Tranquilo, July 2011).

These entrepreneurs are focused on eco and adventure tourism, oriented for people who come from other countries. Many of them have been buying land and building facilities near to the

attractions, as the snowdrifts, and in some sense they have, because of their economic and territorial position, the monopoly of the “natural” attractions. At the same time, these entrepreneurs have created jobs for the locals in activities which support the tourism facilities, for example: the local women work in the kitchen and clean, and the men work as guides and drivers. For all of them, nature is a critical part of their business, and the construction of dams will affect their investments and economic activities. In terms of *ecopower* they are central to the defence of the “natural condition of Patagonia” promoting the transformation of its landscapes in private areas of conservation.

The third group are the large entrepreneurs, and in the case of the southern Aysén the main actor is Douglas Tompkins. He and his wife are the owners of the former cattle company of the Baker “*Hacienda Chacabuco*”, located in the upper valley of this river. They have been transforming the former hacienda into a conservation park, recycling the space for the protection of flora and fauna. The Tompkinses are very important actors in *Patagonia Sin Represas* which is funded in part by their *Pumalín Foundation*, that promotes conservation. The Tompkins control large amounts of land in Chile and Argentina, in order to create parks and tourism, mainly for people from abroad, and to promote the development of the scientific knowledge of the zone.

For many of the local people, the Tompkins are considered foreigners who have transformed the use of the land, occupying productive cattle valleys for conservation. Many of the locals say that once the hacienda was transformed the foxes and cougars started to reproduce very quickly, affecting their small production of sheep: “*they and the government protect the wild animals, but we are feeding them*” (medium sized cattle producer, Baker zone, April, 2009). The same producer, a local leader, told me that “*these gringos are responsible for the productive changes of the valley, and now they are against the dams too*”. In the course of my fieldwork I heard similar statements about the Tompkins, which I think reflects the complexity of the situation in Patagonia; nature and its exploitation follow class stratification, and in the case of Aysén this stratification is related to land tenure and to the possibility of culturally re-presenting the meaning and uses of Patagonia.

Also I have discovered several tensions about the future of the tourist activity because of exclusion and isolation. In many of the interviews people said that there is mistrust in the community because of the perception of centrality, bureaucracy and social networks. They

said that information about public resources for tourism entrepreneurship is concentrated in the municipalities and only the medium and large entrepreneurs have the access and the knowledge to work in the public projects promoted by the government. In turn, the medium and large entrepreneurs say that the local people are “*accustomed to receive*”. Perhaps these tensions could contribute to the lack of significant associations that could articulate the rejection or eventually negotiate mitigation or compensation with HidroAysén. This feeling of mistrust could be transposed to other productive activities, showing the tensions that exist over the use of resources for “outsiders” and the support of the government. Probably this situation is a result of the bordering land conditions and the colonization process, but I believe that this has not been taken into account as an element of the conflict.

6.2.3. Discourses in semi-urban areas

One of the main concerns of the local people more than the destruction of nature, is the arrival of 4,000 workers into river basins, especially in the Baker area. This number of people is bigger than Cochrane’s population (the large town in southern Aysén), and could create a massive disruption to everyday life and production: “*There is not enough capacity for this new colonization process*” (councillor of Cochrane, July 2011). The people fear the arrival of a large number of men, expressing concern for their daughters because of pregnancies, the growth of STDs, alcoholism, delinquency and violence. Thus, HidroAysén is identified as a source of disturbance to their everyday life:

“this place is so beautiful, and is quiet, this is one of the places where you can leave anything because nobody is worried about getting robbed (...) this could change in the future” (Tourism entrepreneur, Puerto Sánchez, April, 2009).

“It is going to be bad for the region, for our quality of life, family and manners...here when someone knocks at the door we open it. But soon, it will be like in the north, where you look through the window first and then ask (...) There will be a lot of people that we do not know (...) In the future I will say Patagonia and nobody will know of what place I’m talking about” (Tourist entrepreneur, Puerto Bertrand; July, 2011).

The local people are also concerned about the disruption to their space, both materially and symbolically. In physical terms, they are concerned about the increase of people in public

places such as schools, hospitals (there is only one), the Austral Road, ferries, but also in private spaces including stores and supermarkets. They are worried about their culture and folklore, and their traditions and practices, for example a small cattle producer told me that he does not have the capacity to produce for that amount of people or the money for more technology, land and animals, and he fears that other medium and large producers can cover the market choking the small ones. That kind of concern about the possible collapse of everyday life has not enjoyed any public attention until today, and it is a constant source of stress for the local community.

Many of the owners of services in Cochrane believe that they could multiply their incomes many fold. However, they know that they will need more supplies, everything will be more expensive, and competition will increase with the arrival of new entrepreneurs and new people with different customs. For example, the owner of a bar told me there will an increase in drunken people on the streets. In his personal reflection he said: *“For me (HidroAysén) it will be great, but not for the community”* (Entrepreneur, Cochrane; July, 2011). The same discourse is repeated in many of my interviews, namely the contradiction between self-profit and community well-being. Those local entrepreneurs are not in favour of the destruction of nature, or pro-dams, they just live their life as entrepreneurs who want to improve their quality of life. Thus, at local level it is not an environmental conflict but a social and economic one which breaks exclusion, isolation and poverty, according to the framework promoted by the government.

For the locals it is not clear how many jobs HidroAysén will create for the community. They know that the company will need to create all kind of jobs, many of them with special training that they do not have. They are expecting that HidroAysén will create training courses for the harnessing of local manpower for construction. Others, more critical, said that the Patagonians will not have opportunities to be included in the construction of the dam:

“The people here believe that the company will bring jobs. But I know that it is not going to be like that. Here the peasants could offer their horses and their physical work using shovel. I think they will not have other opportunities. The company will bring specialized technicians, and here we do not have that kind of people... So the local people are wrong” (Old man, settler of Cochrane; July, 2011).

Despite local interest in the increase of the population, HidroAysén has promised that they will create self-sufficient “closed camps”. The main idea of the company is to mitigate the impact of the workers in the local communities. Thus, all of these discussions and the possible investment of the local entrepreneurs probably will not create the demand that people are expecting. Without clear information some of the entrepreneurs have already started to improve their facilities in preparation for the future.

At the same time, there are people who could get money from HidroAysén through the sale of land or compensation. Those people say that they could invest in tourism projects and even take advantage of the new lakes that could be created. However these possible new entrepreneurship will need water, and they will not be able to use the water of the reservoirs because the water rights are under the control of HidroAysén. Thus, the possible new tourism projects will need pipes to take water directly from the river without affecting the water rights. This situation could be the same for cattle and other farm production (councillor of Cochrane, July 2011). I think it is necessary to remember that the Baker basin alone is the size of Belgium and Switzerland put together, so we are talking about a massive territory in which ENDESA has a monopoly over water.

Other discourses maintain that with HidroAysén the cost of energy will be less, allowing for improvements in the family and local economy. However, it is not clear how much less they will pay because HidroAysén is a generating company. For that reason, some of the locals are very critical of the decrease in the price of energy, basically because the HidroAysén business is not about the distribution of energy, and today there is no project for a hydroelectricity plant to generate, transport and distribute energy for Aysén. Probably the solution will be the integration of Aysén with the SIC which will transfer all the problems of the national system to the region, for example the change in prices because of the drought which could now affect Aysén, a region with a surplus of water (councillor of Cochrane, July 2011).

All the improvements that the region demands depend on initiatives by outsiders which in turn create mistrust. Environmentalists, promoters of hydropower, public officials, scientists and scholars are from outside the region: “*there is a feeling that outsiders came here to take advantage and become rich*” (councillor of Cochrane, July 2011). But at the same time, the presence of the outsiders helps to increase the value of the region. For the local people, of all these outsiders, “*just HidroAysén came with money to invest in the region and the people*” (Tourist entrepreneur, Puerto Bertrand; July, 2011).

These kinds of dynamics at local level could affect the social and political sustainability of the region: on the one hand HidroAysén could take advantage of the absence of the state, winning the support of local communities. The state could benefit from HidroAysén by obtaining taxes from them because of the sale of land, and could enjoy the social benefits and infrastructure promised by the company in the region. The communities could benefit from the investments during the time of negotiation and construction through the development of a “new culture of the *Patagonian entrepreneur*” without losing subsidies from the state (electricity, drinking water, education, transportation, and housing) because this population lives in an extreme zone. All these elements could contribute to generating a misunderstanding or a distortion of communitarian wellbeing, especially when there is no real plan of development.

However, some local actors believe that there could be opportunities, but it is necessary to have a state or a government agency playing a role: *“As a region, we must have a royalty from HidroAysén, and we must use that money for our children, for their education. But there are no public organizations planning the mitigations, and also there is no coordination between the state and the private bodies”* (former regional authority; July, 2011).

This is a critical point. If HidroAysén is going to build the transportation infrastructure, contributing to an end to the isolation of that part of Patagonia, it will also be, at the same time, opening the door to other new large investment projects. Currently, at local level, the people are talking about mining and forestry, promoted by some companies which belong to one of the main investors in Colbún, the Matte holding. For some locals, this is just the beginning of a radical change for Patagonia:

“We know that HidroAysén is just the tip of the iceberg. These dams will be just the first ones and then lots of projects will come because there are a lot of resources. Now there will be roads for the extraction of resources like mining. The people are aware of it, but it is difficult because many of the locals do not see (...) we want to show that this is not the environmentalist against the developmentalist” (Local leader, Cochrane; July, 2011).

Thus, the process of liberation of Patagonia could be finally finished. With the improvements of roads, ports and airports, and the construction of infrastructure, there could be new possibilities of business for the global market. Patagonian landscapes could be fully produced, supported by the palimpsest.

6.2.4. Polarisation

During January 2013 the Bishop of Aysén, Luis Infanti, sent an open letter to the Council of Ministers of the Chilean government, who will have to make the final decision about HidroAysén. This letter is the continuation of a previous letter presented by all the bishops of Patagonia (Chilean and Argentinian) to the General Secretary of the United Nations, demanding the protection of Patagonia as a “*Worldwide Reserve of Life*” in relation to extractive projects. In Infanti’s analysis the people of Chile are claiming more democracy, the protection of their environment and a critical stance on the development model. Those people, according to the Bishop, are a majority in Chile. 2013 is a year of presidential elections; the different candidates from all political tendencies are integrating many of the claims in their political programs, among them tax reforms, educational reforms, reforms to the system of pensions (the AFPs), and even the possibility of changing the authoritarian Constitution. For example the candidate of the left, Marcel Claude, has a slogan “*All to the Moneda*” (the government palace), the candidate of the centre-left *Concertación*, the former President Michele Bachelet is using the slogan “*More Equality, No More Abuse*”, the candidate of the centre-right wing Andrés Allamand is using “*I am with You*”, while the right-wing candidate is using “*More Social Justice*”. All of them are identifying people who do not confirm with the neoliberal systems and are promising changes. It is in this context of social mobilisation and criticism of the economic and social development of Chile that the popular rejection of HidroAysén, must be understood, as it is seen as one of the main embodiments of the injustices inherited from Pinochet’s dictatorship.

In the words of the Bishop, approval of HidroAysén is based only on “*economic interest which is ethically unacceptable and deplorable*” because of the existence of *hydropower* and the necessity for a new national and consensual energy policy, which should be based on non-conventional renewable energy. Also, the sovereignty of Chile is threatened because the Italian state is the owner of 32% of ENEL, which at the same time is the owner of ENDESA, which in its turn owns 90% of the water rights of Aysén. According to Infanti, this situation has been created by an elite strongly separated from the Chilean people, who are today arguing in favour of “*Chile has sold its goods (water, land, sea, minerals,...) to the transnational capital, but fortunately it has not sold its conscience as it still wants to be a free*

country, peaceful, solidarity, equitable and fraternal (...) if these deep longings are not taken into account the social peace could seriously flounder” (Ecoamerica, 2013).

The letter of Bishop Infanti was answered by 80 political and social actors from Aysén through an open letter. In their response it is possible to see the everyday tensions that exist in the region about the internal contradiction between conservation and economic growth. This shows that it is not possible to talk about the Patagonians as one single human group with share ideas, because historically the very idea of Patagonians was constructed from abroad. The next quote, taken from that letter, shows the polarisation in Aysén and illustrates my point that in Patagonia the main conflict is not about energy or the protection of nature, but about social and territorial inequalities: *“projects like HidroAysén, Energía Austral and others, could mean development for our region and communities; according to many, those projects could represent and could be an opportunity for a better quality of life for our families, a better education, a source of labour and connection with the rest of the country (...) from the communities we are providing and we expect to continue the discussions and meetings which look for the development of our communities, looking for the wellbeing that our region needs, and not for the interest of minority groups which are not interested in consensus and solutions to the everyday problems that we have in one the most isolated and expensive zones of the country”*(El Ciudadano, 2013).

A third letter was sent by what I called *ecopower*, this time signed by 1,000 people, who are against the HidroAysén project and support the words of the Bishop. Again, the core of the message has to be read in the context of social and territorial inequalities: *“What the ecclesiastical authority expressed is the feeling of thousands of inhabitants of the Aysén region, who agree with his words in the sense of questioning the centralists interest to impose dam projects in a whole region and its communities. Those projects want to take advantage of the natural resources of the region to benefit large companies”* (Futuro Renovable, 2013).

It is clear that there is a high level of discursive polarization within Patagonian society which claims its right to “conserve” or to “produce”. The consideration of the “other” as a “minority” has been an integral part of the conflict, perhaps as part of the tensions generated because of an immature Chilean democracy which still fears large majority decisions. That could be the reason why the current government reacted at first with violence against the

HidroAysén mobilizations and the *Social Movement of Aysén*, recognizing later that popular support in both cases was massive.

Today the consensus created by *hydropower* during the dictatorship and subsequent democracy has been broken. From the left the proposal is to nationalize water, as well other natural resources such as copper, in order to break the private monopolies and allow for new actors in energy generation. The centre-left is arguing that today HidroAysén “is not viable”, even when the current candidate, former president Bachelet, accepted the environmental procedures of the company during her government (Diario Financiero, 2013). The right-wing has said that the project “is dead” because of the popular rejection and the concentration of energy generation in a few hands (El Mostrador, 2013), for example many of the executives and investors in the electric sector, especially in ENDESA and Colbún, belong to right-wing political parties. Thus, because of social mobilization, the social appropriation of dominant discourses and the emergence of regional movements demanding equality, at least in the political arena conditions to develop the HidroAysén project are not viable.

Summary

In this last chapter I have analysed *counter-territorialisation*, understood as part of territorialisation, but exercised through different practices of management of the environments and resources by local communities. Through counter-territorialisation the state classification of territories is contested, but the demands of local groups are also shaping the future according to state law, trying to unify subaltern and state discourses. In this chapter I have analysed two counter-territorialisations: a) environmental protection, shared by the regional government and the environmentalist elite, who demand that the state conserves Patagonia, and b) regional claims that demand development and public investment. Furthermore, in this counter-territorialisation environmentalist demands and the social demands are not against the state or fighting for liberation, but to expand the control of the state in this territory through the protection of the environment and social investment.

I have explained that the current environmentalist discursive construction of Patagonia is related to the emergence of what I have called *ecopower* created by environmentalist organizations (among them international and national NGOs), ecologist entrepreneurs (large,

medium and small), anti-dam organizations, scholars, think tanks and other local organizations. The force of *ecopower* promotes a consensus about the central role of the environment in the development of the country, implying knowledge, physical and behavioural transformations, the creation and support of intellectuals and employees, institutional support from the state (environmental laws, institutions, commissions and employees), economic support (international NGOs, sponsors, donors) and social support (local organizations). *Ecopower* puts pressure on legal reforms and institutions and in the diffusion of an alternative relationship between culture and nature, the designation of areas for environmental conservation, and alternative uses for environments and resources, among others. This *ecopower* is also material, because it produces and disseminates knowledge through books, publications and documentaries, public campaigns in the media, and public and private spaces, the accumulation of land for the creation of private parks for conservation such as those located in Chilean and Argentine Patagonia, and the use of environments and resources for tourism by private actors (global, nationals and locals). Therefore, *ecopower* is transforming Patagonia through a set of discourses and material practices which include the rejection of the HidroAysén project, the defence of the Aysén as a natural region, the transformation of this excluded territory as a heritage of Chile and a global common, and the creation of tourism as the “natural” vocation for economic and social development.

Even when the counter-territorialisation of the environmentalists is supported by local organisations, many of these organisations are formed by people who migrated recently to Patagonia, probably following the colonial discourses with the aim of defending the environment and developing tourism. In this sense, *ecopower* and its local supporters reproduces the discourse of Patagonia without its people, at a pristine stage, ready to be transformed into conservation. Consequently, the territorial political project of *ecopower* has been constructed from outside the region, implying environmental transformation without the integration of local communities, the representation of Patagonia without a human history, and the accumulation of land for conservation by transforming cattle land in private parks. However, the anti-dams regional organisations took part in the *Social Movement of Aysén* and now constitute the regional *Anti-dam Coordinator*. In this way, it is possible perhaps that the social inequalities of Patagonia may be integrated into the demands of environmentalist movement.

This chapter also connected to subaltern discourses constructed by Patagonians who live in places that could be transformed by the construction of dams and which are leading to social

tensions. The inhabitants of Patagonia can demonstrate hundreds of years of history of colonisation and occupation of the Baker basin. As a result, they have an identity constructed from the everyday struggles against nature, characterised by masculinity and patriotism. These discourses constructed from inside Patagonia demonstrate the contradiction between the preservation of livelihoods associated with rural life and small cattle production, and modern life in semi-urban villages associated with the construction of dams and eco-tourism. This contradiction has to be understood in the context of physical isolation and social and political exclusion where the state is failing to invest in public works.

Some of the settlers reject the construction of dams because it would be an attack on their traditions, transforming the space and erasing the history of the people. They believe that the state should promote this kind of project, to support the settlements and the colonisation process, but not now when the forest has been removed and the roads have been constructed. Other groups of settlers recognize the history of occupation but they feel that it is time to change their life of sacrifice and ensure the livelihood of futures generations by selling the land that they own and migrating to semi-urban and urban areas. Both groups of settlers share the criticism about the role of the state and its territorialisation as having been inadequate.

At the same time, at the local level there is a memory about the role that large private companies can play to benefit of the community, replacing the state. Moreover, ENDESA has had its own history over the last fifty years. For that reason, for many Patagonians the arrival of HidroAysén could be positive because it will implies the creation of jobs, the modernization of the village and the increasing circulation of people and money. Hence, the small and medium service sector (motels, restaurants, supermarkets, transport and bars) is supporting the hydroelectric project. At the same time, HidroAysén is promising the construction of roads, ports, airports, and support with hospitals and schools, which are identified by local people as important improvements to their quality of life. However, the people recognise that the arrival of four thousand men could disrupt their way of life in a dramatic way.

Where *ecopower* and local people clash is around regional development. Tourism, created as the “natural vocation of Patagonia”, is effectively limited to certain zones and associated with investment in facilities and equipment that many Patagonians cannot afford, even when the state has supported the creation of entrepreneurship in tourism with grants and training. Consequently, they are working in bed & breakfast and services which support tourist

activities. Therefore, only 3% of the regional population is working in tourism and while the rest of the regional population live in cities and urban areas, working in other economic activities, for example salmon production.

The HidroAysén conflict illustrates the tensions that exist within Chilean society. There is a national clash mobilized by the elites around the development of the country, essentially in terms of the extractive neoliberal model and the role of the regions in which the natural resources are extracted. In this sense Patagonia in general, and Aysén in particular, are presented as having natural conditions for the development of contradictory political ecological projects of environmental transformation: hydroelectric production and environmental conservation. Furthermore, there are clashes about how these transformations are directed, mainly through the use of colonial discourses and environmental representations that do not integrate the local population. In the case of Patagonia, after four hundred years of territorialisation by the state, there are profound historical inequalities that affect the everyday life of the local population. The demands of regional movements like the *Social Movement of Aysén* are manifest in the isolation and exclusion of large territories of the country, and in claims for public investment in infrastructure and development programs to support the life of Patagonian communities. As a result, the struggles over Patagonia are not only about the construction of dams, but also about the conditions of exclusion and isolation.

CONCLUSION

This dissertation has sought to provide an explanation for the environmental conflicts generated by large investment projects. It has examined the deep connections between territory, culture and power, by focusing on the historical representations of people and places in Patagonia through which political ecological projects are promoted or defended. Environmental conflicts are historically unresolved tensions, originating in the way in which the state has performed its territorialisation, especially in post-colonial contexts. In the case of Latin America, and especially in the case of Chile, environmental conflicts also derive from the way in which the territorialisation of the state and the implementation of neoliberalism occurred under an authoritarian military government. Hence, these conflicts are not environmental conflicts *per se*, but a history of dispossession and social and territorial inequalities. These take the form of environmentalism and polarise discourses about environmental transformation.

In this research, a socio-environmental conflict is defined as the possibility of representing and transforming people, territories and landscapes. This possibility is based on historical processes of material and symbolic exclusion embedded in inequalities about race, gender, class and geographical allocation. I have argued that the HidroAysén conflict could be understood from three main perspectives: a) as a clash between the persistence of colonial discourses mobilized by national and transnational elites; b) as a clash of discourses/power/knowledge within the elites about the strategies of economic growth and the development of Chile, where Patagonia becomes a symbol (*hydropower* against *ecopower*); and at the same time, c) as a clash between those that can create representations and transformations (located in the centre of the economic, political, cultural and territorial power) and those who live in territories that have historically been excluded. Hence, Patagonia appears as the result of tensions between two different ways of understanding this territory, which emerge from the palimpsest of historical social constructions: the “natural condition of Patagonia” mobilised by the elites, and the discourse of territorial “inequality” mobilized by the regional movements of Aysén.

In the next pages I will discuss the major findings grouped under my research questions, and then I will point out the implications that the conflict has in the current political and economic situation of Chile.

Findings

How has Chilean Patagonia been socially constructed in the past?

The current existence of Patagonia is the result of an historical global process. My analysis has focused on how discourses about Patagonia were created, how those discourses constituted an “otherness” that supported the territorialisation of the colonial and postcolonial state, and how, through these processes of territorialisation and counter-territorialisation, the Patagonian landscape has been created.

I have argued that it is not possible to analyse the HidroAysén conflict without an analysis of the history of Patagonia and the meanings that this territory has for Chilean society and the world. I have identified Patagonia as the result of different discourses/power/knowledge mobilized by different actors throughout the last four hundred years. Patagonia is not only the result of dominant narratives, but a co-production thereof. It is true that it is possible to identify the persistence of representations, but it is also possible to identify material and symbolic processes of contestation that today are presented in the demands of regional social movements.

I have developed a genealogy of Patagonia, through the process of territorialisation of the colonial and postcolonial state, divided into four interlinked stages: imagination, liberation, occupation and circulation. The first argument is that “Patagonia cannot pre-exist its construction”. Thus, there is no Patagonia outside history and society, and all that we know about Patagonia came from how the West culturally has understood and transformed this territory. A second argument is that “there is nothing natural about Patagonia”; what today looks natural in Patagonia is in fact an historical transformation of landscapes made by capitalism in the last two centuries.

There are *colonial discourses* about Patagonia that must be understood within a long history of “otherness”. This is the result of the expansion of the European imperial powers which constructed Patagonia as the antithesis of culture and production. Patagonian landscapes were presented as a wilderness, a pristine and unoccupied space, ready to be the scenario of a Western masculine performance, and the possibility of reconstructing the origins of humankind through new scientific knowledge. Patagonia has been represented as a female entity (which is more obvious in the Spanish language) and it has been constructed as a point of comparison between nature and civilization. However, this process of social construction

has not been one-way, i.e. from Europe to Patagonia; it has been a co-construction between foreign and local meanings, desires and expectations.

The history of otherness cannot be separated from the territorialisation (and counter-territorialisation) of the colonial and postcolonial state over the last four hundred years. Two medieval myths were constructed by the Spanish empire in the process of imagining Patagonia, and those myths supported the earliest representation of this space; Patagonia was a distant vast land, populated by savage giant Indians who controlled the territory, and that territory was full of resources such as gold and land that made it possible to build cities (the city of Caesars).

Since the 18th century, a process of liberation was performed to bring Patagonia to “light”, to fill maps with systematic knowledge, and to develop accurate accounts and representations for the colonial centres of calculation. Thus, Patagonia was constructed as a place that was in a “natural condition”; its landscapes were identified as “*how Europe used to be*” and their inhabitants were presented as belonging to a stage of the “*beginning of the world*”. This otherness was reinforced through the idea of unproductive indigenous groups, with barbaric customs, without memory and history. Scientific knowledge identified Patagonia as poor, deserted and unproductive, and all the indigenous groups that inhabited Patagonia became simply *Patagones*.

There is a *postcolonial discourse*, deeply influenced by the Enlightenment, which identified landscapes and people as the antithesis of progress, which in turn allowed the exercise of different forms of power over space and society. Since the end of the 19th century, Patagonia started a new process of otherness as an integral part of the nation states of Chile and Argentina. The Chilean state exercised sovereignty in Western Patagonia, now constructed as a rich and unoccupied land. Meanwhile, the Patagonians were constructed through the figure of the *pioneers*; European capitalist and masculine immigrant, in contradistinction to those inhabitants who came from Argentina, Chiloé Island and Chile to work as labourers in the cattle companies. Patagonia, constructed as an empty space, was rapidly transformed through the burning of thousands and thousands of hectares of forest to create land for the production of livestock, generating irreversible environmental damage.

The territorialisation of the state was manifested in the normalisation of Patagonian geographical features through the designation of names associated mainly with religion, heroes and explorers. The territorialisation of the colonial and postcolonial state implied the

normalisation of Patagonia through violence; against the indigenous people to occupy their lands, against the explorers to control their behaviour, and against the settlers to define what kind of land they can occupy.

Meanwhile, the territorialisation of the postcolonial state took place through the emergence of a “Chilean Patagonia”. The Chilean state has created the region of Aysén through the delimitation of boundaries, laws, customary rights, institutions, settlements and the material transformation of environments and landscapes, which has included large environmental degradation. I have identified four stages in the process of occupation and circulation: exploration, laissez faire, settlements and state intervention. Through occupation and circulation the land and the sea of Patagonia were reinvented, constructing subjects, fabricating a culture, building infrastructure, normalizing the territory through land grant and haciendas, claiming sovereignty through the use of flags in towns and on ships, expanding the control of the ocean, and opening and connecting southern Patagonia to the world system. A second moment in the territorialisation of the postcolonial state occurred through the deployment of the military forces in Aysén, the *Chileanisation* of names given to geographical features, and the location of public institutions. One of the most important forms of territorialisation was the construction of towns and villages and the construction of the Austral Road “Captain General Augusto Pinochet”.

At the same time, an important process of counter-territorialisation took place in Patagonia. Spontaneous settlers started to occupy land in different parts of the region, creating villages, communitarian services and using the Chilean flag as a symbol of the presence of the state. The situation of isolation and marginalisation created a powerful identity of nationalism and autarky. A new Patagonian emerged occupying the land on behalf of Chile and demanding action by the state. This counter-territorialisation has implications today, as demonstrated in the regional social movements, and it has led to the co-construction of Patagonia. In this representation Patagonia is a humanised space of settlement, based on traditional and rural values and one that demands a space in the current environmental and economic transformations.

From these processes two dominant discourses about colonisation were created: on the one hand *large-scale ownership*, which belongs to private transnational capital, which is connected to urban centres; and on the other hand, *small-scale ownership*, which belongs to the new Patagonians, rural, poor and with a mixture of masculine traditions from Chile,

Argentina and Chiloé Island. In this way, the objective of the territorialisation of the postcolonial state was the creation of towns and the official recognition of places with spontaneous settlements, reorganisation of land grants given by the state to the cattle companies, and their incorporation in a new management framework through the creation of public services (schools, hospitals, police offices, courts, banks, and property registration administrators). Even today there is a deficit in public services as the population has been systematically growing in a mixture between formal and informal settlements.

All these discursive and material processes resulted in the construction of a Patagonian historical landscape, following the rapid transformation of Western Patagonia for the production of cattle. A new map of Western Patagonia was populated by the material and symbolic presence of the cattle companies, constituting an extension of the sovereignty of the Chilean state. This process implied the racial stratification of Patagonian society based on the control of land, the dispossession of land belonging to the indigenous groups such as the *Tehuelches* and *Selknam*, and the creation of patterns of occupation which were highly concentrated in a few centres. These transformations have implied the construction of a British cultural landscape (because the United Kingdom was the only buyer of wool) adapted to the conditions of this territory, and today has become part of the heritage and historical cultural landscape of Patagonia. The human landscape defended by those who are in opposition to the dam construction is in fact a British cultural landscape.

What these discourses share is that they have been constructed from outside Patagonia. The conceptualisation of nature that they use is connected to what Mitchell (1994) has called *imperial landscape*. Therefore, Patagonia has been constructed *from* and *by* the centres of calculation in the West (Harris, 2004). Hence, there is a Patagonia created by elites that is physically located far from the rest of the world, but which is well known because of its beauty. However, there is another Patagonia which has been constructed from the ground. In these terms, Patagonia as a cultural artefact has been co-constructed by dominant and subaltern actors and discourses.

What political economic conditions and discourses enable dams to be built in Chilean Patagonia?

I have proposed to analyse the current political-economic strategies in Patagonia through the existence of two supposedly contradictory discursive formations which have different ways of

understanding this territory, based on the palimpsest of historical social constructions: *hydropower* and *ecopower*. These two discursive formations are also material, because they have been produced and disseminated through books, publications and documentaries, public campaigns in the media, and public and private spaces, and through the accumulation of rights to land and water.

Hydropower is the result of neoliberal policies in water and energy. It is an assemblage of non-democratic laws, privatisation, national and transnational capital and economic and political elites. This *hydropower* suggests that Patagonia has “natural conditions” for the development of hydroelectricity, which in turn is presented as the right way to face the energy crisis and global warming. *Hydropower* has mobilized the idea of “*water as the oil of Chile*”, a clean and renewable resource, which will increase economic growth in Chile. In these discourses the water of the Patagonian Rivers is being wasted in the ocean when it could be used to give stability to the electricity system of Chile. At present this is highly dependent on imported fuels and climate variability. This *hydropower* is also material, because of the concentration of the electric companies, water rights and a framework which promotes hydropower with minimum requirements, facilitating the approval of dams in those places where the companies own the water. For this *hydropower*, the construction of HidroAysén will be the opportunity to expand the generation of electricity to Patagonia, but also to secure the role of electric companies such as ENDESA in Latin America, and ENEL throughout the world.

The image that this *hydropower* has about Patagonia is focused on free flowing rivers which are wasting their water in the ocean. Thus, Patagonia presents “natural conditions” for hydroelectric production, located in a vast land where impacts will affect less than 1% of the regional surface. HidroAysén is mobilizing a discourse of unoccupied places which are not productive, and at the same time, it is highlighting how difficult life is in Patagonia without large investment projects. Patagonians are presented as poor urban people who will improve their economic situation thanks to the support of the company.

I have shown how the right-wing took part in the privatisation of the electric companies, and some of its members are still important directors in those companies. However, the privatised electricity sector is not only part of the right-wing’s heritage. The centre left *Concertación* which governed Chile between 1990 and 2010 also provided directors of the electric companies. For example, Daniel Fernández, today’s Executive President of HidroAysén, was

the director of important companies during the years of *Concertación*. This shows that an important part of the centre-left in Chile is committed to the neoliberal model. However, because Chile is having presidential elections this year, and HidroAysén is a hot topic, there is unanimous rejection of the construction of dams in Patagonia, together with demand for reforms to the electricity system and citizen participation. HidroAysén has become unpopular, and in general terms, many of the neoliberal reforms such as education, health, pensions and regionalisation are now being criticised. Therefore, the *hydropower* consensus has been broken and today the private sector is calling for state intervention to generate the conditions for investment.

Which discourses are in conflict regarding to the HidroAysén Project?

Nowadays, Patagonia is still a female entity, comprising a vast land full of resources ready to be transformed, with dramatic scenarios that promote adventure. The owners of the land and water are foreign actors, the people who live in Patagonia (the new “Patagonians” fabricated in the process of occupation) are still identified as a single group of people, and they continue to be marginalised in the representations of the environments where they live and the decision-making about environmental transformation. Moreover, Patagonia is still within a process of colonisation that requires large investments to end its isolation, through the deployment of the state and capitalism.

Since the year 2000, an *institutional discourse* has been constructed by the regional government of Aysén. This institutional discourse has promoting economic activities according to the slogan “*Aysén reserve of life*”. In this way, the environmental potential of the region for the production of “clean” products and the promotion of tourism was recognised. Hence, the nature of Patagonia was understood as a resource to produce regional development via environmentally-friendly production and the conservation of landscapes. Many of the environmentalists’ demands of the HidroAysén conflict are supported in the framework constructed by the regional government.

I have argued that the defence of Patagonia is related to *ecopower*, which is the result of global concern over the environment, the action of national and international NGOs in favour of the protection of the environment in Chile, the existence of government concern about the environment expressed through the creation of institutions and public policies, the investment

in tourism and conservation in Patagonia by a millionaire deep ecologist, and the circulation within Chilean society of the idea of Patagonia as pristine land. *Ecopower* presents Patagonia with “natural conditions” for the development of tourism, collapsing its landscapes into the commodification process. *Ecopower* is looking to protect this territory and to have influence on the public policies regarding environmental transformation. To do that, they are engaged in a millionaire-backed campaign opposing HidroAysén, called “*Patagonia without dams*” that highlights pristine scenarios, the promotion of a Patagonian cultural landscape, and the subsistence of the people who live in Patagonia in harmony with nature.

Ecopower presents Patagonia as a global commons for the world. This territory has “natural conditions” that must be conserved as national parks, and which can be transformed using tourism as an environmentally-friendly strategy for economic growth. For *ecopower*, the Patagonians are rural people who live in harmony with nature, who need public and private support to develop small and medium-sized enterprises. The social history of dispossession of Patagonia has been omitted, because *ecopower* is concentrating on land and water. Thus, the former cattle company Chacabuco Hacienda is being dismantled and its animals sold, in order to produce an unoccupied and pristine land.

These current constructions of Patagonia occupy different representations embedded in the palimpsest of earliest representations and otherness. They purposefully ignore the human occupation of Patagonia, which results from the territorialisation of the colonial and postcolonial state. Therefore, the local inhabitants of Patagonia and their representations of nature, environments and landscapes are only useful if they can be translated into the terms of the dominant discourses. There is no recognition of the way in which the local inhabitants perform the “natural condition” of Patagonia, and the identification of the Patagonians as poor and isolated people is a continuation of the colonial and postcolonial otherness.

To present Patagonia as “natural” or “pristine” is an exercise of power, used to mobilize governmentality and environmentality and to gain popular support for environmental transformation. To create this popular support it is necessary to mobilise ideas that have existed previously about Patagonia and its inhabitants. Therefore, landscapes and peoples are presented in a revised form of colonialism, in order to allow the appropriation of the environment for the production of hydroelectricity or tourism. Thus, there is no pristine Patagonia, but a history of territorialisation and dispossession.

In this context must be understood a number of *local discourses*. Those discourses have been constructed in relation to the territorialisation of the postcolonial state. These discourses are a mixture between nationalism, autarky and everyday life, which highlights the value and behaviour of the settlers and the tensions that exist with the state. In these discourses it is possible to observe how governmentality works, especially amongst those people who demand public investment to continue “flying the flag” in that part of Chile. Regional social movements have emerged in the last three years demanding state support and investment and the recognition of Patagonians as Chilean citizens. In these discourses, nature is related to isolation, exclusion and reduced quality of life, and an everyday struggle for domination and conquest. This is important because dominant and subaltern discourses do not understand in the same way, and therefore the conflict that they have is absolutely different. For the local people, HidroAysén could be an opportunity because of the large size of the investment and the possibility of taking part in business or related services: and at the same time, it is a risk because of the disturbance of thousands of men in the everyday life of the villages.

The social movements located in Patagonia are demanding that the Chilean state provide improvements in their quality of life, because of its isolation and its effects on the cost of living and cost of production. The Patagonian conflicts are conflicts with the state, demanding integration and a recognition that the sovereignty of Chile in the south has depended upon the will of the Patagonians and their counter-territorialisation.

Nationalism, governmentality and environmentality

Patagonia was fabricated by the postcolonial state as an integral part of the national territories of Chile and Argentina. It was divided, delimited, framed, and physically and symbolically integrated with the sovereignty of the postcolonial states. The history of Chile and Argentina during the 20th century is the history of the boundaries of Patagonia. Therefore, the Chilean state has promoted an ecological discursive formation of Patagonia as female, empty and pristine, and facing the threat of foreign force. This situation has created a major problem for the current government and its support for the HidroAysén project; if Patagonia is a place that Chilean society must defend against foreign aggressors, why should Patagonia now be transformed by transnational companies? “*Patagonia is not for sale*” said the slogans in the demonstrations during 2011; “*our Patagonia*”, as a distant, dreamed, exotic and beautiful land located far in the South that “*belongs to Chile!*”

Consequently, Patagonia is a cultural landscape that circulates within Chilean society through pictures and stories about its gigantism, dramatic vistas and natural resources. The most important argument in the defence of Patagonia is the image promoted by the state and the media. Hence, Patagonia's otherness today does not allow the development of one the most important projects of the neoliberal system in Chile; HidroAysén does not have popular and political support. In the context of a previous discourse based on nationalism, *ecopower* moved the threat from Argentina to transnational companies, represented by ENDESA. Hence, previous discourses were recycled and now "the natural condition" of Patagonia has to be defended; "*fly the flag and defend Patagonia*" is one of the slogans of *Patagonia without dams*. This discourse is related to the previous military constructions, and it is supported by the use of geosymbols and iconography such as mountains, lakes, rivers, snow, flags and peasants. Thus, nature and nationalism are presented together.

However, this nationalism based on otherness reinforces the dominant discourses which are in conflict, because the construction of dams or the conservation of Patagonia share the same diagnosis; both producing and conserving imply the territorialisation of the postcolonial state and expansion of the domain of Chilean society over Patagonia through more knowledge, territorial practices and the discourses of development. Consequently, the environmentalist defence of Patagonia is the continuation of the process of imagination, liberation, occupation and delimitation through the colonisation and commodification of all its landscape into tourism and conservation. The nationalist-environmentalist defence of Patagonia is based upon collapsing its history, and it is creating a new form of colonialism.

Today, HidroAysén is at the centre of political discussion in Chile about energy, development, democracy and the end of the non-interventionist role of the state. Thus, HidroAysén is a major political issue for the next presidential elections in Chile. The defence of Patagonia has become a symbol of resistance to the neoliberal model. *Patagonia without dams* has bound together the rejection of Chilean society to the HidroAysén project and the role of the government as supporter of this kind of project, the relationship between economic and political power, and the defence of nature as an integral part of the Chilean national territory. Consequently, the people are demanding more government, more laws, more institutions, and more state intervention. Thus, part of the opposition to HidroAysén derives from environmentality that defends the environment not merely because of the opportunity for business and local development, but because the protection of the Patagonian environment has been mandated by the state. To protect the environment is to secure the future of the nation.

Implications

The HidroAysén conflict has contributed to the following challenges for the future:

- *The construction of Patagonia as a global commons:* Because of the HidroAysén conflict the circulation of the Patagonian landscape within the media has grown. Today Chilean society knows more about this territory; therefore it has developed an environmental concern about its importance as a reserve of water in the context of climate change. At the same time, the campaign *Patagonia without dams* has drawn attention to species in danger of extinction, and highlighted the Patagonian peasant culture. In a similar way, the regional social movements have increased the knowledge that Chilean society has about “how to live in Patagonia”, allowing the recognition of the demands and the role of the Patagonians in the defence of the sovereignty of Chile. At the global scale the anti-dam campaign has allowed the dissemination of a Chilean Patagonia, highlighting its “natural condition” as a global commons. I think this is the most important success of the anti-dam campaign.
- *The weakening of the authoritarian neoliberal legacy:* the HidroAysén conflict has happened during years in which there has been a massive rejection of neoliberal policies, especially in education, health, pensions, large investment, and regionalist demands for territorial equality. There is a political critique about how neoliberal policies created during the dictatorship allowed the concentration of economic and political power in a few hands. At the same time, Chilean society is demanding an active role of the state in different areas, which is not possible because of the Constitution. Thus, today there are at least three projects to reform the Chilean Constitution, even originating within the right-wing. The major aims are the creation of a truly democratic system for the election of members of the parliament, and the possibility of redefining the role of the state - especially in the provision of social services - and for citizen participation. From the left some politicians have argued for the necessity to nationalise critical resources such as water. Consequently, the HidroAysén conflict has helped to identify the way in which the Chilean neoliberal model has been applied, and especially of the role that what I have called *hydropower* has played in environmental transformation, the creation of the energy

crisis, and the accumulation of rights to water and energy that can determine the future of the country.

- *The necessity of a democratic planning process and management of resources:* One of the bases of the social and environmental conflict is the democratic administration of natural resources and public services, because the massive concentration in private hands and the lack of public planning. Hence, a process of “judicialisation” has been installed which consists of legal actions of different actors in courts. Currently the most important large investment projects in mining and energy have been paralysed by the courts, even though these projects already have the approval of the government. Social and environmental issues are increasing in importance for Chilean society. This environmentality needs institutions and legal agreements, for which constitutional changes are necessary.
- *The emergence of the regions:* The case of HidroAysén demonstrates how Chile is physically and symbolically concentrated in Santiago. Decision-making, incomes, and demonstrations are all localised in the capital of the country. Meanwhile, the regions historically have provided a raw material, which has created unequal relations of power. Regional social movements have emerged in the last three years in Chile. All of them are associated with the struggle for improvement in the quality of life, especially in places that are of interest to capitalism because of the presence of natural resources.
The HidroAysén conflict has contributed to the discussion about the future of Aysén in terms of regional development. It has opened the possibilities for a regional and national debate about citizen participation, the management of resources, and the way in which ‘technical’ decisions are in fact political projects.
- *Recognition of new organisations for citizens:* The emergence of social and environmental movements needs to have formal channels of expression and representation. The Chilean political system must recognise that, in recent years, different forms of social organisation such as the “*Asambleas*” (assembly) are the way through which the demands of the population are being channelled. The *Asambleas* are developing more and more social legitimacy and their leaders are today important political figures many of them candidate for the next parliamentary elections.

- *Emergence of new renewable energy projects:* The HidroAysén conflict, as well as other social and environmental conflicts, has allowed the emergence of renewable energy projects, especially in solar energy and wind. 55% of energy investments during 2013 are in renewable energy projects (it was 25% in 2012), with 449 MW under construction. Moreover, HidroAysén is not being considered by the CDEC-SIC in the future energy development of the country (even when the project has not been cancelled). However, many of these projects are being developed by ENDESA and the other electricity companies, which mean that they can preserve their monopoly over generations.

Therefore, the HidroAysén conflict has contributed to opening up possibilities in a Chilean society which is still struggling against an authoritarian model. Today it is possible to change the Constitution and to generate democratic mechanisms of regional development and planning, especially in the isolated territories of Chile. Citizen participation, environmental concerns and the cultural-territorial identity of Chile are three major challenges that have emerged from the HidroAysén case. All of them can contribute to social change.

BIBLIOGRAPHY

- 24 Horas. (2012). Cinco chilenos entre los más millonarios del mundo, según Forbes. Retrieved from: <http://www.24horas.cl/economia/cinco-chilenos-entre-los-mas-millonarios-del-mundo-segun-forbes-316144> [October, 15 th, 2012; 11:20]
- Acuña, R. & Iglesias, A. (2001). La Reforma a las Pensiones. In Larraín, F. & Vergara, R. (Ed.), *La Transformación Económica de Chile* (pp. 430–490). Santiago: Centro de Estudios Públicos.
- Aedo, M., Fernández, B., Larraín, S. & Matus, N. (2004). *Recursos Hídricos: Desafíos para la Sustentabilidad*. Santiago.
Retrieved from: <http://www.chilesustentable.net/wp-content/plugins/downloads-manager/upload/RECURSOSHIDRICOS.pdf>
- Aesgener. (2013). Official website. Retrieved from www.aesgener.cl
- Agrawal, A. (2005). *Environmentality. Technologies of Government and the Making of Subjects*. London: Duke University Press.
- Altinbilek, D. (2002). The Role of Dams in Development. *Water Science and Technology*, 45(8), 169–180.
- Arapoglou, V. (2004a). The Governance of Homelessness in Greece: discourse and power in the study of philanthropic networks. *Critical Social Policy*, 24(1), 102–126.
- Arnold, D. (2000). “Illusory Riches”: Representations of the Tropical World, 1840–1950. *Singapore Journal of Tropical Geography*, 21(1), 6–18.
- Atkinson, R. (1999). Discourses of Partnership and Empowerment in Contemporary British Urban Regeneration. *Urban Studies*, 36(1), 59–72.
- Atkinson, R. (2000). Narratives of Policy: The Construction of Urban Problems and Urban Policy in the Official Discourse of British Government 1968–1998. *Critical Social Policy*, 20(2), 211–232.
- Bachelet, M. (2008). Mensaje Presidencial.
Retrieved from: http://www.camara.cl/camara/media/docs/discursos/21mayo_2008.pdf
- Bakker, K. (1999). The Politics of Hydropower: Developing the Mekong. *Political Geography*, 18, 209–232.
- Bakker, K & Bridge, G. (2006). Material Worlds? Resource Geographies and the ‘Matter of Nature’. *Progress in Human Geography* 30 (1), 5–27
- Baldwin, A. (2009). Carbon Nullius and Racial Rule: Race, Nature and the Cultural Politics of Forest Carbon in Canada. *Antipode*, 41(2), 231–255.
- Barnett, J. (2000). Destabilizing the Environment-Conflict Thesis. *Review of International Studies*, 26(2), 271–288.

- Bauer, C. J. (2002). *Contra la Corriente: Privatización, Mercados de Agua y el Estado en Chile*. Lom Ediciones. Retrieved from
- Bauer, C. (2009). Dams and Markets: Rivers and Electric Power in Chile. *Natural Resources Journal*, 49, 583–651.
- Bayo, C. (1913). *Los Césares de la Patagonia*. Madrid: Imprenta de Juan Pueyo.
- Bebbington, A. (2009). The New Extraction : Rewriting the Political Ecology of the Andes ? *NACLA Report on the Americas* 42.5, 12–22.
- Bebbington, A., & Bebbington, D. H. (2009). Actores y Ambientalismos: Conflictos Socio Ambientales en Perú. *Íconos. Revista de Ciencias Sociales*, 35, 117–128.
- Bebbington, A., Bebbington, D. H., Bury, J., Langan, J., Muñoz, J. P., & Scurrah, M. (2008). Mining and Social Movements: Struggles Over Livelihood and Rural Territorial Development in the Andes. *World Development*, 36(12), 2888–2905.
- Bebbington, A., & Humphreys Bebbington, D. (2011). An Andean Avatar: Post-Neoliberal and Neoliberal Strategies for Securing the Unobtainable. *New Political Economy*, 16(1), 131–145.
- Beck, U. (1995). *Risk Society: Towards a New Modernity*. London: Sage.
- Bellin, J. (1764). Atlas Marítimo, Isla de Chiloé.
Retrieved from: <http://www.monografias.com/trabajos26/quinchao/quinchao4.shtml>
[July 29th, 2013; 13:34]
- Bennett, J. (2004). The Force of Things: Steps toward an Ecology of Matter. *Political Theory*, 32 (3), 347-372
- Bennett, J. (2010). *Vibrant Matter: A Political Ecology of Things*. Durham: Duke University Press.
- Bernstein, S. (1991). Sector Eléctrico. *Soluciones Privadas a Problemas Públicos*. Santiago: Instituto Libertad y Desarrollo, 175–214.
- Bertrand, A. (1886). Memoria Sobre la Reji3n Central de las Tierras Magallánicas Presentada al Se3or Ministro de Colonizaci3n... In *Anuario Hidrográfico de la Marina de Chile* (Tomo XI., pp. 203–343). Santiago.
- Blacksell, M. (2006). *Political Geography*. New York: Routledge.
- Blaikie, P. (1985). *The Political Economy of Soil Erosion in Developing Countries*. Essex: Longman.
- Blaikie, P. & Brookfield, H. (1987). *Land Degradation and Society*. New York: Methuen & Co. Ltd.

- Blaikie, P. & Springate-Baginski, O. (2007). Setting Up Key Policy Issues in Participatory Forest Management. In P. Springate-Baginski, O & Blaikie (Ed.), *Forest, People & Power: The political ecology of reform in South Asia* (pp. 1–14). London: Earthscan.
- Blaser, M. (2010). *Storytelling Globalization from the Chaco and Beyond*. Durham: Duke University Press.
- Bonnemaïson, J. (2005). *Culture and Space: Conceiving a New Geography* (Vol. 8). London: IB Tauris & Company Limited.
- Bowd, G. & Clayton, D. (2005). Tropicality, Orientalism, and French Colonialism in Indochina: The Work of Pierre Gourou, 1927–1982. *French Historical Studies*, 28(2), 297–327.
- Braun, B. & Castree, N. (1998). *Remaking Reality: Nature at the Millenium*. New York: Routledge Chapman & Hall.
- Braun, B. (2002a). Colonialism's Afterlife: Vision and Visuality on the Northwest Coast. *Cultural Geographies*, 9(2), 202–247.
- Braun, B. (2002b). *The Intemperate Rainforest: Nature, Culture and Power on Canada's West Coast*. Minneapolis: University of Minnesota Press.
- Braun, B. (2004). Nature and culture: on the career of a false problem. In *A companion to cultural geography* (pp. 151–179). London: Blackwell.
- Braun, B. (2007). Biopolitics and the Molecularization of Life. *Cultural Geographies*, 14(1), 6–28.
- Bridge, G. (2001). Resource Triumphalism: Postindustrial Narratives of Primary Commodity production. *Environment and Planning A*, 33(12), 2149–2173.
- Bridge, G. (2010). The Economy of Nature: From Political Ecology to The Social Construction of Nature. In Ley, A., Lee, R., McDowell, L. & Sunley, P. (Ed.), *The SAGE Handbook of Economic Geography* (pp. 121–134). London: SAGE.
- Bryant, A. & Charmaz, K. (2007). *The Sage Handbook of Grounded Theory*. London: SAGE.
- Brayant, R. (1994). From Laissez-Faire to Scientific Forestry: Forest Management in Early Colonial Burma, 1826–85. *Forest & Conservation History*, 38 (4), 160–170.
- Bryant, R. & Bailey, S. (1997). *Third World Political Ecology*. London: Routledge Chapman & Hall.
- Budds, J. (2004). Power, Water and Neoliberalism: The Political Ecology of Water in Chile. *Singapore Journal of Tropical Geography*, 25(3).
- Budds, J. (2009). Contested H2O: Science, Policy and Politics in Water Resources management in Chile. *Geoforum*, 40, 418–430.

- Burr, V. (2002). *An Introduction to Social Constructionism*. London: Routledge.
- Butler, J. (1993). *Bodies that Matter: On the Discursive Limits of Sex*. London: Routledge.
- Byron, J. (1769). *Viaje del Comandante Byron Alrededor del Mundo*. Madrid: En casa de Don Francisco Mariano Nipho.
- Byron, J. (1901). *Relato del Honorable John Byron*. Santiago: Imprenta Cervantes.
- Cabezas, A. (2007). Pérdida de Modos de Vida. In J. P. Rodrigo, Patricio; Orrego (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 113). Santiago: Ocho Libros.
- Cantino, A. (1502). The “Cantino Chart.”
Retrieved from:
http://www.historicalatlas.ca/website/hacolp/national_perspectives/exploration/unit_05/U05_staticmap_cantino_1502.htm# [July 29th, 2013; 11:26]
- Casini, S. (2007). *Ficciones de Patagonia: La Construcción del Sur en la Narrativa Argentina y Chilena*. Fondo Editorial Provincial, Secretaria Cultural del Chubut.
- Castree, N. (2000). The Production of Nature. In *A companion to economic geography* (pp. 269–275). Oxford: Blackwell.
- Castree, N. (2005). *Nature*. New York: Taylor & Francis.
- CDEC-SIC. (2011). Anuario 2001 CDEC-SIC. Retrieved from: http://www.cdec-sic.cl/contenido_es.php?categoria_id=4&contenido_id=000034 [June 22th, 2013; 11:22]
- Central Energia. (2012). Perspectivas del Abastecimiento Eléctrico en el SIC.
Retrieved from: <http://www.centralenergia.cl/2012/04/25/perspectivas-del-abastecimiento-electrico-en-el-sic/> [October, 20 th, 2012; 11:16]
- Cepik, M. (2011). Foucault in the Forest: Questioning Environmentality in Amazonia. *Journal of the American Ethnological Society*, 38(3), 501–515.
- Charmaz, K. (2002). *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. London: SAGE.
- CIPER. (2011). Los cuestionamientos que complican a quienes decidirán la suerte de HidroAysén. Retrieved from: <http://ciperchile.cl/2011/05/03/los-cuestionamientos-que-complican-a-quienes-decidiran-la-suerte-de-hidroaysen/> [January 29th, 2013; 14:44]
- Clarke, A. E. (2003). Situational Analyses: Grounded theory Mapping After the Postmodern Turn. *Symbolic Interaction*, 26(4), 553–576.
- Clarke, A. E., & Friese, C. (2007). Grounded Theorizing Using Situational Analysis. In *The Sage handbook of grounded theory* (pp. 363–397). London: SAGE.

- Clayton, D., & Bowd, G. (2006). Geography, Tropicality and Postcolonialism: Anglophone and Francophone Readings of the Work of Pierre Gourou. *L'Espace géographique*, (3), 208–221.
- CNN Chile. (2012). Experto explica que Hidroaysén aportará 15% de la electricidad total el 2020. Retrieved from: http://www.youtube.com/watch?v=hoalFN_e-Qg [October, 26 th, 2012; 12:21]
- COLBÚN. (2013). Official Website. Retrieved from www.colbun.cl
- CONARA. (n.d.). Políticas de la Comisión Nacional de la Reforma Administrativa. Retrieved from: <http://www.subdere.gov.cl/documentacion/políticas-de-la-comisión-nacional-de-reforma-administrativa-conara>
- CONARA. (1975). *Chile hacia un nuevo destino: su Reforma Administrativa Integral y el Proceso de Regionalización*. Santiago.
- Contreras, H. (2007). Los Incendios. In J. P. Rodrigo, Patricio; Orrego (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 33). Santiago: Ocho Libros.
- Cook, I.J., Tolia-Kelly, D.P. (2010). Material geographies in Hicks D. & Beaudry M (Eds.) *Oxford Handbook of Material Culture Studies*, Oxford: Oxford University Press.
- Corson, C. (2011). Territorialization, Enclosure and Neoliberalism: Non-State Influence in Struggles over Madagascar's Forests. *The Journal of Peasant Studies*, 38(4), 703–726.
- Couyoumdjian, J. R. (1971). Manuel José de Orejuela y la Abortada Expedición de los Césares y Extranjeros, 1780-1783. In *Historia 10* (pp. 57–176). Santiago: Instituto de Historia de la Universidad Católica de Chile.
- Cronon, W. (1996). The Trouble with Wilderness: Or, Getting Back to the Wrong Nature. *Environmental History*, 1(1), 7–28.
- Cruz Cano y Olmedilla, J. de la. (1799). Mapa Geografico de America Meridional. Retrieved from: <http://www.davidrumsey.com/maps5794.html> [July 29th, 2013; 13:41]
- Cummings, B. (1995). Dam the Rivers; Damn the People: Hydroelectric Development and Resistance in Amazonian Brazil. *GeoJournal*, 35(2), 151–160.
- Czepczyński, M. (2008). *Cultural Landscapes of Post-Socialist Cities: Representation of Powers and Needs*. Hampshire: Ashgate.
- Darwin, C. (2001). *The Voyage of the Beagle*. Pennsylvania: The Pennsylvania State University.
- Das, V. (1996). Sexual Violence, Discursive Formations and the State. *Economic and Political Weekly*, 31(35/37), 2411–2423.
- Davis, D. (2006). Neoliberalism, Environmentalism, and Agricultural Restructuring in Morocco. *The Geographical Journal*, 172 (2), 88–105

- Davis, D. (2009). Historical Political Ecology: On the Importance of Looking Back to Move Forward. *Geoforum* (3), 285-286.
- Day, D. (2013). *Antarctica a Biography*. Oxford: Oxford University Press.
- De Angelis, P. (1836). *Colección de Obras y Documentos Relativos a la Historia Antigua y Moderna de las Provincias del Río de la Plata*. Buenos Aires: Imprenta del Estado.
- De Bry, J. (1601). Expedition of Van Noort. Retrieved from: http://international.loc.gov/service/rbc/rbdk/d031/inanalytics_america.html [June 9th, 2011; 09:18]
- De Castro, S. (1992). *Prólogo, El Ladrillo*. Centro de Estudios Públicos. Retrieved from: http://www.cepchile.cl/dms/lang_1/doc_3546.html [October, 26 th, 2012; 12:25]
- Del Sol, P. (2002). Responses to Electricity Liberalization: The Regional Strategy of a Chilean Generator. *Energy Policy*, 30, 437–446.
- Del Sol, P. (2010). Chilean Regional Strategies in Response to Economic Liberalization. *Universia Business Review*, 112–131.
- Demeritt, D. (2002). What is the “Social Construction of Nature”? A Typology and Sympathetic Critique. *Progress in Human Geography*, 26(6), 767–790.
- Diario Financiero. (2013). Rechazo de Bachelet a HidroAysén y cruce entre Velasco y Orrego marcó debate opositor. Retrieved from: http://www.df.cl/rechazo-de-bachelet-a-hidroaysen-y-cruce-entre-velasco-y-orrego-marco-debate-opositor/prontus_df/2013-06-24/004220.html [June 24th, 2013; 18:53]
- Diehl, P. & Gleditsch, N. P. (2001). *Environmental Conflict: An Anthology*. New York: Westview Press.
- Dodds, K. (2007). *Geopolitics: a Very Short Introduction* (Vol. 171). Oxford: Oxford University Press.
- Dodds, K. (2012). *The Antarctic: A Very Short Introduction*. Oxford: Oxford University Press, Incorporated.
- Downing, L. (2008). *The Cambridge Introduction to Michel Foucault*. Cambridge: Cambridge University Press.
- Dumrauf, C. I. (2005). *Patagonia, Tierra de Hombres: Vida y Obra de Los Misioneros Salesianos en el Sur Argentino*. Buenos Aires: Ediciones Continente.
- Ecoamerica. (2013). Obispo Infanti entrega carta a La Moneda e interpela a comité de ministros por proyecto HidroAysén. Retrieved from: <http://www.ecoamerica.cl/entrevistas/450-obispo-infanti-entrega-carta-a-la-moneda-e->

- interpela-a-comité-de-ministros-por-proyecto-hidroaysén.html [January 8th, 2013; 11:19]
- Economía y Negocios. (2012). Energía en Chile. Retrieved from:
http://www.economiaynegocios.cl/especiales/especial_energia/tipos_generacion.html
 [October, 22 th, 2012; 15:34]
- Ecosistemas. (2012a). Ccoordinadora anti-represas de Aysén acuerda no seguir negociando con el gobierno. Retrieved from:
<http://www.ecosistemas.cl/web/noticias/patagoniasinrepresas/2441-coordinadora-anti-represas-de-aysen-acuerda-no-seguir-negociando-con-el-gobierno-.html> [28th of November, 2012; 11:54]
- Ecosistemas. (2012b). Coordinadora anti-represas de Aysén acuerda no seguir negociando con el Gobierno. Retrieved from:
<http://www.ecosistemas.cl/web/noticias/patagoniasinrepresas/2441-coordinadora-anti-represas-de-aysen-acuerda-no-seguir-negociando-con-el-gobierno-.html> [November 28th, 2012; 11:54]
- Edelmag. (2012). Sistemas Eléctricos en Chile. Retrieved from:
<http://www.edelmag.cl/mercadoelectrico/PublishingImages/SistemaEle.PNG> [July 29th, 2013: 20:25]
- Ekers, M., Loftus, A. & Mann, G. (2009). Gramsci Lives!. *Geoforum*, 40 (3), 287-291.
- Ekers, M. (2009). The Political Ecology of Hegemony in Depression-Era British Columbia, Canada: Masculinities, Work and the Poduction of the Forestscape. *Geoforum*, 40 (3), 303-315
- El Ciudadano. (2012). Opositores manifiestan su rechazo a HidroAysén y hacen llegar carta a Presidente Piñera.
 Retrieved from: <http://www.elciudadano.cl/2012/09/03/56717/opositores-manifiestan-su-rechazo-a-hidroaysen-y-hacen-llegar-carta-a-presidente-pinera/> [October, 26 th, 2012; 12:20]
- El Ciudadano. (2013). Amplio cuestionamiento a carta de quienes critican a obispo Infanti por su defensa de ecosistemas y comunidades de Aysén.
 Retrieved from: <http://www.elciudadano.cl/2013/01/29/63141/amplio-cuestionamiento-a-carta-de-quienes-critican-a-obispo-infanti-por-su-defensa-de-ecosistemas-y-comunidades-de-aysen/> [January 7th, 2013; 9:47]
- El Combatiente Aysenino. (2012a). Choque entre la policía y manifestantes Puente Ibáñez.
 Retrieved from:
<http://www.facebook.com/photo.php?fbid=162862057164153&set=a.162861910497501.32742.100003210787810&type=3&theater> [August, 29 th 2012, 3:32 pm]
- El Combatiente Aysenino. (2012b). Quema de vehículo policial.
 Retrieved from:
<http://www.facebook.com/photo.php?fbid=3504161445060&set=a.1207319265441.31782.1302456053&type=1&theater> [August, 29 th, 2012, 15:34]

- El Diario de Aysén. (n.d.). Dirigentes del Movimiento Social de Aysén en Coyhaique.
Retrieved from: <http://www.diarioaysen.cl/noticias1.php?id=1685> [July 29th, 2012; 14:35]
- El Mercurio. (2005). A 40 años del asesinato del teniente Merino en Laguna del Desierto.
Retrieved from: <http://www.emol.com/noticias/nacional/2005/11/04/200537/a-40-anos-del-asesinato-del-teniente-merino-en-laguna-del-desierto.html> [July 25th, 2013; 13:51]
- El Mostrador. (2011). Cómo se financia la millonaria campaña de Patagonia sin Represas.
Retrieved from: <http://www.elmostrador.cl/noticias/pais/2011/06/06/como-se-financia-la-millonaria-campana-de-patagonia-sin-represas/> [19th of June, 2013; 12:41]
- El Mostrador. (2012). Juez que rechazó recursos de protección contra HidroAysén posee más de cien mil acciones en Endesa.
Retrieved from: <http://www.elmostrador.cl/noticias/pais/2012/04/04/ministro-de-la-corte-suprema-que-rechazo-recursos-de-proteccion-contra-hidroaysen-posee-mas-de-cien-mil-acciones-en-endsa/> [January 29th, 2013; 14:57]
- El Mostrador. (2013). Candidatos se muestran más sueltos en debate de la Alianza y Longueira critica a HidroAysén.
Retrieved from: <http://www.elmostrador.cl/noticias/pais/2013/06/21/candidatos-se-muestran-mas-sueltos-en-debate-de-la-alianza-y-longueira-critica-a-hidroaysen/> [June 24th, 2013; 18:56]
- El Patagón Domingo. (2012). Foto de dirigentes Movimiento Social de Aysen.
Retrieved from:
<http://www.facebook.com/photo.php?fbid=416769605015931&set=a.416766178349607.118451.108175142542047&type=1&theater> [August 29th, 2012, 17:12]
- Emol. (2012a). Corte suprema rechaza construccion de termoelectrica Castilla.
Retrieved from: <http://www.emol.com/noticias/economia/2012/08/28/557795/corte-suprema-rechaza-construccion-de-termoelectrica-castilla.html> [October, 26th, 2012; 12:15]
- Emol. (2012b). Turismo en Aysén: Más de US\$12 millones en pérdidas por los 40 días de conflicto.
Retrieved from: <http://www.emol.com/noticias/nacional/2012/03/25/532553/turismo-en-aysen-mas-de-us12-millones-en-perdidas-por-los-40-dias-de-conflicto.html> [July 29th, 2013; 18:23]
- Empréndete Chile. (2012). *Emprendimiento en Chile: Una Comparación Internacional*. Santiago.
- ENDESA. (2013). Official website. Retrieved from www.endsa.cl
- Erakhtin, B. (1998). Theoretical Basis of Designing Concrete Dams with Consideration of Construction Operation. *Hydrotechnical Construction*, 32(2), 82–88.
- Escobar, A. (1996). Constructing Nature: Elements for a Poststructural Political Ecology. In M. Peet, R & Watts (Ed.), *Liberation Ecology* (pp. 46–68). London: Routledge.

- Escobar, A. (1999). After Nature: Steps to an Antiessentialist Political Ecology. *Current Anthropology*, 40(1), 1–30.
- Estrategia. (2010). El 80% de las Inversiones Hidroeléctricas Se Hizo con Actual Legislación de Aguas.
Retrieved from: http://www.estrategia.cl/detalle_noticia.php?cod=26289 [October 26 th, 2012; 12:22]
- Fairclough, N. (1995). *Critical Discourse Analysis: the Critical Study of Language*. New York: Longman Publishing.
- Falkner, T. (1774). *A Description of Patagonia, and the Adjoining Parts of South America*. Eighteenth Century Collections Online Print Editions.
- Fazio, H. (1997). *Mapa Actual de la Extrema Riqueza en Chile*. Santiago: Lom Ediciones.
- Fernández, D. (2011a). Para Daniel Fernández la Patagonia no es intocable.
Retrieved from:
<http://www.veoverde.com/2011/09/para-daniel-fernandez-la-patagonia-no-es-intocable/>
[September, 12th, 11:13]
- Fernández, D. (2011b). “Debate sobre los pro y los contra de HidroAysen” Tolerancia Cero. Chile: Chilevision.
Retrieved from: <http://www.chilevision.cl/home/content/view/359448/229/> [July 11th, 2011; 21:34]
- Fernández, D. (2011c). Entrevista con Jorge Navarrete.
Retrieved from: www.youtube.com/watch?v=Z4dSDJT97sA [November 22th, 2012; 12:04]
- Flynn, T. (2005). Foucault’s Mapping History. In G. Gutting (Ed.), *The Cambridge Companion to Foucault* (pp. 28–46). Cambridge: Cambridge University Press.
- Folchi, M. (2001). Conflictos de Contenido Ambiental y Ecologismo de los Pobres: No Siempre Pobres, Ni Siempre Ecologistas. *El Ecologismo Popular a Debate*, 22, 79–101.
- Fonck, F. (1900). *Viajes de Fray Francisco Menéndez a Nahuelhuapi*. Valparaíso: Imprenta Gillet.
- Forsyth, T. (2003). *Critical Political Ecology: The Politics of Environmental Science*. New York: Routledge.
- Foucault, M. (1977). Nietzsche, Genealogy, History. In D. Bouchar (Ed.), *Language, Conunter-Memory, Practices: Selected Essays and Interviews* (pp. 139–164). Ithaca: Cornell University Press.
- Foucault, M. (1979). *Arqueologia del Saber*. Madrid: Siglo XXI.
- Foucault, M. (1980). *Power: Selected Interviews and Other Writings 1972-77*. (C. Gordon, Ed.). Essex: Harvester Wheatsheaf.

- Foucault, M. (1982). The Subject and Power. *Critical inquiry*, 8(4), 777–795.
- Foucault, M. (2001). *Madness and Civilization: A History of Insanity in the Age of Reason*. Oxon: Routledge.
- Foucault, M. (2002). *The Order of Things: An Archaeology of the Human Sciences*. London: Routledge.
- Foucault, M. (2003). *Vigilar y Castigar: Nacimiento de la Prisión*. Buenos Aires: Siglo XXI.
- Frías Valenzuela, F. (1957). *Historia y Geografía (Primer Ciclo de Humanidades)* (Tomo II). Santiago: Nascimento.
- Futuro Renovable. (2013). Más de mil personas firman carta de respaldo a Obispo Infanti en la Expo Patagonia. Retrieved from: <http://www.futurorenovable.cl/2013/02/mas-de-mil-personas-firman-carta-de-respaldo-a-obispo-infanti-en-la-expo-patagonia/> [January 7th, 2013; 9:46]
- Gabriel, N. (2011). The Work that Parks Do: Towards an Urban Environmentality. *Social & Cultural Geography*, 12(2), 123–141.
- Gastó, J. & Rodrigo, P. (2007). Sobrepastoreo. In J. P. Rodrigo, Patricio; Orrego (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 41). Santiago: Ocho Libros.
- Ghemawat, P. & del Sol, P. (2009). *Power Across Latin America: Endesa de Chile* (pp. 1–21). Boston: Harvard Business School.
- Gilbert, J. (1840). South America. Retrieved from: <http://www.rare-maps.com/details.cfm;jsessionid=843036ab3c60bbc9834a60656333752c6e70?type=maps&rid=1566312> [July 29th, 2013; 14:59]
- Glasberg, E. (2012). *Antarctica as a Cultural Critique. The Gendered Politics of Scientific Exploration & Climate Change*. New York: Palgrave Macmillan.
- Glaser, B. G., & Strauss, A. L. (1967). *The Discovery of Grounded Theory: Strategies for Qualitative Research*. New Jersey: Aldine de Gruyter.
- Gobierno de Chile. (2010). *Plan Aysén 2010-2014*. Santiago.
- Gray, P. (1764). *Peoples of the Americas*. Tarrytown: Marshall Cavendish Corporation.
- Gregory, D. (1994). *Geographical Imaginations*. Oxford: Blackwell.
- Gurney, G. (1999). Lowering the Drawbridge: A Case Study of Analogy and Metaphor in the Social Construction of Home-ownership. *Urban Studies*, 36(10), 1705–1722.

- Gutierrez, D. (1562). *Americae Sive Quartae Orbis Partis Nova et Exactissima Descriptio*. Retrieved from: <http://valdeperrillos.com/book/export/html/1224> [July 29th, 2013; 11:34]
- Gutiérrez, R. (2007). The Circular Missions of the Jesuits in Chiloé: Notes to a Particularity in the History of Evangelization. *Apuntes: Revista de Estudios sobre Patrimonio Cultural-Journal of Cultural Heritage Studies*, 20(1), 50–69.
- Gutting, G. (2005). *Foucault: A Very Short Introduction*. Oxford: Oxford University Press.
- Hachette, D. (2001). Privatizaciones: Reforma Estructural Pero Inconclusa. In Larraín, F. & Vergara, R. (Ed.), *La Transformación Económica de Chile* (Segunda Ed., pp. 111–153). Santiago: Centro de Estudios Públicos.
- Hanishc, W. (1982). *Isla de Chiloé, Capitana de Rutas Australes*. Santiago: Academia Superior de Ciencias Pedagógicas de Santiago.
- Haraway, D. (1991). *Simians, Cyborgs, and Women: The Reinvention of Nature*. New York: Routledge.
- Harris, C. (2004). Did Colonialism Dispossess? Comments from of Empire Edge. *Annals of the Association of American Geographers*, 94(1), 165–182.
- Hartman, P. (2007). La Patagonia Abusada. In J. P. Rodrigo, Patricio; Orrego (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 115). Santiago: Ocho Libros.
- Harvey, D. (1996). *Justice, Nature and the Geography of Difference*. Oxford: Blackwell.
- Harvey, D. (2003). *The New Imperialism*. Oxford: Oxford University.
- Harvey, D (2006). Space as a Keyword. In Castree & Gregory (2006). In *David Harvey: A Critical Reader*. Oxford: Blackwell.
- Hastings, A. (1998). Connecting Linguistic Structures and Social Practices: a Discursive Approach to Social Policy Analysis. *Journal of Social Policy*, 27(2), 191–211.
- Heming, L., Waley, P., Rees, P. (2001). Reservoir Resettlement in China: Past Experience and the Three Gorges Dam. *The Geographical Journal*, 167(3), 195–212.
- HidroAysén. (2007). El Proyecto HidroAysén: Fundamentos yPresentación Resumida. Concepción: Presentación Centro EULA.
- HidroAysén. (2013). Official website. Retrieved from www.hidroaysen.cl
- HidroAysén TV Advert. (2011a). Hospital without energy. Retrieved from: <http://www.youtube.com/watch?v=cPcpyUjILkE> [July 27th, 2013; 14:44]
- HidroAysén TV Advert. (2011b). Stadium without energy. Retrieved from: http://www.youtube.com/watch?v=m2dGxVq_3j8&NR=1&feature=endscreen [October, 22 th, 2012; 15:16]

- HidroAysén TV Advert. (2011c). Renewable energy is not enough. Retrieved from: <http://www.youtube.com/watch?v=cPcPyUjILkE> [October, 20th, 2012; 11:17]
- Hinchliffe, S. (2008). Reconstituting Nature Conservation: Towards a Careful Political Ecology. *Geoforum* 39, 88–97
- Holzapfel, M. (2007). Los Caminos Australes. In Rodrigo, P. & Orrego, J.P. (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 49). Santiago: Ocho Libros.
- Homer-Dixon, T. (1994). Environmental Scarcities and Violent Conflict: Evidence from Cases. *International Security*, 19(1), 5–40.
- Hornborg, A.; McNeill, J. R.; Martinez-Alier, J. (2007). *Rethinking Environmental History: World-System History and Global Environmental Change*. Lanham: Altamira.
- Howitt, R. (2001). *Rethinking Resource Managment*. London: Routledge.
- Hubert J. A. (1669). Nova Totius Americae sive novi orbis tabula... Retrieved from: <http://patagoniamonsters.blogspot.co.uk/2009/11/patagons-map-from-1669.html> [July 20th, 2013; 11:22]
- Huxley, M. (2007). Geographies of Governmentality. In S. Crampton, J; Elden (Ed.), *Space, Knowledge and Power: Foucault and Geography* (pp. 185–204). Hampshire: Ashgate.
- Ibáñez, A. (1973). *La Incorporación de Aysén a la Vida Nacional, 1902-1936*. Santiago: Historia 11, Instituto de Historia, Universidad Católica de Chile.
- ILPES. (2002). *Identificación y Análisis de Oportunidades de Inversión para la Región de Aysén (Serie Gestión Pública 26)*. Santiago.
- ILPES; Gobierno Regional de Aysén. (2009). *Estrategia Regional de Desarrollo de Aysén*. Coyhaique.
- Infanti, L. (2007). Amor y Sabiduría. ¿Cómo lo Explicaríamos a las Futuras Generaciones? In Rodrigo, P. & Orrego J.P. (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 13). Santiago: Ocho Libros.
- Ingeniería PUC. (2012). El Sistema Interconectado Central. Retrieved from: <http://web.ing.puc.cl/~power/alumno02/sicsing/sic.htm> [October, 20th, 2012; 11:17]
- Innova Chile. (2012). *Programa de Apoyo para el Emprendimiento y la Innovación*. Santiago.
- Irrazaval Larraín, J. (1930). *La Patagonia: Errores Geográficos y Diplomáticos*. Santiago: Imprenta Cervantes.
- Isager, L. & Ivarsson, S. (2010). Contesting Landscapes in Thailand: Tree Ordination as Counter-territorialization. *Critical Asian Studies*, 34(3), 395–417.
- Ivanoff, D. (2002). *La Guerra de Chile Chico o los Sucesos del Lago Buenos Aires*. Coyhaique: Editorial Cruz del Sur de la Trapananda–Coyhaique.

- Ivanoff, D. (2007). *Lago General Carrera: Temporales de Sueños*. Santiago: LOM Ediciones.
- Jackson, P. (2000). Rematerializing Social and Cultural Geography. *Social & Cultural Geography*, 1 (1), 9-14.
- Jacobs, K. (2006). Discourse Analysis and its Utility for Urban Policy Research. *Urban Policy and Research*, 24(1), 39–52.
- Jacobs, Keith; Kemeny, Jim; Manzi, T. (2003). Power, Discursive Space and Institutional Practices in the Construction of Housing Problems. *Housing Studies*, 18(4), 429–446.
- JCLD. (2009). *Japan Commission on Large Dams*. London: Taylor & Francis Group.
- Johnson, A. (1862). South America. Retrieved from:
http://commons.wikimedia.org/wiki/File:1870_Johnson_Map_of_South_America_-_Geographicus_-_SouthAmerica-johnson-1870.jpg [July 29th, 2013; 15:27]
- Jørgensen, M. W., & Phillips, L. J. (2002). *Discourse Analysis as Theory and Method*. London: SAGE.
- Kaika, M. (2006). Dams as Symbols of Modernization: The Urbanization of Nature Between Geographical Imagination and Materiality. *Annals of the Association of American Geographers*, 96(2), 276–301.
- Karriem, A. (2009). The Rise and Transformation of the Brazilian Landless Movement into a Counter-Hegemonic Political Actor: A Gramscian Analysis. *Geoforum*, 40 (3), 316-325.
- Kennedy Jr, Robert (2013). Retrieved from:
<http://www.patagoniasinrepresas.cl/final/opiniones-por-patagonia.php> [September 23th, 2013; 12:53]
- La Tercera. (2011a). HidroAysén: 20% del tendido será visible en Carretera Austral y afectará 700 hectáreas. Retrieved from:
<http://diario.latercera.com/2011/12/06/01/contenido/negocios/10-92978-9-hidroaysen-20-del-tendido-sera-visible-en-carretera-austral-y-afectara-700.shtml> [July 27th, 2013; 14:31]
- La Tercera. (2011b). Fedetur no cree que HidroAysén afectará turismo en la Patagonia. Retrieved from: <http://www.latercera.com/noticia/negocios/2011/08/655-389673-9-fedetur-no-cree-que-hidroaysen-afectara-turismo-en-la-patagonia.shtml> [January 30th, 2013; 12:31]
- La Tercera. (2011c). Tercera marcha contra HidroAysén convoca a 20 mil personas en Santiago. Retrieved from: <http://diario.latercera.com/2011/05/29/01/contenido/pais/31-70800-9-tercera-marcha-contra-hidroaysen-convoca-a-20-mil-personas-en-santiago.shtml> [July 25th, 2013; 17:59]
- La Tercera. (2012a). Colbún suspende línea de HidroAysén y demanda cambio en política energética. Retrieved from:
<http://diario.latercera.com/2012/05/31/01/contenido/negocios/10-109995-9-colbun->

- suspende-linea-de-hidroaysen-y-demanda-cambio-en-politica-energetica.shtml [October, 26 th, 2012; 12:17]
- La Tercera. (2012b). Los mecenas de Patagonia Sin Represas. Retrieved from: <http://diario.latercera.com/2012/03/03/01/contenido/reportajes/25-102470-9-los-mecenas-de-patagonia-sin-represas.shtml> [19th of June, 2013; 14:32]
- La Tercera. (2012c). Piñera asegura que su gobierno “protegerá la Patagonia” y que las represas que se construirán en la zona cumplirán la ley. Retrieved from: <http://www.latercera.com/noticia/politica/2012/11/674-495220-9-presidente-pinera-dice-que-este-gobierno-va-a-proteger-nuestra-patagonia-en.shtml> [December 3th, 2012; 13:26]
- La Tercera. (2012d). Precio de la energía residencial en Chile y la OCDE, p. 23. Santiago.
- Lacroix, F. (1839). L’Univers Pittoresque. Histoire et description des îles de l’Océan and Chili, Paraguay, Uruguay, Buenos-Ayres, Patagonie, Terre du Feu et archipel des Malouines. Retrieved from: <http://www.goletancud.cl/2012/05/01/¿por-que-la-patagonia-se-llama-asi/> [July 29th, 2013; 13:44]
- Larraín, F. & Vergara, R. (Ed.). (2001). *La Transformación Económica de Chile* (Segunda.). Santiago: Centro de Estudios Públicos.
- Larroulet, C. (Ed.). (1991). *Soluciones Privadas a Problemas Públicos*. Santiago: Libertad y Desarrollo. Retrieved from <http://www.libertadydesarrollo.cl/biblioteca/libros/pubs3.html>
- Latchman, R. (1929). *La Leyenda de los Césares: Su Origen y su Evolución*. Santiago: Imprenta Cervantes.
- Latta, A., & Cid, B. (2012). Testing the Limits Neoliberal Ecologies from Pinochet to Bachelet. *Latin American Perspectives*, 39(4), 163–180.
- Lees, L. (2004). Urban geography: discourse analysis and urban research. *Progress in Human Geography*, 28(1), 101–107.
- Leroy, C. & Drioux, C. (1872). L’Amérique du Sud/Antilles. Retrieved from: <http://trove.nla.gov.au/map/result?q&sortby=dateDesc&l-decade=186&s=180> [July 29th, 2013; 15:33]
- Leslie, J. (2005). *Deep Water: The Epic Struggle over Dams, Displaced People, and the Environment*. New York: Farrar, Straus and Giroux.
- Lestrelin, G. (2011). Rethinking State Ethnic Minority Relations in Laos: Internal Resettlement, Land Reform and Counter-Territorialization. *Political Geography*, 30, 311–319.
- Libiszewski, S. (1992). What is an Environmental Conflict? In *Environment and Conflicts*. Berne/Zürich: International Relations and Security Networks.

- Liu, Y. (2008). The Construction of Patriotic Discourse in Chinese Basal Readers. In J. Dolón, Rosana; Todolí (Ed.), *Analysing Identities in Discourse* (pp. 57–76). Amsterdam: John Benjamins Publishing Company.
- Livon-Grosman, E. (2003). *Geografías Imaginarias. El Relato de Viaje y la Construcción del Espacio Patagónico*. Rosario: Ensayos Crítico, Beatriz Viterbo Editora.
- Luke, T. (1995). On Environmentality: Geo-Power and Eco-Knowledge in the Discourses of Contemporary Environmentalism. *Cultural Critique*, 31 (The Politics of Systems and Environments, Part II), 57–81.
- Maldonado, P. & Herrera, B. (2007). *Sostenibilidad y Seguridad del Abastecimiento Eléctrico: Estudio de caso sobre Chile con posterioridad a la Ley 20.018*. Santiago: CEPAL, División de Recursos Naturales e Infraestructura.
- Mann, G. (2009). Should Political Ecology be Marxist? A Case for Gramsci's Historical Materialism. *Geoforum*, 40 (3), 335–344
- Marcel, M. (1989). Privatización y Finanzas Públicas: El caso de Chile, 1985-1988. *Colección de Estudios CIEPLAN N° 26*.
- Marina de Chile. (1871). Diario de Viaje i Navegación hechos por el Padre Jose Garcia (1766-1767). In *Anuario Hidrográfico de la Marina de Chile Año VI* (pp. 3–42).
- Marina de Chile. (1880). Expedicion de Francis Drake. In *Anuario Hidrográfico de la Marina de Chile Año VI* (pp. 527–556). Santiago: Imprenta Nacional.
- Martín Rojo, L. (2008). Imposing and Resisting Ethnic Categorization in Multicultural Classrooms. In J. Dolón, Rosana; Todolí (Ed.), *Analysing Identities in Discourse* (pp. 31–56). Amsterdam: John Benjamins Publishing Company.
- Martínez-Alier, J. (1998). Political Ecology of Industrial Tree Plantations and Large Dams. *Capitalism Nature Socialism*, 9(3), 141 – 146.
- Martínez-Alier, J. (2002). *The Environmentalism of the Poor: A Study of Ecological Conflicts and Valuation*. Glos: Edward Elgar.
- Martinez-Alier, J. (2004). Distribution Conflicts Ecological of Sustainability Indicators. *International Journal of Political Economy*, 34(1), 13–30.
- Martinez-Alier, J. (2009). Social Metabolism, Ecological Distribution Conflicts, and Languages of Valuation. *Capitalism Nature Socialism*, 20(1), 58–87.
- Martinic, M. (1986). *Nogueira: El Pionero*. Punta Arenas: Ediciones Universidad de Magallanes.
- Martinic, M. (2001). *Braun y Menéndez: Prohombres Patagónicos*. Punta Arenas: Ediciones de la Universidad de Magallanes.
- Martinic, M. (2005). *De la Trapananda al Aysén*. Santiago: Pehuen Editores.

- Marvasti, A. (2004). *Qualitative Research in Sociology*. London: SAGE.
- Matless, D. (1998). *Landscape and Englishness*. London: Reaktion Books.
- McCulloch, C. S. (2008). *Dam Decisions and Pipe Dreams: The Political Ecology of Reservoir Schemes (Teesdale, Farndale and Kielder Water) in North East England*. La Vergne: Lightning Source.
- McCully, P. (2001). *Silenced Rivers: The Ecology and Politics of Large Dams*. London: Zed Books.
- McEwan, C. (2009). Postcolonialism/Postcolonial Geographies. In Kitchin, R. & Thrift, N. (Ed). *International Encyclopedia of Human Geography*. London: Elsevier.
- Mele, C. (2000). The Materiality of Urban Discourse : Rational Planning in the Restructuring of the Early Twentieth-Century Ghetto. *Urban Affairs Review*, 35, 628–648.
- Mercopress. (2012). Chile with 50% hydro power by 2034, but serious energy shortages in 2015. Retrieved from: <http://en.mercopress.com/2012/01/16/chile-with-50-hydro-power-by-2034-but-serious-energy-shortages-in-2015> [October, 22 th, 2012; 16:10]
- Mignolo, W. (2005). *The Idea of Latin America*. Oxford: Blackwell.
- Mills, S. (1997). *Discourse*. London: Routledge
- Minería Chilena. (2010). Gran minería y consumo energético. Retrieved from: http://www.mch.cl/revistas/index_neo.php?id=1454 [October, 20th, 2012; 11:16]
- Ministerio de Energía. (2012). *Estrategia Nacional de Energía 2012-2030. Energía para el Futuro*. Santiago. Retrieved from: <http://www.minenergia.cl/estrategia-nacional-de-energia-2012.html>
- Mitchell, D. (1998). The Scales of Justice: Localist Ideology, Large-Scale Production, and Agricultural Labor's Geography of Resistance in 1930s California. In *Organizing the Landscape: Geographical Perspectives on Labor Unionism* (pp. 159–194). Minneapolis: University of Minnesota Press.
- Mitchell, D. (2003). Cultural Landscapes: Just Landscapes or Landscapes of Justice? *Progress in Human Geography*, 27(6), 787–796.
- Mitchell, W. J. T. (1994). Imperial Landscape. *Landscape and Power*, 2, 5–34.
- Mitchell, W. J. T. (2002). *Landscape and Power*. London: University of Chicago Press.
- Mladinic, H. (2007). El Turismo. In J. P. Rodrigo, Patricio; Orrego (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 157). Santiago: Ocho Libros.
- Mönckeberg, M. O. (2001). *El Saqueo de los Grupos Económicos al Estado Chileno*. Santiago: Ediciones B.

- Moussy, M. de. (1873). Carte de la Confederation Argentine. Martin de Moussy. Retrieved from: <http://www.davidrumsey.com/maps51111.html> [May 5th, 2012; 08:54]
- Murdoch, J. (2006). *Post-Structuralist Geography: A Guide to Relational Space*. London: SAGE.
- Murdoch, J. (2004). Putting discourse in its place: planning, sustainability and the urban capacity study. *Area*, 36 (1), 50–58
- Muscarà, L. (2000). Gottmann's Geographic Glossa. *GeoJournal*, 52(2), 285–293.
- Musters, G. (1911). *Vida Entre los Patagones*. Buenos Aires: Universidad Nacional de la Plata.
- Neumann, R.(1998). *Imposing Wilderness: Struggles Over Livelihoods and Nature Preservation in Africa*. Berkeley: University of California Press.
- Nicholls, N. (2010). La Sociedad Ballenera de Magallanes: de Cazadores de Ballenas a “héroes” que Marcaron la Soberanía Nacional, 1906-1916. *Historia (Santiago)*, 43(1), 41–78.
- Nicoletti, M. A. (1998). La Configuración del Espacio Misionero: Misiones Coloniales en la Patagonia Norte. *Revista Complutense de Historia de América*, 24, 87–112.
- Nüsser, M. (2003). Political Ecology of Large Dams: a Critical Review. *Petermanns Geographische Mitteilungen*, 147(1), 20–27.
- O'Connor, J. (1998). *Natural Causes: Essays in Ecological Marxism*. New York: Guilford.
- O'Farrel, C. (2005). *Michel Foucault*. California: SAGE.
- Offen, K. (2004). Historical Political Ecology: An Introduction. *Historical Geography*, 32, 19-42.
- Oportus, C. (1928). *Informe Sobre el Problema de Colonización de la Zona del Río Baker*. Santiago.
- Ovalle, A. de. (1646). Histórica Relación del Reyno de Chile y de las Misiones y Ministerios que Exercita la Compañía de Jesús. Retrieved from: http://www.memoriachilena.cl/temas/documento_detalle.asp?id=mc0008986 [June 13th, 2012; 16:56]]
- Parker, S. (2000). Tales of the City: Situating Urban Discourse in Place and Time. *City: Analysis of Urban Trends, Culture, Theory, Policy, Action*, 4(2), 233–246.
- Patagonia Sin Represas. (2009a). 9 Manifestaciones del sentir ciudadano. Chile dice NO a HidroAysén. Retrieved from: <http://www.patagoniasinrepresas.cl/final/dinamicos/inserto12.pdf> [May 14th, 2013; 21:20]

- Patagonia Sin Represas. (2009b). 9 Razones Más para conservar la Patagonia. Patagonia Reserva de Vida. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto3.pdf> [May 13th, 2013; 12:13]
- Patagonia Sin Represas. (2009k). 9 Razones por las cuales el gobierno NO debe admitir a trámite el Estudio Ambiental para construir Represas en Aysen. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto1.pdf> [May 13th, 2013; 12:23]
- Patagonia Sin Represas. (2009l). 9 Razones por qué HidroAysen es Negocio de Pocos...y ruina de Muchos. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto11.pdf> [May 14th, 2013; 20:55]
- Patagonia Sin Represas. (2009c). 9 Razones Más para Rechazar HidroAysén. Monopolio Energético y de Aguas. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto7.pdf> [May 13th, 2013; 13:34]
- Patagonia Sin Represas. (2009d). 9 Razones Más, para conservar la Patagonia. Turismo y Desarrollo de la Patagonia Chilena. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto6.pdf> [May 13th, 2013; 13:44]
- Patagonia Sin Represas. (2009e). 9 Razones Más...Las Megarepresas de Aysen NO SON NECESARIAS. Existen Alternativas. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto4.pdf> [May 13th, 2013; 14:01]
- Patagonia Sin Represas. (2009f). 9 Razones Más...Para Preservar La Patagonia Sin Represas. Parques Nacionales. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto8.pdf> [May 13th, 2013; 14:05]
- Patagonia Sin Represas. (2009g). 9 Razones Más...Para Proteger La Patagonia Sin Represas. Impactos de la Línea de Transmisión. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto9.pdf> [May 14th, 2013; 20:34]
- Patagonia Sin Represas. (2009h). 9 Razones Más...Para proteger nuestra Patagonia. Impacto de las Represas. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto5.pdf> [May 13th, 2013; 15:22]
- Patagonia Sin Represas. (2009i). 9 Razones para NO destruir la Patagonia Chilena. Retrieved, from: <http://www.patagoniasinrepresas.cl/final/dinamicos/inserto2.pdf> [May 13th, 2013; 15:41]
- Patagonia Sin Represas. (2009j). 9 Razones para Reducir el Consumo Energético. No al Derroche...así se pierden nuestros ríos. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/dinamicos/inserto10.pdf> [May 13th, 2013; 16:05]
- Patagonia Sin Represas. (2012). Nuestra Causa. Retrieved from:
<http://www.patagoniasinrepresas.cl/final/contenido.php?seccion=nuestracausa> [21th of November, 2012; 17:02]

- Patagonia Sin Represas. (2013). Official website. Retrieved from www.patagoniasinrepresas.cl
- Paulson, S; Gezon, L & Watts, M. (2003). Locating the Political in Political Ecology : An Introduction. *Human Organization*, 62(3), 205–217.
- Peet, R. (1996). A Sign Taken for History: Daniel Shays' Memorial in Petersham, Massachusetts. *Annals of the Association of American Geographers*, 86 (1), 21-43.
- Peet, R. & Watts, M. (Ed.). (1996). *Liberation Ecologies: Environment, Development, Social Movements*. London: Routledge.
- Peet, R., & Watts, M. (2004). *Liberation Ecologies: Environment, Development, Social Movements* (Second Edi.). Oxford: Routledge.
- Peet, R; Robbins, P; Watts, M. (Ed.). (2011). *Global Political Ecology*. London: Routledge.
- Peluso, N. L. (1995). Whose Woods are These? Counter-Mapping Forest Territories in Kalimantan, Indones. *Antipode* 27(4), 383-406.
- Peluso, N. L. (2005). Seeing Property in Land Use: Local Territorializations in West Kalimantan, Indonesia. *Geografisk Tidsskrift, Danish Journal of Geography*, 105(1), 1–15.
- Peluso, N. , & Lund, C. (2011). New Frontiers of Land Control: Introduction. *The Journal of Peasant Studies*, 38(4), 667–681.
- Peluso, N. L., & Vandergeest, P. (2001). Genealogies of the Political Forest and Customary Rights in Indonesia, Malaysia, and Thailand. *Journal of Asian Studies- Ann Arbor*, 60(3), 761–812.
- Peñaloza, F. (2010). Myths and Realities: Mapping Scientific, Religious, Aesthetic and Patriotic Quest in Patagonia. In Peñaloza, F. & Wilson, J. (Ed.), *Patagonia Myths and Realities*. Oxford: Peter Lang.
- Percival, Val & Homer-Dixon, T. (2001). The Case of South Africa. In Diehl & Gleditsch (Ed.), *Environmental Conflict: An Anthology* (pp. 13–35). New York: Westview Press.
- Peuhkuri, T. (2002). Knowledge and Interpretation in Environmental Conflict Fish Farming and Eutrophication in the Archipelago Sea, SW Finland. *Landscape and Urban Planning*, 61, 157–168.
- Phillips, D. (2006). Parallel Lives? Challenging Discourses of British Muslim Self-Segregation. *Environment and Planning D: Society and Space*, 24, 25–40.
- Pigaffeta, A. (2010). *The First Voyage Round the World by Magellan*. Cambridge: Cambridge Library Collection.
- Pomar, J. (1923). *Tierras de Colonización: La concesión del Aisén y el Valle Simpson*. Santiago: Imprenta Cervantes.

- Pompe, J. J., & Rinehart, J. R. (2002). *Environmental Conflict: In Search of Common Ground*. New York: State University of New York.
- Powell, R. C. (2007). "The Rigours of an Arctic Experiment": The Precarious Authority of Field Practices in the Canadian High Arctic, 1958-1970. *Environment and Planning A*, 39(8), 1794.
- Powell, R. C. (2008). Configuring an "Arctic Commons"? *Political Geography*, 27(8), 827–832.
- Prado, C. G. (2000). *Starting with Foucault*. Oxford: Westview Press.
- Prieto, M., & Bauer, C. (2012). Hydroelectric Power Generation in Chile: An Institutional Critique of the Neutrality of Market Mechanisms. *Water International*, 37(2), 131–146.
- Proctor, J. D. (1998). The Social Construction of Nature: Relativist Accusations, Pragmatist and Critical Realist Responses. *Annals of the Association of American Geographers*, 88(3), 352–376.
- Puchi, V. H. (2007). Producción y Cultura. In J. P. Rodrigo, Patricio; Orrego (Ed.), *Patagonia Chilena ¡Sin Represas!* (p. 155). Santiago: Ocho Libros.
- Purvis, T. & Hunt, A. (1993). Discourse, Ideology, Discourse, Ideology, Discourse, Ideology... *The British Journal of Sociology*, 44(3), 473–499.
- Quiroz, D. (2011). La Flota de la Sociedad Ballenera de Magallanes: Historias y Operaciones en los Mares Australes (1905-1916). *Magallania (Punta Arenas)*, 39(1), 33–58.
- Quiroz, D. & De la Fuente, P. (2012). Operaciones Balleneras de la INDUS en Aguas Patagónicas: Años Iniciales (1936-1939). *Magallania (Punta Arenas)*, 40(2), 23–40.
- Rabinow, P. (1984). *The Foucault Reader*. New York: Pantheon Books.
- Radio Bio Bio. (2011). Energía Austral firma acuerdo con HidroAysén que le permitira unirse a sistema interconectado central. Retrieved from: <http://www.biobiochile.cl/2011/11/03/energia-austral-firma-acuerdo-con-hidroaysen-que-le-permitira-unirse-a-sistema-interconectado-cetral.shtml> [May 22th, 2011; 11:23]
- Radio Bio Bio. (2012a). Piñera y proyecto HidroAysén: Podrán ser construidas las represas que cumplan con legislación. Retrieved from: <http://www.biobiochile.cl/2012/11/25/presidente-pinera-represas-que-cumplan-con-legislacion-pueden-ser-construidas.shtml> [January 28th, 2013; 17:18]
- Radio Bio Bio. (2012b). Encuesta Adimark muestra contundente apoyo a movimiento social en Aysén. Retrieved from: <http://www.biobiochile.cl/2012/04/04/encuesta-adimark-muestra-contundente-apoyo-a-movimiento-social-en-aysen.shtml> [June 23th, 2013; 17:14]

- Radio Cooperativa. (2011). HidroAysén cuestionó origen de recursos de ONG ambientalistas. Retrieved from: http://www.cooperativa.cl/hidroaysen-cuestiono-origen-de-recursos-de-ong-ambientalistas/prontus_notas/2011-04-05/110147.html [19th of June, 2013; 14:27]
- Radio Santamaría. (2012). Daniel Fernández reconoce que proyecto Hidroaysén podría sufrir nuevo retraso por indefinición de carretera eléctrica pública. Retrieved from: <http://www.radiosantamaria.cl/rsm/noticias/5214-daniel-fernandez-reconoce-que-proyecto-hidroaysen-podria-sufrir-nuevo-retraso-por-indefinicion-de-carretera-electrica-publica.html> [October, 26 th, 2012; 12:19]
- Revista EI. (2012). Los grupos empresariales y la energía en Chile. Retrieved from: http://www.revistaei.cl/revistas/imprimir_noticia_neo.php?id=906 [October, 22 th, 2012; 15:56]
- Rivero, D. (1529). El Mapa de América. Descubrimiento y Exploración. Retrieved from <http://valdeperrillos.com/book/export/html/1224> [July 29th, 2013; 11:31]
- Robbins, P. (2011). *Political Ecology: A Critical Introduction*. Oxford: Wiley.
- Rodrigo, P. & Orrego, J. P. (Ed.). (2007). *Patagonia Chilena ¡Sin Represas!* Santiago: Ocho Libros.
- Romero, H. (1986). Objetivos, Realidades y Contradicciones de la Colonización de Aisén. *Ambiente y Desarrollo, II* (2), 75-89.
- Rosenberg, D; Bodaly, R; Usher, P. (1995). Environmental and Social Impacts of Large Scale Hydroelectric Development: Who is Listening?. *Global Environmental Change*, 5(2), 127–138.
- Rudnick, H. (1998). *The Electric Market Resctructuring in South America: Successes and Failures on Market Design* (pp. 1–7). San Diego.
- Rudnick, H., & Zolezzi, J. (2001). Electric Sector Deregulation and Restructuring in Latin America: Lessons to be Learnt and Possible Ways Forward. In *Generation, Transmission and Distribution, IEE Proceedings-* (Vol. 148, pp. 180–184). IET.
- Said, E. (2003). *Orientalism*. London: Penguin.
- Salazar, H. (2008). Chile: ríos de vida, ríos vendidos. *Television Española*.
- Sanger, A. (2013). Retrieved from: <http://www.ipsnoticias.net/2007/10/ambiente-chile-campana-internacional-contrarepresas/> [May 12th, 2013; 12:32]
- Schmidl, U. (1605). Map of América Meridional. *Americae pars VII. Verissima et ivcvndissima descriptio praecipvarvm qvarvndam Indiae regionum & insularum, quae ...* Retrieved from: http://international.loc.gov/service/rbc/rbdk/d031/inanalytics_america.html [May 12th, 2011; 15:34]

- Scott, J. (1976). *The Moral Economy of the Peasant: Rebellion and Subsistence in Southeast Asia*. New Haven: Yale University Press.
- Sebastián, P. (2011). Mensaje Presidencial. Retrieved from <http://www.gob.cl/mensaje-presidencial-21-de-mayo-2011/>
- Sernatur. (2013). Torres del Paine. Retrieved from: <http://www.elmagallanews.cl/noticia/sociedad/escogen-las-torres-del-paine-como-el-mejor-lugar-para-que-viajeros-solitarios-reali> [July 29th, 2013; 18:13]
- SERPLAC. (2000). *Estrategia de Desarrollo Región de Aysén 2000-2006*. Coyhaique.
- Serra, P. (2002). Regulación del Sector Eléctrico Chileno. *Revista Perspectivas*, 6(1), 11–43.
- Simon, N. (2000). “The Very Gardens of South America”: European Surveyors in Paraguay. *Singapore Journal of Tropical Geography*, 21(1), 48–62.
- Sio, M. (2009). Natures, Postcolonial. In Kitchin, R. & Thrift, N. (Ed). *International Encyclopedia of Human Geography*. London: Elsevier.
- Slater, C. (2002). *Entangled Edens: Vision of the Amazon*. London: University of California Press.
- Smith, N. (1984). *Uneven Development: Nature. Capital and the Production of Space*. Georgia: The University of Georgia Press.
- SOFOFA. (2010). Mapa Energético de Chile. Retrieved from: http://www.sofofa.cl/indicadores/CPI/Informe/Mapa_Energetico.pdf [July 20th, 2012; 17:28]
- Sohr, R. (2012). *Chile a Ciegas*. Santiago: Random House Mandadori.
- Soto, R. (1999). *Intitutional Reforms in the Electricity Sector*. Retrieved from <http://fen.uahurtado.cl/wp-content/uploads/2010/07/inv120.pdf>
- Springer, S. (2010). Neoliberal Discursive Formations: On the Contours of Subjectivation, Good Governance, and Symbolic Violence in Posttransitional Cambodia. *Environment and Planning D: Society and Space*, 28, 931– 950.
- Steadman Rice, J. (1992). Discursive Formation, Life Stories, and the Emergence of Co-Dependency: “Power/Knowledge” and the Search for Identity. *The Sociological Quarterly*, 33(3), 337–364.
- Steffen, H. (1910). *Viajes de Exploracion i Estudio en la Patagonia Occidental* (Tomo II.). Santiago: Imprenta Cervantes.
- Sullivan, S. & Stott, P. A. (2000). *Political Ecology: Science, Myth and Power*. London: Arnold.

- Swyngedouw, E. (2003). Modernity and the Production of the Spanish Waterscape, 1890–1930. In T. Zimmerer, K. S.; Bassett (Ed.), *Political Ecology. An integrative approach to geography and environment-development studies*” (pp. 94–112). London: The Guildorf Press.
- Swyngedouw, E. (2004). *Social Power and the Urbanization of Water: Flows of Power*. Oxford: Oxford University.
- Swyngedouw, E. (2007). Technonatural Revolutions: The Scalar Politics of Franco’s Hydro-Social Dream for Spain, 1939–1975. *Journal compilation* © Royal Geographical Society (with The Institute of British Geographers).
- Terra. (2011). Manifestación contra HidroAysén. Retrieved from: http://megagalerias.terra.cl/megagalerias/abril2011/mg58993200511/mg61984200511/A_UNO_021215.jpg [July 27th, 2013; 13:12]
- Thrift, N. (2002). The Future of Geography. *Geoforum*, 33, 291–298
- Tokman, M. (2008). *Política Energética: Nuevos Lineamientos. Transformando la Crisis Energética en una Oportunidad Política*. Santiago.
- Tsing, A. L. (2005). *Friction: An Ethnography of Global Connection*. New Jersey: Princeton University Press.
- Turpin, T. (2008). *Dam*. London: Reaktion Books.
- Unkown Author. (n.d.). La ciudad de los Cesares. Retrieved from: <http://dadaisforever.wordpress.com/2008/04/28/la-busqueda-de-la-ciudad-de-los-cesares/> [April 18th, 2011; 12:03]
- Urbina, X. (2008). La Frustrada Misión Estrategica de Nahuelhuapi, Un punto en la Inmensidad de la Patagonia. *Magallania*, 36(1), 5–30.
- Usher, A. (1997). *Dams as Aid*. London: Taylor & Francis.
- Van Dijk, T. (1998). *Ideology: A multidisciplinary approach*. London: SAGE.
- Van Dijk, T. (2001). Principles of Critical Discourse Analysis. In *Discourse Theory and Practice: A reader* (pp. 300–317). London: Sage.
- Van Dijk, T. (2005). Contextual Knowledge Management in Discourse Production. In *A New Agenda in (Critical) Discourse Analysis* (pp. 71–100). Amsterdam: John Benjamins Publishing Company.
- Vandergeest, P. (1996). Mapping Nature: Territorialization of Forest Rights in Thailand. *Society & Natural Resources: An International Journal*, 9(2), 159–175.
- Vandergeest, P. & Peluso, N. L. (1995). Territorialization and State Power in Thailand. *Theory and Society*, 24(3), 385–426.

- Veoverde. (2011). El Papel de la Publicidad en HidroAysén. Retrieved from:
<http://www.veoverde.com/2011/05/opinion-el-papel-de-la-publicidad-en-hidroaysen/>
 [July 29th, 2013; 18:07]
- Vergara, A. (2002). Régimen Jurídico de las Concesiones de Servicio Eléctrico Privado.
Revista de Derecho Administrativo Económico, 2, 395–402.
- Vergara, A. (2004). *Derecho Eléctrico*. Santiago: Editorial Jurídica de Chile.
- Wainwright, J. & Morgan, R. (2003). Territorialization, Science and the Colonial State: the Case of Highway 55 in Minnesota. *Cultural Geographies*, 10, 196–217.
- Walker, P. (2004). Roots of Crisis: Historical Narratives of Tree Planting in Malawi.
Historical Geography 32, 89-109.
- Waterton, E. (2013). Landscape and Non-Representational Theories. In Howard, P., Thompson, I. & Waterton, E. *The Routledge Companion to Landscape Studies*. Oxford: Routledge.
- White, R. (1995). *The Organic Machine: The Remaking of the Columbia River*. New York: Farrar, Straus and Giroux
- Willems-Braun, B. (1997). Buried Epistemologies: The Politics of Nature in (Post) Colonial British Columbia. *Annals of the Association of American Geographers*, 87(1), 3-31.
- Wodak, R. & Weiss, G. (2005). Analyzing European Union Discourses: Theories and applications. In P. Wodak, Ruth; Chilton (Ed.), *A New Agenda in (Critical) Discourse Analysis* (pp. 122–137). Amsterdam: John Benjamins Publishing Company.
- Wodak, R. & Chilton, P. (Ed.). (2005). *A New Agenda in (Critical) Discourse Analysis Theory, Methodology and Interdisciplinarity*. Amsterdam: John Benjamins Publishing Company.
- Woods, N. (2006). *Describing Discourses: A Practical Guide to Discourse Analysis*. London: Hodder Arnold.
- World Energy Council. (2007). Survey of Energy Resources. Retrieved from:
http://www.worldenergy.org/documents/hydro_country_notes.pdf [October, 10 th, 2012; 19:12]
- Worster, D. (1982). Hydraulic Society in California: An Ecological Interpretation.
Agricultural History, 56(3), 503–515.
- Wylie, J. (2007). *Landscape (Key Ideas in Geography)*. London: Routledge.
- Wylie, J. (2009). The Ends of the Earth: Narrating Scott, Amundsen and Antarctica. In V. Cosgrove, Denis; della Dora (Ed.), *High Places: Cultural Geographies of Mountains, Ice and Science* (pp. 33–47). London: I.B. Tauris.

