London School of Economics and Political Science

Energy as the work of nature:

The quandaries of sacrificial productivism in Chiloé, south of Chile

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DECLARATION

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ABSTRACT

Chiloé, an archipelago in the south of Chile, has been the setting of recent conflicts around the expansion of energy infrastructure. My research explores these contestations in the wider ecological and political context of the relations between the archipelago and the Chilean state. I analyse these conflicts around energy generation as the latest phase of a much longer history of struggles for and against connectivity and related processes of making the land productive. I contextualize the ambiguous relation with energy my interlocutors had in tandem with their idea of work as a human activity. The concept of work, I suggest, is inseparable from the wider moral and political understanding of energy as the work of nature. I argue that both work and energy have been developed as goods in themselves, as part of the historical trajectory of ideas of moral worth, care and productivity in Chiloé

Within this context, I show that understanding certain activities as 'work' is not a universal or default category; its imposition has relied worldwide on different institutions. In the case of Chiloé, I focus on the role the Spanish-imposed *encomienda* had as a seminal moment of transformation and displacement of other forms of social action, such as the *minga*. The contradictions that emerge in the expectations around work can be found in the idea of sacrifice, and in a certain relation to work as being sacrificial. A similar denunciation and understanding of sacrifice can be found in the notion of sacrifice zones, a term used among my interlocutors to express the dangers that come with making a place productive. I develop my argument across two lines: processes of energy planning and other state-led instances of bureaucratic evaluation of energy projects, and the issues Chilote collectives brought forward in their defence of the archipelago's autonomy in relation to energy projects.

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ACRONYMS

AFUSAM	Asociación de Funcionarios de la Salud Municipal (Association of Municipal Health Workers)
ANEF	*Asociación Nacional de Empleados Fiscales* (National Union of Public Workers).
ANFUSEA	*Asociación Nacional de Funcionarios del Servicio de Evaluación Ambiental (*National Asosiation of Workers of the Environmental Evaluation Service)
ARV	*Aysén Reserva de vida*
CADE	*Comisión Asesora para el Desarrollo Eléctrico* (Adivsory Board for Electricity Development)
CAP	*Comisión Asesora Presidencial* (Presidential Advisory Committee)
CASA	*Centro de Análisis Socioambiental* (Centre for Socia-Environmental Analysis)
CCTP	*Comisión Ciudadana-Técnico-Parlamentaria para la Política y la Matriz Eléctrica*
CEP	*Centro de Estudios Públicos* (Centre for Public Studies)
CESCH	*Centro de Estudios Sociales de Chiloé* (Chiloé's Social Studies Centre)
CORFO	*Corporación de Fomento de la Producción* (Economic Development Agency
DIA	*Declaración de Impacto Ambiental* (Environmental Impact Declaration)
E2050	*Energía 2050* (first National Energy Policy)
EEL	*Estrategia Energética Local* (Local Energy Strategy)
EIA	*Evaluación de Impacto Ambiental* (Environmental Impact Evaluation)

FENATRAMA	*Federación Nacional de Trabajadores del Medio Ambiente* (National Federation of Environment workers)
GPS	*Oficina Gestión de Proyectos Sustentables* (Sustainable Projects Management Office)
IRENA	International Renewable Energy Association
NCRE	Non-Conventional Renewable Energy
PELP	*Planficación Energética de Largo Plazo* (Long Term Energy Plan)
RCA	*Resolución de Calificación Ambiental* (Environmental Qualification Resolution)
SCAC	*Sociedad Civil por la Acción Climática* (Civil Society for Climate Action)
SEA	*Servicio de Evaluación Ambiental* (Environmental Evaluation Service)
SEIA	*Sistema de Evaluación de Impacto Ambiental* (Environmental Impact Evaluation System)
SEN	*Sistema Eléctrico Nacional* (National Electricity System)

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PROLOGUE: AN ETHNOGRAPHIC VIGNETTE FROM THE STREETS OF SANTIAGO

Anyone walking in Santiago on the 17th of October 2019 would have had no idea of what was about to ignite the day after. At least I did not. Often presented as a Latin American case of neoliberal success, the last 10 years of growing social mobilisation, especially through struggles led by the student movement in 2011-2013, had failed to bring about a wider dismantling of the suffocating inequalities, empire of debt and oligarchic politics that marked post-dictatorship Chile. What we, as students, did not achieve through careful organising and massive but official demonstrations on the streets suddenly became possible after an increase in 2p in the subway fare in October 2019.

The raise had been routinely explained and downplayed on TV and newspapers by expert economists that saw it as a reasonable adjustment to increase**s** in fuel prices. The first ones to protest seriously against the raise were high school students, who were not affected by it. 'It is to help out our parents, that we see struggling to get to work every day' some of them explained on TV on the first days of massive fare-dodging, in which groups of students would irrupt in a subway station in Santiago to open the tourniquets. Videos of people thanking the students as they sang '*evadir, no pagar, otra forma de luchar'* went viral. Others, that were trying to pay, were rather angry at them. When questioned on their methods, students explained that, even though their fare had not increased, it was their families and school communities that were affected. It was a social justice issue, not a personal one.

What happened on that Friday 18th of October and after is much better documented and discussed: the response against the student's actions – that had been gathering momentum that week – led to the shutting down of metro stations and virtual standstill of the city. This unlocked something among the Santiago urbanites. In angry reaction, several subway stations were burned, which prompted the militarisation of the streets, leading to repression, killing and mutilation, not seen in the last 30 years in Chile. The demonstrations quickly spread to other cities, by this point, encompassing social ills beyond the hike in fares: by the end of day one of the state of exception, the increase had been retracted. But it was too late.

This insurrectionary space opened an unthinkable horizon of possibilities: everything needed to be changed, what was considered commonplace was upturned, questioned. In the following weeks, a collective trance ensued. The endlessly renovating street art felt like a change of skin: murals and signs would often last only a day or two before being covered by new ones. A sense of feverish catharsis would take us from one topic to the other. We remembered long-erased colonial dispossession, recovered radical feminist struggles, and denounced the ruthless consequences of privatising public services. Performances, music, and dance combined with intense confrontations with the police in an atmosphere of fear, joy, and adrenaline. Most would refer to 'waking up' – *Chile despertó* – to the injustices of the system, to the privileges of the elites, and to the impossibility of living with dignity in a country that had promised that, if you worked hard, nothing should be out of reach.

Other than running and protecting ourselves from the increasingly murderous intentions of the police, we talked to each other. A lot. The small assemblies – *cabildos* – that spontaneously started taking place by the end of October were an intuitive way of giving more concrete shape to the conversations we were having on the streets while cutting the traffic or taking a break from tear gas and dancing on the streets. As improvised canvases in public squares filled up with all sorts of demands, one overarching change seemed to be the key to all of them: establishing a constitutional assembly. As little as one month later we already had an institutional agreement, a roadmap to craft a new constitution. One that, we expected, would bring about the possibility of a dignified life.

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Around the time, the centre of Santiago was in a virtual lockdown due to the protests and military curfew. I had a friend working in the Ministry of Education that would tell me how pointless it was to go to the office. No one was managing to get any work done as the city burned outside. 'Your friend is unlucky, she is in a very political ministry' said a worker of the Ministry of Energy I met to talk about energy plans around those same days. He had left his work early because of the demonstrations, and we sat in a pub right next to the epicentre of both protests and confrontations with the police. He was quite calm about his participation in the government, even though he supported the protests. His political position was

cemented on the belief that his role in the ministry as an engineer was purely technical.

I later moved to Chiloé with this idea somehow making noise in my mind. In the *cabildos* I joined in Santiago, there seemed to be space to debate almost everything but energy. I found energy being referred to only when it came to water and its sustainable use, and in arguably quite niche *cabildos* organised by those already involved in environmental issues. Other than that, its infrastructural nature kept its invisibility. I could get a couple of comments on the need of more renewable energy, yes, but that was about it. The need for energy, the systems of production that we were sustaining with it and the wider implications of our dependency on cheap energy forms like oil remained ultimately an apolitical matter.

Had everything really seemed possible? Or did some things remain hard to imagine in a different way? If so, why? Filled with the hope and expectation of radical political transformation, I travelled south willing to explore my interest in energy and energy transitions in a context in which social creativity seemed to be at a peak. What I found in this journey far from the capital and my answer to these questions are the topic of this thesis.

INTRODUCTION

Aims and objectives of this thesis

One of my final conversations before leaving Chiloé happened to take place with Andrea[1], my local host, and Tamara, a common friend, activist and a long-term resident of rural Chiloé. Tamara had come to our house for a farewell lunch, and the tea right after had extended until late afternoon. The conversation was about Tamara's involvement in the creation of a Nature Sanctuary (*Santuario de la Naturaleza*) in Huillinco, an area where she lived and worked as a school teacher, located at the heart of the Isla Grande. Aitué, an environmental organisation which Tamara was part of, had recently celebrated the victory of the local government granting designation of Sanctuary to the area, thus allowing to generate a management plan with different local stakeholders. Such an arrangement, the three of us agreed, was much needed. We had mounting evidence of environmental degradation affecting virtually all places in the Chiloé archipelago, and Huillinco contained the most important watershed of the main (and largest) island.

Aitué is one of Chiloé's many environmental organisations – though they prefer to describe themselves as a *sociocultural* organisation – that has learned to navigate the language of the state in search of protection from extractive activities. Whilst Aitué promoted and built networks towards the achievement of the Sanctuary status as a way of taking care of the land, for the local government it was a 'way of guaranteeing its conservation and long-term management'[2]. Tamara, clearly disagreeing with the government's perspective, further explained that, on top of this, certain Huilliche[3] Indigenous communities of the area tried to invalidate the granted designation to the Sanctuary, appealing to what they considered to be their unfair exclusion from it, further arguing that the decree

[1] Andrea and most of the names I refer to in this thesis are pseudonyms. I have kept real names when people have engaged in publicly known acts of political mobilisation or are public figures.

[2] El Insular, 28 April 2021.

[3] I use Huilliche and Williche indistinctively, as both are used in the literature and among my interlocutors

would not allow them to 'work in their fields'[4], which Tamara categorically denied. Nevertheless, the three of us knew that such claims were problematic: in a territory affected by rapidly invasive extractive activities – including moss harvesting, wind farms and wood cutting – the tensions between protecting the environment and allowing people to make a living were indeed tangible issues, and much discussed in the local communities.

Throughout my fieldwork, I experienced tensions like this repeat in different guises. My politically active interlocutors would often portray the desire and need for productive activities as an imminent threat of sacrifice: the irreversible destruction of a place that would be, once again, made in the name of increasing economic activity. This reoccurring situation prompted my interest in what was perceived as a looming threat of increasing renewable energy infrastructure and, more broadly, energy connectivity. The archipelago had been the setting of the first active opposition to renewable energy ever documented in Chile, where as early as in 2014[5] protests arose against a wind farm, when such projects were still off the radar of mainstream environmental activism. This prompted me to investigate the topic, as the rapidly emerging industry seemed crucial to further understand the deeper meaning of the perceived sacrificial dynamics at stake. Unlike other activities, wind farms are part of a wider 'green' agenda that is being advanced in Chile, as a possibility to overcome environmentally destructive forms of fossil growth. Therefore, why did the promise of an energy transition face such hostile approach from the people of Chiloé?

In order to provide answers to the above question, this dissertation explores and examines the relationship between work and energy in the context of an ecological emergency being experienced in the Chiloé archipelago. Work – as human economic activity, and energy – as nature's work, both share the value of being productive. But what does it mean to transform people into workers and nature into a potential energy source? What kind of relations are being created when production and productivity are the main value categories? I have found that it was the deeply felt ambiguous relation to sacrifice that illuminated the

[4] El Insular, 28 April 2021.

[5] The movement '*Salvemos Mar Brava'* started their opposition to Parque Eólico Chiloé in 2014 as the project entered the environmental assessment system. The park was approved but in 2023 their construction permit was revoked.

tensions and conflicts of embracing productiveness in Chiloé. Sacrifice, I suggest, crystallises the promises and threats of capitalist modernity, offering people a conceptual repertoire to make sense of the value of their lives and the places they inhabit.

By connecting work and energy through sacrifice, this dissertation explores the creation of categories of value and potentiality – potentiality being the key to projecting value into the future (Ferry & Limbert 2008; Tsing 2005; Weszkalnys 2015) in the context of an emergent energy transition. The specific conception of work as productive activity that is at stake, I argue, is historically constituted. It was first shaped in sixteenth century in the early Spanish colonial settlements in Chiloé. The transformation of indigenous people into tributaries of the Spanish crown through work was part of a project of making nature productive. The process was twofold: together with a notion of production came a promise of inclusion and care, a tense negotiation that continued developing after Chilean independence. In the subsequent centuries, the centrality of the value of work has continued to shift, remaining, as the opening vignette shows, a contested arena.

Much has changed since the colonial times. In those days, the serious concerns around environmental breakdown that worried many of my interlocutors were in an incipient phase. The commodified language of energy did not exist (Daggett 2019). Still, the roots and scars of the first waves of intensive extraction have much to teach about the increasing politicization and conflicts around renewable energy projects in Chiloé, and Chile more broadly. The older promises of infrastructure and inclusion in Chiloé (Anand et al. 2018), with their fragile and partial fulfillment, continue to shape the increasingly ambitious agendas of an ‘energy revolution’ that is becoming more and more relevant in public debate. The focus on the tensions of sacrifice means unpacking the flattening assumption of the intrinsic ‘good’ of both work and energy (Smith & High 2017). This examination of the benevolent promises of wind energy – and, as it became relevant in Chile, of green hydrogen – can clarify why the expectations of endless increment in energy availability, as ‘the work of nature’, has become so irresistible in Chilean energy policy.

The mainstream narratives in both Chiloé and Chile treat energy and work as objective, self-contained categories that can be treated as inputs to ‘the

economy'. As anthropologists have pointed out, these forms of reification rely on the constant construction of political power, with energy and its infrastructure playing a central role in its configuration (Boyer 2014, 2018; Appel 2017). At the same time, the emergence of energy as a means for understanding and organising social life and its intimate relation to work has been addressed in historical works, such as in Daggett's (2019) study of the relationship between the Victorian work ethic and modern thermodynamics, and Hughes' (2017) study of labour organisation in the early plantation economy in the Caribbean. Both understand the formation of energy, science and language in direct relation to the harnessing and control of human labour as a productive force and moral project. They also address the historical and geopolitical specificities of the establishment of 'work' as related to slavery, and how understanding work as 'energetic' allowed to read history in evolutionary terms.

In this thesis I build on the abovementioned assumptions to complicate the dilemmas that the search for productivity brings into people's lives in Chiloé. My approach additionally highlights the critical role of colonial history in the analysis of capitalism, the 'global' economy and the place of Latin America within it (Bhambra 2021; Quijano 2011; Segato 2015). It builds upon scholarship that points to the significance of understanding multiple forms of oppression, including colonialism, as crucial factors of the contemporary economic and ecological crisis (Todd 2015; Whyte 2016; Powell 2017; Liboiron 2021). In the recovery of this history the concept of 'work' becomes central. As Coronil (2002) points out, the making of 'free waged-labour' in Europe was only possible because of the 'unfree' labour in its colonies. Broadening this insight, I am interested in tracing the emergence of 'work' and its relation to energy through the specific historical lens and colonial experience of Chiloé (Mondaca 2019), which further relates to the Spanish institution of the *encomienda*, a different productive subject than that of slavery – a figure typically analysed to understand the origins of the objectification of labour.

In this thesis, I connect transnational and intra-national distinctions in different moments of Chiloé's history. Recent post-colonial, decolonial and feminist literature has challenged the predominant narrative of capitalism as a result of the ingenuity and creativity – or alternatively, the hard work and sweat – of certain European men and 'modernising elites' that set out to transform the world (Tsing

2009; Bhambra 2014; Federici 2014). This work, therefore, aims to expand and complicate the understanding of climate coloniality embedded in the actions that are supposed to address the threat of climate and environmental breakdown (Sultana 2021; Valentine & Hassoun 2019). While a significant part of the post-colonial critique has aimed at highlighting the plunder and exploitation of slavery, it still focuses on labour and the production of *commodities* as the central value category (Graeber 2006). Instead, I focus on the 'human economies' of capitalism, and ask what kind of relations made the emergence of 'work' possible, and later of energy, as categories that shape both humans and the places they inhabit.

Overall, this dissertation aims to provide an alternate point of view on how 'work' has emerged as a socio-political category. By building a historical perspective, I examine how people in Chiloé and Chile have both embraced and rejected work as a utopian project with an attached sacrificial logic. I develop the tensions under which people on both sides of the Chacao channel (separating main Chiloé island from the continent) acknowledge and reproduce the value of work – and, by extension, the value of energy. All whilst remaining ambivalent with the contradictions created in that pursue. My main argument is that one cannot understand the conflicts around energy without addressing the conflicts around the value and significance of (human) work.

Fieldsite and Methodology. Castro and Dalcahue in the Chiloé Archipelago, south of Chile

Chiloé (Figure 1) is an archipelago of around 40 inhabited islands. Located where the national land connectivity breaks down, in the 'gateway to Patagonia' in southern Chile, this cluster of islands is separated by an inner sea from the American continent on the east, and a narrow channel towards the north, the Chacao channel. It belongs administratively to the Los Lagos region, with its capital Puerto Montt situated on the continental side. Already due to its geography, Chiloé is, in the eyes of the state, a remote place.

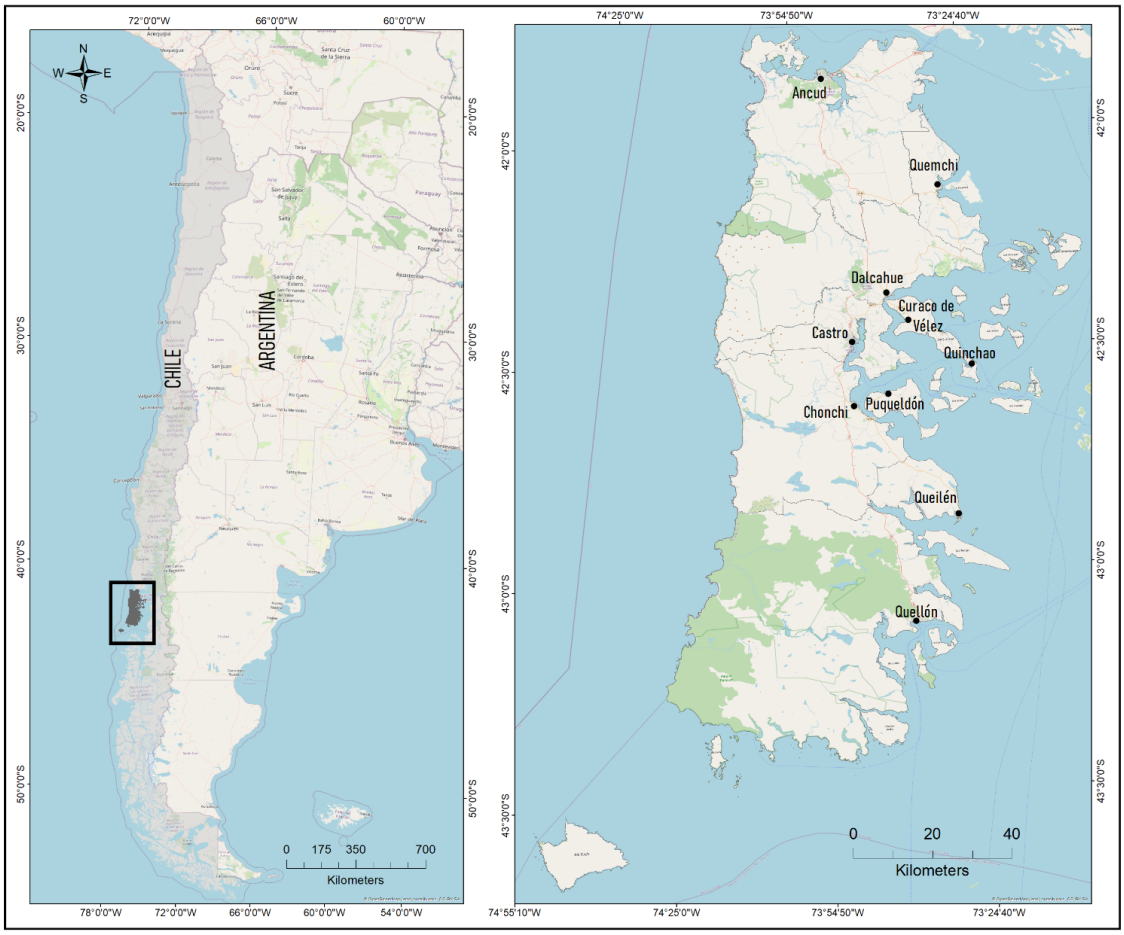

Figure 1: map of Chiloé and the administrative centres of the different municipalities. Made by Claudia Alonso for the author.

The city of Castro, the capital of the Chiloé province, is a small urban node on the eastern shore of the Isla Grande, with a surface 8,394 km² (slightly smaller than Corsica). The Castro municipality is home to around 48,000 people, while the total population of the 40+ islands of Chiloé amounts to approximately 150,000 (Biblioteca del Congreso Nacional de Chile 2023). Once a key port and commercial hub for the whole country, Castro today clusters commerce, services, public institutions, and the only public university in Chiloé. Whilst the central blocks (the older part of the city) concentrate the main shops, restaurants, hotels and transportation, the significant part of the population – of which many are recent migrants from other parts of the continent and the archipelago – lives in the newer and more residential blocks towards the upper side of Castro, as well as in the neighbouring suburban areas of Nercón and Gamboa. One of the rainiest regions of the world, Chiloé and the rest of the southern region of Chile have a predominantly cold and humid climate. It is only during the hottest weeks

of the summer that one can see many days in a row without rain or expect to have a comfortable temperature indoors without any heating on.

This mixed urban landscape reflects the economic structure of the archipelago: until very recently, the majority of the population was dedicated to agricultural activities and (male) seasonal migration to the mainland (Ramírez et al. 2010; Ramírez & Ruben 2015). In the last 40 years, the salmon farming sector and the expansion of commerce and public services have changed the possibilities of livelihood. Many left their agricultural work and fishing tradition to be factory or growing pools workers, making formal waged labour more common, whilst increasing the demand for goods and services until very recently only present in the nearest mainland city of Puerto Montt (Bacchiddu 2017).

In the collective perception of mainland Chileans like myself, Castro and Chiloé more generally fit the description of a dreamy, slow, rustic place, somehow stuck in the past. According to the last Census results, only 59% of the population lives in urban areas (Instituto Nacional de Estadísticas 2021). A landscape of soft hills, scattered forests and ubiquitous sheep and cattle in the mostly rural Isla Grande, attracts tourists to experience this breath-taking spectacle of natural beauty. The Andes Mountain range, far in the continent towards the east, is majestically visible on clear days. Whilst much less famous than its neighbouring continental Patagonia, Chiloé still appeals as a tourist destination, mostly for its 'cultural festivals' or *ferias costumbristas* – annual events that take place during the summer and showcase different traditional crafts, products, food and activities (*costumbres).* The most repeated of them is the *minga,* a system of mutual aid in which different parties exchange assistance for economic activities in a festive spirit, generously thanked by those being aided through lavish gestures of hospitality and gift-giving.

It would be impossible to understand Chiloé without referencing the *minga.* The *minga* is considered constitutive of a specific, traditional Chilote subjectivity (Bacchiddu 2017; Daughters 2016, 2019). Today, it is usually performed in the context of the abovementioned fairs, where it references to the moving of a house, using a combination of oxen and human traction. However, beyond this state-sponsored performativity, the *minga* is also a crucial part of the building of relatedness in the archipelago. Discussing the *minga* with my interlocutors, I realised that besides being a system of labour exchange, it also stands more

widely for different forms of gathering, dancing, eating and even playing traditional games together. The centrality of this non-productive element has brought to light a certain *playfulness* of the *minga* that I expand on throughout this thesis.

Additionally, I aim to explore the *minga* as a practice with a Huilliche origin. As I detail in chapter one, the indigenous people that settled in the archipelago in the context of Spanish colonisation, were in part of Huilliche descent, a group considered to be part of the broader continental Mapuche people, who in turn are one of the nine officially recognised indigenous peoples. As a result, it is well observed for state programs, politically oriented groups, and individuals to take the broad label of Mapuche-Huilliche as their main indigenous identification (Valdivieso 2019). Based on the results of the 2017 Census, approximately 34% of the population identified themselves as indigenous[6], and mostly Mapuche, thus more than doubling the percentage reported in the 2002 Census. Still, the *minga* is nonetheless practised by people who simply perceive themselves as Chilote, rather than indigenous.

To speak about indigeneity in Chiloé, and in Chile more broadly, is a complicated issue. As I elaborate in chapter 1, the recent recognition of a Huilliche identity in the archipelago has emerged in relation with political disputes with the state, and in the multiple conflicts and appeals I explore in this thesis indigeneity will play a central role. It is important to keep in mind that in Chile indigenous groups have scarce autonomous rights and are not recognised as 'people' (*pueblo*) or nations, in contrast with other countries in the region (Figueroa Huencho 2016). As I develop later, most of the claims around social-environmental conflicts rely on one international treaty, the 169 Indigenous and Tribal Peoples Convention, from the International Labour Organisation (ILO), created in 1989. While in my chapters I focus on a rather active and organised dimension of indigenous communities and non-indigenous organisations and groups working with them, the larger landscape of indigeneity is mixed. It is not uncommon that, when it comes to renewable energy and electricity transmission projects, many legally recognised indigenous communities will be willing to have infrastructure located in their surroundings, and be more open to look for compensation rather than a

[6] Databases available for download at http://resultados.censo2017.cl/

full stop of projects or appeal openly confrontational. In other cases, the communities might be more focused on other ecological emergencies and political processes and the topics that interested me here fell into the background. This generated clashes and debates about who was authorised to speak as the voice of indigenous people in the archipelago.

Such differences in how to make sense of what it means to be Huilliche in Chiloé were often put to me in the example of a long debate on the legitimacy of giving the Huilliche people a recognition as people independent from the already legally recognised Mapuche. Just before the time I spent in Chiloé, the issue was taken to Congress by a group of Huilliche representatives, that were then challenged by other indigenous authorities that declared their opposition to the initiative. The Ministerio de Desarrollo Social even commissioned a report on the particularities of the Huilliche people in Chiloé, that was made by a team from the local Universidad de Los Lagos (Park et al., 2018). The opinions and attempts to influence the report revealed overlapping structures of indigenous organisation that did not recognise each other and often accused the others of not being 'truly Huilliche'. While I do not detail the internal politics of each of my indigenous interlocutors, it is good to keep in mind that such debates were ongoing during the time of my fieldwork, which made alliances fragile, contingent and often tense.

Besides the *minga*, a second, less favourable way in which Chiloé has gotten the national attention is the ecological and social impact of the salmon farming industry. The industry that grows this Atlantic fish has been expanding at a high intensity since the 1980s, as a direct result of dictatorship productive policies (Gerhart 2017; Barton 1998), where as a result, since the early 2000s multiple alarms have been raised regarding the damaging impact it has on the marine ecosystem. In 2016, an algae bloom (*marea roja*) affected the health of the marine fauna, an incident that many related directly with salmon farming and left many fishermen unable to fish. This created a spur of mobilization that brought the archipelago to a standstill for almost a month. The event – which, in honour to the mobilisations is called *Mayo Chilote* (Chiloé's May) – is strongly remembered as a testimony of local political struggles. This social-ecological event has become a usual point of concern in national debates and academic research, where it is being explored how the rapid ascent of salmon farming has

created a form of inclusion that can be called ‘neoliberal citizenship’ (Bustos-Gallardo 2021).

Together with this, an often-discussed topic is the construction of a bridge to the continent over the Chacao channel, which has been in the national government’s agenda since 1966[7]. The current version of this megastructure, which started in 2019, has faced multiple technical challenges and has a tentative delivery date of 2026. Most people I spoke to had a skeptical approach about this project ever coming to fruition, if not being openly hostile to its materialisation, with the issue cyclically returning to local and national news. The disputes around salmon farming and the bridge illustrate the contradictory life of this province as a ‘remote’ and isolated place. Both the cultural richness depicted in the media and development programs about a level of cultural preservation in Chiloé, and the need to address such remoteness as a problem, show how being ‘remote’ can be seen as both ‘a potential resource to some and as an obstacle to others’ (Schweitzer & Povoroznyuk 2019:237), showing, as Schweitzer and Povoroznyuk suggest, that remoteness and connectivity are always in mutual constitution.

Renewable energy certainly is not a highlight of the province, as the only large development already in place is a wind farm at the top of the Piuchén mountain range (*Cordillera de Piuchén*), in the northern middle of the Isla Grande. The wind farm remains mostly out of sight for those travelling through the area, usually covered by either clouds or hills. Nevertheless, asking questions about such renewable energy projects would usually raise alarm: people often reported knowing of a new park about to be built, or of a project that was approved but had not yet started. Some of those projects might disappear from conversation after never showing up in any official records, vanishing like unproven rumours. Others, as I will show, exist in a limbo of participatory processes, permits and inconclusiveness, sometimes for several years.

Until now I have referred to a continental, outsider gaze on the archipelago. I had shared this perspective on frequent touristic visits during my childhood and youth and, still, in late 2019 when I returned to the archipelago as a researcher. From

7 https://www.plataformaurbana.cl/archive/2012/05/23/seis-presidentes-en-46-anos-han-impulsado-la-construccion-de-puente-sobre-canal-de-chacao/

inside the province, different contrasts emerged and became more relevant to my understanding of the archipelago than I might have expected. By having lived in Castro and in the rural area of Cuesta Alta[8] (in Dalcahue) throughout very disruptive and agitate events, I became aware of many different realities of this very territory, that constituted for different individuals and groups of people – the inner islands, coasts, highways, tourist spots – all living with a distinctively different access to services, being affected by different extractive industries, with individual histories, whilst having different aspirations for a good life. Living in a small inner island, for instance, raises different questions of connectivity and what it means to be really 'from here', as opposed to the urban elites like those in Castro or Ancud. The current potential impact and meaning of renewable energies would show the same complexity.

When I arrived at Miriam's house in Castro for the first time in December 2019, at the end of spring, the streets were lively and crowded. The political effervescence that had ignited in October 2019 still lingered over the community had left clear marks, especially in the area surrounding the main square (*Plaza de Armas*), where the windows and walls of pharmacies, banks and public buildings were covered with wooden or metallic planks to avoid damages from potential protestors. During the next 18 months that I spent living in Chiloé, this already unusual situation deviated from normality even further, with the arrival of the Covid-19 pandemic in March 2020. The disruption and several attempts to bring back normality through policy and planning, were revealing of many expectations for the future and how, from different angles, it would be possible to significantly act upon it. As I develop in my thesis, the ideas of economic 'productivity' that emerged in this time would play a central role in the ways energy was thought of and debated.

Throughout the abovementioned events, during the conversations I was having with people in Castro, 'energy' appeared as a side topic to other relevant debates and concerns. Not a typical protagonist of hot political disagreement, 'energy' was rather a point of wide political consensus, from expert continental voices to bread-and-butter concerns in the archipelago about firewood scarcity, high electricity prices, and the need to improve energy availability and convenience. The phrase

[8] Cuesta Alta, a sparsely populated area of Dalcahue, as well as Los Manzanos and Agua Clara, are pseudonyms. All other names of places are real.

that ‘energy must be an issue for the state’, *un asunto de estado* (rather than a partisan issue) was repeated in the run-up to the 2021 presidential elections by all sides of the political spectrum, as a call to acknowledge the wide agreement on the topic. As I will argue, policy visions for the future of energy differed surprisingly little between political parties. Similarly, an energy narrative emphasising a movement ‘into the future’ – or, more commonly, the future moving quickly towards us – could be found in already existing policies, plans and developmental perspectives. Thus, the ‘more-better-cheaper’ horizon of energy, as a starting point of envisioning of possible and desired futures of improvement, became a critical point of theoretical concern in my research.

One of the few places where the black box of energy could be unpacked and critically examined was in the spaces of political activism in which I got actively involved. In this activist scene, energy infrastructure (electricity generation and transmission) mainly belonged to the wider agenda of struggle in the context of unfolding of multiple socio-environmental crises, which were seen to be reinforcing each other at an alarming and accelerating rate. Inside this scene, energy and its expansion were part of a wider struggle against lack of planning, human rights violations, and unfolding ecological disaster.

The paradox of the invisibility of infrastructure and its instant visibility, when disrupted, has become a classic trope in the anthropology of energy and infrastructure (Star 1999; Strauss et al. 2013; Harvey et al. 2016; Anand et al. 2018). In this thesis, I aim to bring these two concepts together: the practical desire for more energy and the rejection of the destruction that certain configurations of energy bring about. Explanations of energy-related conflicts often focus on corporate malpractice[9] and the incompetence, and insufficiency of state bureaucracy, and its regulating bodies (High & Smith 2019; Sánchez & Cabaña 2023); or on self-centred NIMBY position from those rejecting the projects (Scott & Smith 2018). Surprisingly, during my fieldwork and what was, arguably, the most politically agitated and revolutionary period in Chilean history in the last 50 years, there seemed to be little space for sustained policy debate

[9] See for instance this reporting by the Latin American Observatory of Environmental Conflicts (OLCA) “’Somos poco tomados en cuenta’: Critican proyecto eólico Vientos del Pacífico por eventuales afectaciones y cuestionan proceso de participación” https://olca.cl/articulo/nota.php?id=110120

on the merits and downsides of different systems of energy provision. Still, for many people in the climate activist communities in which I participated during my fieldwork, energy was a central and profoundly political issue. More than an abstract concern, it came down to the very possibility of keeping the island and the wider archipelago inhabitable.

In answer to this question, I argue that the history of Chiloé and its constitution as a semi-periphery[10] of Chile since (Spanish) colonial times illuminate a wider process in which work came to play a fundamental role in cementing and legitimising national, provincial, and sub-provincial political orders. I will show how work – and questions of whose activities count as work, whose do not, and what different types of work are possible for what kind of people – became central to establishing notions of the good life for Chilotes and Chileans. The extension of the value of work to energy, as a project of national interest, built on and entrenched even more in this sense, thus visualising the potential productivity of the archipelago at the service of a future of endless growth.

Towards the end of this thesis, I relate this incrementalism to the idea of *utopia of work,* understood as a horizon in which maximising productivity is at the centre of human emancipation (Charbonnier 2021; Gorz 1989; Kussy & Talego Vázquez 2017). I build on this to show how this principle takes morally ambiguous and conflictive meanings that give this discourse the resilience and traction that I found during my fieldwork. This utopia of work is also the moral ground of current energy plans for a desired fossil-free future.

Epistemic and political positionality

This thesis is based on 20 months of ethnographic fieldwork (from November 2019 to June 2021) predominantly based in Castro and Cuesta Alta, with a couple of short visits to Santiago in 2019 and 2020, including the previously mentioned COP25 counter-summits in December 2019. My ethnographic fieldwork in Castro and Cuesta Alta was guided by permanent communication and collaboration with the *Centro de Estudios Sociales de Chiloé* (Chiloé Centre of Social Studies -

[10] I develop this idea of semi-periphery in relation with my interest on energy in contrast with zones considered too 'remote' as to be reached by the national energy planning: the two southern most regions just beyond Chiloé that would be peripheral. The continental part of the country that is, for geographical reasons, closer to the largest energy generation, distribution and consumption infrastructure is considered 'central'.

CESCH), which I was kindly invited to join between March 2020 and June 2021. My participation at CESCH already gave a tone to my presence in the archipelago, as the collective has the mission of 'strengthening the sense of territory in the archipelago through social research'[11]. I would soon learn that the archipelago had a variety of different organisations oriented towards political action. These organisations take a variety of modalities, from being in collaboration with state institutions, to being in more open agonistic relation. Many are led by Indigenous people.

A significant part of my fieldwork involved following the discussion around the creation of a new electricity transmission line, that I will call 'the Surelec line'[12] throughout my thesis. Together with two other CESCH members, I participated in the activist platform created in early 2020, called Chiloé Libre, that problematised and rejected the plans for the transmission line's construction (Chiloé Libre is further elaborated on in Chapter 4 and Chapter 5). Furthermore, I joined other activist and political debates that took place online, which mostly focused on issues of energy, green hydrogen, as well as on basic income, degrowth, and constituent process organisation. Many of these spaces were oriented to the creation of an 'Ecological Constitution' during the first constitutional process of 2019-2022.

I decided to work within these platforms as they presented an interesting intersection of approaches towards the idea of 'energy transition'. Some – like Chiloé Libre – followed the model of site-based campaigns, whilst actively participating in influencing overall planning processes and energy projects (like governance at the local level). Others like CESCH, took a critical and reflective stance on many of the expert discourses around Chiloé's energy landscape, and were interested in answering to the needs of social movements and campaigns. Many of my interlocutors also belonged to multiple platforms and activist spaces, kindly sharing their work's insights for the purposes of my research. Finally, as part of my activist network that precedes my PhD research, since 2019 I have been a member of *Centro de Análisis Socioambiental* (Centre for Social-Environmental Analysis – CASA), which is part of the *Sociedad Civil por la Acción*

[11] https://centrodeestudioschil.wixsite.com/cesch/nuestro-equipo

[12] For the purposes of this thesis, I call it the Surelec line. Surelec is a pseudonym for the company in charge of the project.

Climática (Civil Society for Climate Action – SCAC). SCAC is a coordination platform that gathers environmental collectives, NGO's and campaigns that have been, since the COP25 counter-summits, key articulators in climate action advocacy and in debating issues around energy transitions.

I mention all these collectives because my experience and conceptual approach are deeply embedded in the action-oriented political networks I participate in. My encounter with, and understanding of, different positions regarding the issues I address in this dissertation would not have been possible without them. Members of the abovementioned groups were all aware of my doctoral research and generously facilitated much of the material that informs my analysis – including public declarations, interviews and official policy documents. In return, and following the ideas of activist research (Hale 2006), I made myself available to look into issues that had already been identified by different organisations, particularly CESCH.

I am aware that my subjectivity – a woman from Santiago, Chile's capital, doing her PhD in an English university – influenced most of my interactions, often raising discomfort and even suspiciousness to some of my interlocutors. This reflects wider issues and historical trends of uneven relations that affect the archipelago. Too frequently outside researchers carry out tokenistic research, bypassing much of the local already in-motion research processes that take place through and by insular networks of solidarity. In understanding this, my research aimed at avoiding this kind of approach, respecting the ongoing local research activity. Only the people whose stories fill these pages can judge if I was successful.

It was through the building of those relations that I was able to draw meaningfully from the rich circulation of public discourse. These often created political agreement and divergence at different state levels, as well as across collectives and actors outside the state. The sedimented experience of different groups, together with their sometimes decades-long engagement in the questions I was interested in, were a significant starting point for my own reflections. The relationships I built in those 20 months did not stop when I left the research field.

The different groups I have mentioned interacted across geographical boundaries. Throughout my thesis, I analyse networks in which different digital

discourses – written and oral – circulated, taking them as a way of imagining, and simultaneously making, a scientific/political collective as a self-conscious project. This refers to not just reading them but being attentive to the responses and reactions they generated, in conversations that could sometimes continue for months, and move from the most local to the national and international arenas (a table detailing the process and related documents followed during fieldwork can be found in Annex 1). Whilst doing so, I chronicled the everyday life in the archipelago when living with my generous hosts, while additionally learning that radio and music are a significant part of everyday life in Chiloé. I include what I learned by listening to popular local radio shows, music and TV channels in my analysis.

Carrying out most of my fieldwork under varying degrees of lockdown due to the Covid-19 pandemic, significantly limited my possibilities of participant observation. Like most researchers, I switched to digital means of communication, which became relevant to keep relationships alive. To the best of my capacity, I tried to limit in-person contact following official public health regulations. However, this proved increasingly difficult, as more and more of my colleagues and friends were willing to bend the norms and relax caution around contagion. Sticking to the rules eventually seemed impossible. Additionally, part of the reason why I wished to carry out fieldwork in Chile, derived from the sudden process of politicisation – what I would call an incipient revolution – that as described in the prologue, started in October 2019 in Santiago. As both a researcher and a politically engaged Chilean national, these events allowed me to be open about my positionality regarding the constituent process. I participated in demonstrations, *cabildos* (self-organised assemblies that drafted proposals for the new constitution), as well as multiple strategy meetings. This dual existence as an ethnographer and a politicised person, shaped my interactions and most likely biased me to favour interactions with people, with whom I sensed more political affinities or shared a similar perspective.

Conceptual definitions

My argument in this dissertation builds on anthropological and historical work regarding the conceptual relationship between work and energy, on one hand, and work and play, on the other. I also develop the concept of sacrifice, which

resonates with notions of ‘sacrificed lives’ and ‘sacrifice zones’ that were widely used in my field site.

Energy and work

I approached energy through two different but converging views. First, as an object of bureaucratic regulation and planning tools. Those were the main ethnographic settings where the existing ‘energy’ encapsulated as its own semantic field. Building on the anthropological work on planning and resource-making (Richardson & Weszkalnys 2014; Abram & Weszkalnys 2013; Weszkalnys 2011, 2017) I develop how expectations of energy demand growth and production were contested. The forms of speculative planning (Bear 2011) that I encountered in regard to energy, prompted creative reframings of both planning and energy among my interlocutors. The underlying tensions between different approaches to energy can be emphasised, I suggest, by looking into the relation between energy and work that I develop further in the following paragraphs.

On the other hand, for some of my interlocutors in Chiloé, energy appeared as an imposed infrastructural reality. When exploring conflicts around wind farms in this area, I found an overall sense of frustration over the difficulty of making a case against such ‘clean’ energy, and a lack of acknowledgement of its impacts in the wider public and political authorities. This resonates with other research on wind energy that has been the object of recently growing anthropological attention, and has questioned the image of wind farms as ‘conflict-free’ (High & Smith 2019). High and Smith warn against framings in anthropological research ‘that cast fossil fuel resources as necessarily immoral and renewable resources as their assumed opposites’ (2019:10). Indeed, as Abram et al. (2023) note, ‘renewable energy is as susceptible to extractive mentalities as other, more material resources’ (74).

Such perspectives have been fertile to ethnographically problematise wind energy. For example, in their ‘duography’ about wind energy developments in Oaxaca, Mexico, Howe and Boyer provide complementary accounts of the politics and energopower of wind energy related conflicts in La Ventosa (Boyer 2019; Howe 2019). Howe develops the impacts the rapid advance of wind infrastructure has in the delicate ecologies and the more-than-human relations that exist in the Isthmus of Tehuantepec. In examining the calls for sacrifice of

delicate ecosystems in the name of 'global climate salvation' (Howe 2019:9), Howe questions which, exactly, is the world being sustained when we speak about 'sustainability'. I develop my engagement with energopower further in chapter 2. This rejection of sacrifice echoes in Franquesa's ethnography (2018) of the struggle for dignity among Cataluña's peasants, who reject the transformation of their land into a site for new wind farms. Franquesa further explores the wider, moral setting of what it means for a territory to be destined to energy production, and how those tensions are not eased out by the 'clean' nature of wind energy. The search for maintaining autonomic forms of livelihoods plays a crucial role in both settings. In Andalusia, Hughes (2021) describes similar hostility in their research, even though Hughes more openly pushes the agenda in support of wind infrastructure.

The abovementioned research all highlights the need to centre questions of wind power around the dynamics of political power (Loloum et al. 2021), particularly the perpetuation of colonial forms of violence (see also Argenti & Knight 2015; Dunlap 2019). And while conflict and open opposition from those in the territories targeted for expansion has attracted attention, other literature shows the corporate expansion of wind infrastructure in Latin America as an instance of negotiation and creation of new relations of reciprocity and obligation. This has been studied among Wayúu communities in La Guajira (Jaramillo 2013; Schwartz 2021) and – as a failed attempt – in the south of Chile (Tironi & Sannazzaro 2017).

This association of certain energy sources with 'goodness' relates to the overall question of the morality of energy as work. As Daggett (2019) shows, early understandings of energy in the social sciences drew heavily from thermodynamics. In this branch of physics, developed in Victorian Britain in the nineteenth-century, energy was defined as 'the capacity to do work', as the scientific management of work brought together the governance of fossil fuels and labour in a context of colonial expansion. In an interdependent process, the organisation of labour in the first colonial plantation economies equalised human bodies with labour power in sugar cane plantations (Hughes 2017; Tsing 2012) in the Caribbean, Latin America and elsewhere, as with the rapid expansion of palm oil and sugar (Haiven 2022; Mintz 1986).

The language of productivity, as these works show, brings together the efforts of harnessing power from humans and non-humans as historically and geographically entwined elements. In this sense, the question of energy as 'the work of nature' is closely entwined with the definition of certain human activities as 'work' or commodified 'labour power' (Tsing 2012:513). These research projects further inform and influence my approach in the incorporation of the development of colonial ecologies and economies throughout time in Chiloé, and how they have shaped the island's subjectivities.

From the work of White (1943) in *Energy and the evolution of culture*, other research has built understanding of cultural change based on thermodynamics (Morris 2014; Smil 2017; Suzman 2020). I situate my work in a different approach to energy, one that has argued that scientific understandings of energy are insufficient. Focusing on the sociocultural dimension of energy means understanding that 'energy never just "is," - existing as some unmediated potentiality, rather it flows through socionatural systems' (Strauss et al. 2013:12). This emphasis on politics and power remains theoretically productive as new imaginaries of 'energy transition' and 'decarbonisation' continue to be articulated in different locations. My thesis aligns with the need of questioning 'dominant visions for and of energy futures' (Pink et al. 2023:2) by paying attention both to everyday experience of energy, and to wind energy as a particular technological solution to the 'energy problem'.

All these approaches feed into my analysis of energy and how it relates to work in the context of Chiloé. High and Smith's (2019) approach of energy being an ethical dilemma is aligned with my concern for the ethical value of work, and employment as means for a dignified life. From the ethnographic study of wind farms, I draw the wide variety of possible interactions that can emerge while this kind of infrastructure is imagined, planned and implemented. The terms of opposition I found in Chiloé were multiple – historical, ecological, political, affective – and are not always monolithic or coherent in the also present wider desires of more connectivity and access to energy. In that sense, my dissertation expands an energopolitical understanding of energy, moving between the local and the national geopolitical levels, whilst integrating with other political tools of subjectification.

Finally, I have found that the equivalence of both levels – energy and work – underpinned many of the actions and discourses of my interlocutors in the context of energy planning, thus flattening the distinct social practice of work. Rather than seeing it as one possible social relation among many, in some spaces, work colonised the imagination of all possible forms of human relation. This extension of the language of work into nature, opened value questions about the 'productivity' of non-humans and about how the very meaning of work is changing in the world's troubled ecologies (Besky and Blanchette 2019). Here I analyse the expectations of unlimited energy, generated from human and non-human work, as a natural or given disposition – a *vocation*. Throughout this thesis, I ask how such contemporary expectations of nature's work relate to, but also differ from, earlier colonial conceptualisations of work in southern Chile.

Work and play

The extensive social science literature on work centres on a common notion of work as an externally coerced instrumental activity, a form of labour imposed heteronomously, which is distinct from labour as the human capacity to produce use-vale (Marx 1977 [1867]; Parrique 2019). By contrast, play is often defined, in dialectical opposition to both labour and work, as what is done as an end in itself. That is,

> The activities that, even though they may involve time and effort, lack a specific purpose are not labour but play (e.g. chatter, music, sex, games, contemplation, wondering about). The essence of play is the absence of purpose: to just enjoy doing something for its own sake (even though it can be productive, e.g. fishing provides fish and playing the flute entertains others) (Parrique 2019:569).

I find the juxtaposition of work and play intriguing, because the literature critiquing work has often taken to think of non-work spaces in rather passive terms, be it as leisure, recreation or rest (Cleaver 2005). The typical opposition of 'work vs life' in contemporary critiques of work tends to overlook the alternative possibilities of time not dedicated to work, which tends to be reduced to recovering from work, consumption, or, more traditionally, 'family time' (Weeks 2011). Making play an alternative form of human action[13] helps visualise other forms of creative action – or as Hamayon suggests, focusing our attention on 'ways of acting or

[13] Following the Arendtian division, play would belong to the third category of doings, *action* as it is performed freely (while it does not necessarily ignite 'something new'). Indeed, Arendt (1998) defines labour in opposition to play.

approaches to action' (2016:26), rather than on activities themselves. This gives theoretical salience to the use of collective creative energies that do not fit the typical Marxist understanding of production as the generation of objects (Graeber 2001), and the production/consumption analytical divide. Marx himself highlighted the relevance of play, as he acknowledged that it is the 'development of human energy which is an end in itself', what allows humans to transcend the realm of necessity and reach 'the true realm of freedom' (Marx 1996 [1894]:593). Still, the concept has remained a somewhat unexplored category in its political significance. In anthropology as well, play remains largely undertheorized (Diz 2016:159).

Earlier I mentioned the playful dimension of the *minga* as an often-overlooked attribute of its social significance. Understanding play becomes relevant for my analysis of this institution as a setting for playfulness rather than as organised reciprocity and structure of cooperative labour between work parties. This is how institutions like the *minga* – or the Andean equivalent *mink'a* – have been described elsewhere (Töhötöm 2014; Harris 2007). Play has been studied in anthropology mostly in relation to games and rituals, with an ethnographic attention to the 'bundle of paradoxes' (Bateson 1973; Huizinga 1951) that it implies. Huizinga, one of the earliest theorists of both game and play, describes playing as a 'voluntary activity' (1951:7) that, as it is superfluous and enjoyable, 'is never a task' (1951:8).

I am particularly interested in playfulness and the creation of playful social practices – that might include ritual activities – in which the freely chosen enjoyment of the activity itself takes priority. This is similar to the idea of a 'playful' atmosphere that goes beyond the limited nature of a game (Petit in Hamayon 2016:16). In play's relation with work, I follow Graeber (2015) in positioning playfulness in opposition to bureaucracy and bureaucratic rules: '[P]lay can be said to be present when the free expression of creative energies becomes an end in itself. It is freedom for its own sake' (2015:192). In connection with Graeber's concept of value, play is a way for people to 'represent the importance of their own actions to themselves' (Graeber 2001:47). Work, on the other hand, has emerged as an analytical object in its close relation to rationalised and instrumental activities (Weber 1978).

My understanding of the freedom of play needs to be detailed in two senses. Firstly, as previous research suggests, there is nothing 'unserious' – that is, trivial – about play (Huizinga 1951). In Hamayon's study of the Mongolian and Siberian Games, for example, playing is fully embedded in social reality, and it is far from being 'frivolous and futile' as it has been deemed in the Western Christian world (Hamayon 2016:4). Secondly, play does not exist outside rules in general. Indeed, the *minga* (explained further in chapter one) – the playful Chilote activity, which is my conceptual guide, is one of many elaborate practices of mutuality and reciprocity present in the archipelago. *Minga's* historical trajectory reflects its embeddedness in consciously egalitarian political structures. Moreover, while play is *not* work, it can be integral to experiences of productivity. For instance: through football, Guaraní men living in the Chaco, live the illusion of autonomous, masculine forms of economic provision (Diz 2022). Considering those points, in this thesis, I build an understanding of play as modality of action integral to political freedom[14]. This is in line with the conceptual kinship that play has, in its ritual dimension, with playful activities full of subversive potential, such as carnivals (Bakhtin 1968).

Rather than distinguishing work and labour, in this dissertation, I begin from the Spanish term *trabajo* that covers a semantic field that, translated into English, includes both work and labour. While 'labour' might also be translated to the Spanish '*labor*', this concept is rarely used in either formal or informal, written or oral Spanish, and was virtually absent from my fieldwork sites. Even activities typically labelled as examples of labour in the English-speaking work, like 'going into labour' in childbirth, are predominantly referred to in Spanish as 'work' (*trabajo de parto*, in this case). This is not to say that such conceptual difference does not exist in Chile or Chiloé, rather, it was not differentially used by my interlocutors. That is: there is not really a different experiential space in which labour can be substantially distinguished from work. The heteronomous quality of work prevails and does not exist in opposition to a more autonomous notion of labour. Employment and jobs, on the other hand, were usually referred to as '*trabajos*' and '*dar trabajos*' in informal settings – giving 'works' instead of jobs –

[14] There is also a literature that explores ritual forms of play as a means of producing authority (see for instance Fox 1996 on Mesoamerican ballgame rituals). This variety is coherent with the understanding of ritual play as an arena of social experimentation (Graeber & Wengrow 2021:501).

and even '*mano de obra*' – workforce, manpower – while the use of '*empleo*' and '*puestos de trabajo*' was used mostly in formal contexts, in official speeches and policy documents.

This curious overlap over of labour, work and jobs in Chile is important to understand how the language of work has come to colonise other forms of creative social action, which this thesis focuses on exploring further. The imposition of work has been central to capitalist forms of policy and a key mechanism of social domination (Cleaver 2002). Similarly, my conceptual use and critique of 'work' can also be extended to 'labour' inasmuch as theoretical debates around both concepts maintain a focus on production.

Far from being a universal form of relation or activity, production refers to

> A specific relationship in which a subject generates an object (…). It presupposes the existence of a clearly individualized agent who projects his interiority on to indeterminate matter in order to give form to it and thus bring into existence an entity for which he alone is responsible and that he can then appropriate for his own use or exchange for other realities of the same type (Descola 2013: 325).

Descola elaborates this concept of production in contrast with other forms of relation, such as protection and transmission, among the peoples studied by anthropologists. Building on Descola's insights, Charbonnier suggests that the naturalisation of production in 'Western'[15] political philosophy can be labelled as 'productionism' – a central characteristic of the modern configuration that grounds abundance and freedom in the exceptional human capacity to exert control over things (Charbonnier 2021:228). Focusing on production means locating the generative capacities of economic value in human intervention as an exceptional agent, in the detriment of the network of relations, and interdependencies that sustain the wider ecological and social worlds. An examination and questioning of production also complements my critique of productivism, which is discussed in more detail in the next chapters.

In the Chilean context, I am interested in how ecomodernism comes to renew discourses on productivity, as the core concept that is shaping the energy policies. I use ecomodernism as a reference to perspectives that, while not positioning themselves explicitly under the seminal Ecomodernist Manifesto that

[15] Throughout the thesis I refer to 'Western' in scare quotes to problematise the lax use of this term (Graeber 2007). I use it mostly in referring the work of other people.

coined the term in 2015 (Asafu-Adaje et al. 2015), share many of its anthropological assumptions (Isenhour 2016; O'Reilly et al. 2020). This includes the key principle, that a desirable future is one in which human wellbeing is dissociated from environmental destruction, which sits in the broader desire of 'the decoupling of humanity from nature' (Asafu-Adaje et al. 2015:12). The relation between the measurement, aspiration to, and an assumption of an ever-increasing productivity – what I call 'productivism' – as a way of displacing and dissipating political conflicts, is connected to the already mentioned wider anthropological debate on 'production' as a category (I further evaluate the concept of productivism in Chapter 5). Building on the critique of ecomodernism as a form of post environmentalism (Kallis & Bliss 2019), my examination of the moral horizons of renewable energy contributes to the understanding of current variations of this political project. Rather than trying to disprove the technical 'greenness' of economic growth sustained by renewable energies, I unpack the foundations of the underlying notions of worth, deservingness and value, as they have been presented, resisted and discussed in Chiloé. In doing so, I address how the idea of an 'energy revolution' in Chile has been able to mobilise political will and infrastructural interventions, while still being enmeshed in generative acts of resistance and negotiation.

Going back to work: examining productionism as the conceptual basis of work and its value – that is: work is ultimately what *produces* something – will be fundamental to understanding the value of energy as an extension of work.

Sacrificed lives, sacrificed territories

The idiom of sacrifice was commonly used by my interlocutors to describe a particular, toiling and over-strenuous relation with work. Because of this, I start from the need to engage with this concept, going beyond the traditional ideas of ritual sacrifice (Mayblin & Course 2014) into the quotidian and non-spectacular ways in which sacrifice became relevant as a concept to think and feel with instead. More specifically, I explore sacrifice as a way of making sense of conflictive situations and relations of productiveness, abundance and suffering, all in relation to the wider political community. By engaging with sacrifice in this modality, I rely on the idea that, in contexts where ritual sacrifice is not being practised, it still 'remains a way to reaffirm membership in a particular community' (Mayblin & Course 2014:316). Sacrifice in Chiloé, and in Chile more broadly,

works as an intergenerational narrative, giving a sense of expectation, fulfilled or unfulfilled promises, and mandates to act ethically. Becoming *sacrificed* is, therefore both desired and recognised as a quality, and rejected as a destructive violence to be avoided.

One way of explaining sacrifice is by referring to sacrificed lives. '*Ser sacrificado*', 'to be sacrificed', was often brought up by the people I met in the field to describe a life dedicated to work, but in which the person had remained in poverty. Nevertheless, that work allowed for some form of provision for others – notably family members – and, most importantly, pushed for a *less sacrificed* life*.* This expression has also been found in other studies about inequality and social mobility in Chile (Frei et al. 2020), for example, as a way of referring to parental efforts enabling children to escape poverty through higher education (PNUD Chile 2017: 21). Anthropologists have also described the role of work as a form of sacrifice in family relations, for instance, in the endurance of 'bitterness' among rural migrants and, increasingly, among urban middle classes in China (Griffiths & Zeuthen 2014; He 2021).

In Chiloé, I suggest, sacrifice was predominantly used to make sense of relations of debt – a particular hierarchical form of debt that is permanent and can never be truly repaid (Graeber 2011). Those that consider themselves as sacrificed, have a moral claim over others. The suffering of a sacrificed life has a strong ethical appeal for retribution, be it at the level of personal relations (from children towards their parents, for instance) or when referring to collectives (as in communities embodying an ethics of sacrifice). This dimension of sacrifice, as related to gift-like forms of exchange, had already been noted by Mauss, particularly in context of establishing relations with the spirits through their earthly representatives in sacrifice: 'the purpose of destruction by sacrifice is precisely that it is an act of giving that is necessarily reciprocated' (1993:16).

In its connection with work, sacrifice is too usually conceived in retrospect, as a testimony of a life that *has been* sacrificed for a long time. Work has been described as self-sacrifice in different forms, for instance in white-collar, 'Western' contexts (Graeber 2018), as well as in the recognition of heroic sacrifice among migrant care workers (Bautista 2015). In Bautista's ethnographic studies on self-mortification among Filipino practitioners, docility at work is part of a 'martyric pursuit of both spiritual and economic ends' (2015:426), and links directly with a

Roman Catholic understanding of virtuous suffering. A sacrificed body is a body painfully marked by the toil of work, a biography mostly dedicated to work in a way that people, themselves, see as requiring from them much more than it should. In Chile, such ideas of 'exchanging money for health' (Weinberg 2021:214) have been related to working in mines and the impact mining has on the bodies of manual workers. In a way, the morality of personal sacrifice is a mark of class (Sennet & Cobb 1973) and of the life that is available for those less privileged in society. This extraordinary and, to some extent, deviant aspect of sacrifice is crucial for its moral dimension: it is the exceptional demand for sacrifice that makes the expectations of retribution so powerful.

While people can 'be sacrificed', so can the territories. The concept of 'sacrifice zone' was popularised and theorised by Lerner (2012) in order to document disproportionate toxic chemical exposure in low-income zones, mostly inhabited by racialized communities in the United States (Scott & Smith 2018). The term – chosen by Lerner himself from a larger conceptual repertoire used by environmental activists – originally referred to areas contaminated through radioactivity due to nuclear waste. The phrase has gained new meaning in Chile and Latin America[16] more broadly, where it refers to a variety of dramatic and long-term cases of ecological damage, with significant health effects.

From one perspective, in Chile 'sacrifice zone' works as an umbrella term to indicate an area affected typically by pollution coming from fossil-based energy (Veas Basso & Fuentes Pereira, 2021); however, it has increasingly become an analytical term to refer to 'a geographic area that has been permanently subject to environmental damage and lack of environmental regularization' (Bolados 2016, cit. in Sanz & Rodríguez-Labajos 2022:1). On the other hand, it is part of the conceptual repertoire of environmental activism to problematise a variety of already existing and emerging environmental disasters that often fit the mechanisms of 'slow violence' (Aedo & Cabaña 2020; Nixon 2011). The consequences of catastrophic pollution worsen the quality of life and impoverish the people living in sacrificed places, such as the industrial complex at the heart of Quintero-Puchuncaví in the central part of the country (Rodríguez-Giralt &

[16] While I engage with the use of the word from the U.S context, in Chile it was never mentioned as a label coming 'from abroad' and it was used quite organically and spontaneously.

Tironi 2020). The concept of sacrifice zone is, too, being used more frequently in understanding environmental conflicts surrounding renewable energy infrastructure (Bravo 2021; Scott & Smith 2018). In my analysis, this dimension of sacrifice articulates a different geographical sense of indebtedness: as territories and their people have contributed to the productiveness of the central state and the national economy, certain reclamations of care can be made in exchange.

For those living in sacrifice zones, the use of the word *sacrifice* in the understanding of what is especially tragic about these situations*,* is defined by the expendability of life at the service of capitalist gain (González Gálvez et al. 2021). There are certain similarities in the conceptualisation of personal sacrifice and the sacrifice of territories: sacrifice comes from a disproportionate devotion to work that inflicts suffering, whether in the territorial case, among all living things, or in life as a whole. Sacrifice, in this sense, is not explicitly sought after. Rather it is recognised and claimed as such from the territories, once it has been 'fulfilled' – that is, once damage is painfully impossible to ignore. Similarly, it can also act as a cautionary tale, an undesired destiny of a territory and a familiar image used to mobilise political action.

However, no sacrifice is accidental (Mayblin 2014). So, what are the structures and relations that bring about these sacrifices? For my interlocutors sacrifice is perceived as a way of recounting one's life, usually in retrospect, or when assessing one's parent's course of life. Discourses on how sacrifice happens reveal a wider logic and assumptions on its meaning. As a form of action, 'the term sacrifice, or its local equivalent, is frequently verbalized as a motivation for future actions and as description of past actions' (Mayblin & Course 2014:308). Throughout this thesis, I elaborate on sacrifice as a shared language that condenses meaning in social and environmental conflicts and disputes. I relate the ascription and rejection of sacrifice to the crafting of deservingness – of people and land – in the history and within the ongoing changes in energy infrastructure that are unfolding in Chiloé today. The different ecological and social aspects of sacrifice are brought together in a wider cosmology that grounds explanations of how social order is perceived to work, and how it relies on an unbearable injustice that hurts the dignity of people and the integrity of the land.

What is gained and lost when embracing sacrifice as a moral language? Are all semantic uses of sacrifice the same? Sacrifice can be referred to for multiple ends. First, it can be used to make claims; for example, people may invoke sacrifice to ask the state to fulfill its duty of care towards them as citizens and subjects. This is the contractual dimension of sacrifice (Sennet & Cobb 1973:125). Secondly, as I argue in my chapters, sacrifice can be invoked in situations where its destructive necessity is in question. Revolution, or potentially revolutionary processes in this sense, can be read as a quest for an anti-sacrificial order – one that claims forms of dignity that today are seen as essentially denied. In these two different forms of engagement with sacrifice and through the lens of energy, my ethnography connects with and reflects on the recent political mobilisations in Chiloé, and Chile more broadly. The contestation of sacrifice in the second sense was clearly articulated by social-environmental movements, as well as less self-consciously 'politicized' people in Chiloé and Chile, for example, in political situations such as the constitutional convention that took place between 2021-2022.

Regional debates

My return to wider questions about the nature of capitalism and colonialism to understand places like Chiloé is a way to overcome *neoliberalism*, *inequality* and *extractivism* as the main tropes for interpreting contemporary Latin America. Analyses of current Chilean economic realities often start from the political and economic transformations kick-started by the military dictatorship of 1973-1990 and focus on the more recent transformations of neoliberalism under democracy (Han 2012). By contrast, this thesis traces the very beginnings of capitalist modernity, locating certain elements that have persisted over time, such as the ecologically intensive exploitation of Chiloé. Instead of focusing on inequality as key political struggle, I explore claims and projects of the 'good life', freedom, and autonomy, beyond the distribution of economic value. I do not ignore or downplay the relevance of such disparities, however, I am more interested in the historical specificities that shape the expectations and practices of care inside hierarchical relations in Chiloé, as it has been described in other Latin American settings of extraction (Winchell 2017).

Finally, extractivism and neo-extractivism have been key analytical categories to understand social and ecological change in Latin America and Chile from a

political perspective (Bustos et al. 2015; Svampa 2019). While I discuss extractivism and some of its key related concepts – such as the idea of 'sacrifice zone' and *eldoradismo* – I also focus on the generative side of extraction and productivity as a particular promise of abundance. The idea of 'extractivism' can lead to flattening understanding of how people live in contexts of extraction (Penfield & Montoya 2020). In decentering from extractivism, I aim to create a different historical reading of the possibilities of renewable energy in Chiloé and Chile. In doing this, I align with anthropological studies of extraction that address the ideas and transformations that people stand for, as well as the internal contradictions, limitations and ambiguities in the life to which they aspire, and the relationships they build when embedded in extractive economies (Nash 1979; Schwartz 2021; Shever 2008, 2013). In doing this I ask, how is the support for the destructive dimensions of extraction maintained? (Abram et al. 2023) and how are processes of extraction also generative? Moreover, how can we understand partnerships with extractive activities as part of indigenous ideas of autonomy, like the case of some Atacameño communities in the north of Chile that create partnerships with mining companies? (Babidge 2013). My question here encompasses both the *Chilotes* living in the frontiers of extraction as well as energy policy planners and others interested in shaping the future of energy.

Furthermore, this thesis is inspired by the need of bringing ongoing political processes into anthropological analysis in order to not 'miss the revolution' as it happened in previous waves of political transformation in Latin America (Starn 1991). My fieldwork was caught in the middle of a process of a political transformation, that changed the frontiers of the possible in institutional politics in Chile. Although discussions about Chile's new constitution happened primarily in Santiago, the capital, they reverberated into my research field site and not only in the form of street protests. Political collectives were reignited, and new possibilities were pushed forward in a deep dialogue between a myriad of archipelago-based organisations. My approach to energy embraces unrest and protest. However, I have stayed attuned to ambiguity and conformity in political mobilisation, rather than assuming that my interlocutors embrace clearly defined conservative or revolutionary positions. Significantly, I take my cue from the 2016 political mobilisations in Chiloé, which around the time of my arrival in 2020, had created a rich set of reflections, alliances and strategies around the defence of

the territory and the *maritory*[17] (Torres & Montaña Soto 2018; Arriagada 2019). These events foreshadowed some of the emergent diagnosis of the constitutional processes in Chile that was unfolding during my fieldwork. This includes, for example, the framing of the current situation as an ongoing colonisation of Chiloé by the Chilean state, annexed comparatively late in the formation of Chile as a nation state (Mondaca 2019).

Research question and outline of the thesis

The pivotal question of this thesis is: how do people in Chiloé navigate the quandaries that come with making themselves and the land productive? To answer this question, I explore how the notions of productivity and its value are present in the insular genealogies of work and energy, and how they can be connected through the idea of sacrifice.

Chapter 1 focuses on history, as it grounds the understanding of the value of work in the process of Spanish colonisation. There, I look into how the encomienda displaced, but not erased, the practice of the *minga*. I further explore how the tensions of the morality of work are embedded in relations that bring care and domination together. Furthermore, I explain how that initial transformation and construction of relations of dependency continues under the contemporary Chilean state, and how this illuminates the intimate relation between sacrifice and work among my interlocutors.

In Chapter 2, I explore the incipient excursion of renewable energy into Chiloé's main island, locating it in the larger history of resource exploitation and ecological crisis of the archipelago. I develop the idea of sacrifice zones by focusing on struggles over infrastructure and the flows of waste and value inside the archipelago, as well as in relation with the continental Chilean state. My main objective is to link the disputes over the harnessing of productivity with the ambivalent struggles for and against connectivity, whilst focusing on energy infrastructure.

Chapter 3 offers an ethnographic unpacking of the idea of 'energy', by looking into what it takes to keep a house warm by using firewood. Expanding the

[17] The maritory*, el maritorio,* was often referred to as a properly insular way of talking about the territory, without sidelining the intrinsically maritime reality of the archipelago.

bounded and generic understanding of ‘energy’ as abstract units of potential work, I offer an ecologically and socially grounded understanding of home-making activities. In particular, I explore the Mapuche-Huilliche meaning of *cariño*, and how it depends on the hearth. I also develop the concept of slow violence, that allows a reading of the landscape through the provision of wood and other extractive practices. I argue that the emergence of something as a ‘source of energy’ depends on a fragile assemblage of elements that can be easily disrupted.

Together, the first three chapters offer a historical account and present quotidian relations with energy in the archipelago, showing the entwinement of human and ecological ‘work’ beyond energy as a particular instance of nature put to work.

Chapter 4 is a bridge to the second part of the thesis. It focuses on different forms of planning (particularly around energy), describing how energy policy has focused on constructing ideas of a ‘culture of energy’, and of territories having a ‘productive vocation’. In examining the strategic engagement my interlocutors had with documents, I develop the idea of *paraofficial planning* in order to show how planning has become a disputed tool and a way to escape the imperative of productivity. Additionally, I further describe indigenous cosmologies that build a different relationship with the land based on plenitude.

Chapters 5 and 6 explore current tensions relating to the future of the work-energy relation. Chapter 5 continues articulating my idea of productivism in the context of Covid-19 lockdowns, whereby I show how a long-existing conflict between two imperatives – taking care of the people and taking care of the economy – acquired a renewed relevance and public attention. In this context, the process of approving energy projects, including an electricity transmission line in Chiloé, was negotiated from within and outside the state. I follow this conflict in order to explore, how bureaucrats navigate the contradictions that come with positing the national economy, and its growth, as central to the capacity of the state to care for its citizens.

Chapter 6 focuses on two elements of energy planning processes that took place between 2020-2021: the emergence of the green hydrogen agenda, and the Long-Term Energy Planning (PELP) participatory process. I argue that the expectations from the Chilean state around hydrogen as ‘the new oil’ reflect on

an emergent ecomodernist productivism. Building on the resource-making literature, I explore how the PELP aimed to build a vision of energy abundance, that values territories on very narrow understandings of potentiality. Furthermore, I develop the role that storytelling and the use of financialised language played in the futures imagined on those settings and in the wider depoliticization of energy.

The conclusion returns to the question of work through the idea of utopia of work, sacrifice, and the possibilities for political freedom.

CHAPTER 1: FROM PLAY TO WORK AS SUBJECT MAKING PROCESSES

Throughout my time spent in Chiloé, I learned that a lot of time and effort in people's lives went into visiting each other and sharing stories around tea, coffee and *mate*. In these long conversations, talking about any topic would often lead to a personal recalling of a *minga*.

The *minga*, sometimes also written *minka*, has been documented in historical Spanish sources since as early as the seventeenth century. It is outlined as a widespread type of social event that can be described as, but not reduced to, a system to coordinate gatherings in order to achieve some form of collective goal – most often agricultural tasks. In the historical descriptions by Jesuit missionary Diego de Rosales, *minga* events are key to indigenous practices and political structures in the south of Chile – an area that then would be a relevant source of migration into the Chiloé archipelago. It also populates historiographic records of the insular life later on. During my fieldwork, my friends would reminisce about the varied *mingas* their parents experienced back in the day, alongside other collective work efforts, such as the classic *tiradura de casa* – in which a house is relocated with the help of oxen and human muscle power. Daniel, for example, had learned about the different types of *mingas* mostly through his father. According to him, the *mingas* taking place now were significantly smaller than those experienced by 'the older ones' (*los antiguos*) decades ago. As per his recollections, whole towns would come together for any activity: from slaughtering an animal, to potato harvests and *chicha* production. He explained that these events now took place mostly between close relatives, while before it could include entire communities and neighbourhoods.

Daniel, a tall and dark-skinned man, that often walked barefoot inside and outside of his house, was in his late thirties when I met him. After working for some time in the salmon business, he had returned to live in Chiloé on his parents' land in the coastal town of Tenaún. Despite the comparatively good salary he received for managing the growing pools, he had realised that the job was unbearably destructive for the environment and too time-consuming to continue. A few years ago, he sold the apartment he was still paying in Puerto Montt and decided to build a life with his partner, Susana, and their daughter, Sayén, based on permaculture. This meant they were dedicated to sustaining their livelihoods

relying as much as possible in the cultivation their surroundings allowed. They started a small beer-brewing business and called one of their beers *ahíta* – an homage to *ahíto* – which, as he explained, referred to what was given by the 'owners' (the hosts) of the *minga* to their guests after the *minga* was over. If it had been an agricultural *minga*, for example, the *ahíto* would include and abundant selection of the best part of the harvest.

In this chapter, I aim to understand the *minga* both in contrast with a moralised notion of work that I also found present among my friends, and beyond its economic usefulness. The tension between the seriousness of work and the playful affectivity of the *minga*, I argue, is a crucial element of how Chilote people narrate and understand themselves. Tamara, as mentioned in the introduction, too had stories on how people in Huillinco organised *mingas* in order to cultivate the land, that one of the *antiguos* did not work himself. She also emphasised the effort that would go into making it a convivial space for encounter, reserving plenty of time for talking and exchanging news. As Tamara recalled, in one of the *mingas* she had joined that involved two different indigenous communities, a full morning had gone into ceremonious rounds of introductions. Agricultural work had only started in the late afternoon after a game of *palín*[18]. She further elaborated on women coming together to weave wool while sharing *mate* and food, as part of keeping each other company and transferring skills from one generation to another, which in her eyes also qualified as a *minga*. These accounts of the *minga* match with more recent authors that argue that this practice remains active, arguably on a smaller scale than often remembered, particularly in the inner islands and more isolated places of the Isla Grande (Bacchiddu 2019; Daughters 2014).

In order to understand the *minga*, I needed to explore what my interlocutors said was as its most cherished element: the fun of getting together[19]. Most of my fieldwork took place under strict restriction to social life due to the Covid-19 pandemic, which seemed to encourage everyone to remember previous *mingas.* Thus, most of my conversations would eventually revert to this topic. For my

[18] A game played with wooden sticks and a ball.

[19] This encouraged me to recentre the classic framing of these events as arrangements of 'reciprocity' – following a Maussian understanding of gift-giving practices – and functionalist analysis of the 'practical' and 'expressive' dimensions of it (Slater San Román 1987). More on this below.

friend Samuel, an experienced and talented guitarist who had spent decades working with the oldest musicians of Chiloé, the key element of the *minga* was, in fact, the party afterwards. These artists – mostly accordion players – were the most critical of the deterioration that the *minga* experienced in the last decades, as the night-long parties they had played for in their youth, were no longer taking place. Nevertheless both Samuel and his *viejos* (old men), as he called them, were confident this crucial element could be resurrected. For this, the parties needed to return. Simultaneously, the role my interlocutors gave to the *minga* – a joyful and fun occasion – contrasted with the pride they often took in being, and aspiring to be, 'hard working' and 'professional', and in the state of personal 'sacrifice' that allowed them to achieve this.

This chapter traces the historical development of the abovementioned notion of work, in association with Catholicism and a Spanish understanding of the imperial political body. For this, I locate work and playfulness – as expressed in the *minga* – as conflicting forms of value at the heart of social and political change in Chiloé. Playfulness, as I argued in the introduction, can be seen as a modality of action (Hamayon 2016; Graeber 2015), in contrast with – and in rejection of – other modalities, such as work. First, I suggest that the roots of what 'work' has come to mean were cemented during the Spanish occupation, mainly through the institution of the *encomienda* – a system of forced tributary work, that was first introduced in the sixteenth and seventeenth centuries. I further elaborate on why *minga's* playfulness can be politically read as integrating principles of freedom (Graeber & Wengrow 2021) that characterised the Mapuche people during their encounter with the Spanish. Following the annexation of Chiloé by the Chilean state, work-related tropes of Chiloé inhabitants as 'lazy' and unproductive ignited different developmentalist incursions of the Chilean state into the archipelago. In the third section of this chapter, I develop two of these interventions: the promotion of the use of the plough, and the creation of national *normalista* schools in the archipelago. Both, I suggest, can be seen in continuity with the processes of racialised subjectification of the *encomienda,* under new languages of productivity, care and moral improvement. Through these changes, I trace emergent notions of sacrifice (Mayblin 2014) and the hierarchical possibilities of care that it opens for people of Chiloé.

The introduction of the *encomienda* in Chiloé grew into conflicting common senses and possible subjectivities around work, that persist in the community until today. Thus, I suggest that the ambiguous conception of personal sacrifice as a form of improvement, offers a way of relating to the 'need to work' that the liberal capitalist economies demand, which I believe is crucial for building an understanding of how work and energy relate with struggles of autonomy and connectivity in the archipelago.

The *encomienda* and the displacement of the *minga*

The history of the Chiloé archipelago is marked by the development of colonial settlements, starting with the Spanish invasion and foundation of its first city in 1567 – Castro – the current capital. During most of the Spanish colonial regime, Chiloé was administratively patchworked into the northern Spanish domains in the American continent, thus being subjected to far-away Lima (then capital of the Viceroyalty of Perú) – a status kept until the end of the Spanish rule in 1826. Throughout this period, connection with continental Chile was difficult, as from 1641 onwards the Mapuche people maintained most of the Biobío River's south region as a free sovereign territory. The isolation and geographical disconnection of the archipelago made it a unique space of coexistence between indigenous inhabitants, described by the Spanish as Veliches, Payos and Chonos, who were later joined by the displaced Huilliche from the continent, as well as a small population of Spanish settlers (Urbina Burgos 1990).

As part of the arrival of Catholic missions – which involved the extensive construction of churches – the *encomienda*, which roughly translates to '*entrustment'*, was the institution that most pronouncedly shaped the period of Spanish rule. Widespread in the American continent, this arrangement played a crucial role in sustaining the Spanish presence, particularly in places like the south of Chile, that had scarce mineral resources – the main interest of the deeply indebted invaders.

Through the *encomienda*, the Spanish crown granted the right to demand labour from adult men of so-called '*naturales*' or '*Indios*' communities (indigenous people), the 'entrusted' ones. The entitlement was conferred to the Spanish settlers, and later to their descendants that lived in the archipelago, whilst following careful bureaucratic guidelines. The right to demand labour was legally

restricted to 9 months a year for most of the colonial period, and was enforced partly as a way for indigenous people to pay off their tribute to the Crown, and partly in exchange for a salary (Urbina Burgos 2004). Due to the lack of precious metals that guided the colonial economies in the largest urban centres in Latin America, the work demanded from the indigenous inhabitants of Chiloé related mostly to cutting and delivering larch boards (extracted primarily from the neighbouring continental shores), as well as providing the 'personal service' of maintaining the *encomenderos's*[20] land. According to Urbina Burgos (2014), the exaggerated importance and power of the noblemen entitled to an *encomienda* made them hold the title of 'feudal lords', *feudatarios,* as they were overseeing *encomiendas* in multiple villages.

Besides being the source of livelihood for the *encomenderos,* noblemen and their families, the *encomienda* materialised an explicit aim of teaching a work ethic and 'civilising the *Indios*' through forced labour. This approach was part of the official religious and moral justification of the *encomienda*, which was shared by other elements of colonial rule that positioned the dominated population as beneficiaries of a superior civilizational process. During their occupation of the archipelago, the Spanish settlers learnt that, if not forced, the indigenous people would refuse to work, even if offered (supposedly) generous payment, as they preferred to 'remain idle' (Urbina Burgos 2004). For the goal of administrating and governing the territories newly conquered by the colonisers, this apparent lack of disposition towards work had to be corrected. From the perspective of the Spanish, this imposition of labour would 'allow the new subjects to understand the value of work' (Urbina Burgos 2004:187), thus also bringing about a spiritual benefit. This benevolent justification of subjugation is a trope commonly present in other colonial settings, such as in colonial India – where, while some native populations were casted as 'criminal classes', they could still be morally educated through restrain and agricultural toil (Pandian 2009). Other encounters with

[20] Other activities made under the duties of the encomienda included: building churches, fences, crossing people across islands on boats, producing skeins of yarn, and working the fields of potatoes, barley, and wheat of the Spanish (that they then used to pay tribute to the King) (Urbina Burgos 1983).

indigenous peoples in America provoked similar reflections of a supposed 'state of nature' as both docile and dangerous (Todorov 1987)[21].

Unsurprisingly, this regime provoked intense rejection from those at the exploited end of the arrangement. Even though the *encomienda* was framed as a duty of care from the Spanish settlers towards their *encomendados*, the *encomenderos* enforced their entitlement brutally and without respecting many of the legal safeguards, that were meant to protect indigenous people from abuse. This sense of care was explained in the acts that formalised the concession of a new *encomienda.* The *encomendero* committed to 'doctrine, teach and instruct in the mysteries of Our Catholic Faith...and Christian police, give them good treatment and heal them of their diseases' (Urbina Burgos 2013:167)[22]. This approach followed an idea of 'accompanying' and educating indigenous peoples as 'underage' persons in process of leaving behind their state of supposed childhood (Urbina Burgos 2013: 154). Such pre-civilised stage was perceived as both 'innocent' and dangerous. Thus, even in its mildest expression, the *encomienda* embodied a paternalistic project of conversion to Christianity (Castro 2007).

From early on, indigenous leaders, or *caciques,* protested against the abuse of the *encomienda* through institutional means, repeatedly raising concerns to Spanish authorities. The abduction of children for domestic service, physical punishment for any disobedience and work until death, or near it, were common. While the *encomienda* subjected only a small percentage of the indigenous population as tributaries to the king (men between 18 and 50 years old), it relied on and demanded no less women's and children's labour, as an extension of the 'ownership' over the villages of the *encomiendas*. This was true at least in two ways. First, by direct domestic labour in the *encomendero's* household – doing chores like cooking and cleaning. Also, the forced absence of men at their indigenous villages put the bulk of agricultural work at the orchards on women, who had to put disproportionate effort into this kind of labour. And their work there

[21] While here I refer to general impressions mainly on initial phases of Spanish colonisation, later the Spanish developed more layered levels of 'civilisational grade' that regarded certain regions – like Chile – in a higher regard than more 'savage' groups (Silverblatt 2004).

[22] Urbina Burgos here is quoting from the Real Cédula of a particular *encomienda* concession from 1711. All official sanctions of new concessions at the time would make reference to the official regulation of the *encomienda.*

was not considered as an actually 'accountable' work in the officials' eyes. Moreover, when men were suspected of having paid tribute with kind that came from their wives' labour they were considered to break the rules and the spirit of the *encomienda*, and denounced as such by the *encomenderos* (Urbina Burgos 2004). Taking the above statements into consideration, it is possible to note the differentiation of certain activities as a valid fulfilment of the political duties of a community towards their rulers/owners: the work performed by adult men is recognised as such, whilst the work carried out by children and women is not. Male labour was seen as 'real' work because it could be extracted and captured with a profit by the Spanish owners of the labour – the fine larch wood planks, the most valued asset, would be sold abroad for money, while domestic labour was considered a 'natural service'.

Throughout this process, as indigenous people resisted – or at least actively tried to escape this subjugation – other forms of livelihood, cosmologies and value articulations existed. While historical sources refer to the population that settled in Chiloé in a variety of forms, all descriptions agree in that they are closely culturally related to the Mapuche-Huilliche people of continental Chile (Cárdenas et al. 1993; Alcamán 1997). In order to understand the deeper meaning that the development of *encomienda* had*,* it is helpful to put it in contrast with other forms of subsistence and of doing things for other people, namely, the *minga*. This practice can be found in many regions of Latin America, and it has been mostly studied in Andean regions as an indigenous form of reciprocal communal work (Poole 2009). In some places it still exists as central to local forms of livelihoods and sociality, while in Chile it has fallen in virtual disuse, however, with some exceptions. In literature about Chiloé, it is described as a form of reciprocity in which the owner (*dueño* or 'host') of the *minga* asks other members of the community to work, with the implicit understanding of being available in return, in the future. Moreover, the person requiring help is obligated to host a party at the end of the task, providing food, drink and music, with more food being given to the *mingados* (the invited to the minga) to take it home (Slater San Román 1987) – the previously mentioned *ahíto*. In its popular days, the *minga* system used to include agricultural work such as wheat or potato planting and harvest, pig slaughter (*reitimiento*) or moving of a house (*tiradura de casa*). The heavier the task at hand, the more people would be invited – *suplicado* – which translates directly as a strong appeal to take part in the *minga*.

Furthermore, all my interlocutors described the *minga* as an activity that takes place among equals, mostly indigenous people, or between those from the inner parts of the archipelago (in contrast with the wealthy elites of the cities in the coast). The idea of asking and attending *mingas* rarely consolidates hierarchies (more on this below), which also relates to land ownership: as in the times of the colony, there are today no major landowners (*terratenientes)* that could concentrate and either demand or be at the mercy of others' demands (León León 2015:167)[23]. This offers a contrasting view to, for instance, Winchell's (2017) analysis of patronage in Bolivia, which focuses on the role of the landed *patrón* and land ownership structures in the circulation of favours, quite unlike those found in Chiloé. Winchell argues that the *mestizo* businesses and landowners' demands of wealth generated by indigenous people invokes 'obligation as an aspirational language that both compels particular forms of action and unfolds as an ethical work on the part of the subject' (Winchell 2017:176). She also links the *hacienda*, the post-independence system of patronage, to the previously existing Inca patronage, again in contrast with the absence of such relations in southern Chile.

By comparing the *minga* and the *encomienda*, I suggest that the *minga* can provide a heuristic outlook to a wider sense of what was relevant for the sociality of indigenous people that would come to populate Chiloé. As described above, the *minga* relies not only on a principle of solidarity and long-term debt-keeping among the households that organise labour for complex tasks, but it is also a *playful* way of acting. With that objective in mind, I have avoided defining the *minga* through a language of work, even though the existing literature unanimously does. I further expand on this below.

As introduced and evaluated upon in the introduction, both play and labour are a subjective – and therefore, always *inter*subjective – relation to the actions we carry out, not 'objective' actions in themselves. For explaining what I mean when I say the *minga* can be productively conceptualised as a form of playing, I revert to existing descriptions of *mingas* in southern Chile in the seventeenth century.

[23] There are important exceptions to this: a large part of the main island is privately owned by former president Sebastián Piñera, and other largely uninhabited and uncultivated places are owned by large landowners. But they do not participate in the holding and attending of *mingas.*

Consider the following narrative of a house building by Diego de Rosales (1877). The author explicitly states that, given its simple structure, a house like the ones used by the Mapuche people, could be easily built by a family alone. However, doing so was unthinkable, as a house 'should not be built only with your own (family), as this would be something of lesser value and an outrageous thing (...), and if you did, people would take you as a mean and diminished man, and as a helpless person who has no friends or relatives to rely upon' (1877:149).

It is worth quoting this historical text more extensively, regarding the wider social ties that were called upon for this *minga*:

> The *caciques* and principal people put their vanity and greatness in making the parties of their houses to last several days, specially the last one in which they cover it: that day all their blood relatives and extended family (married with daughters, sisters, and relatives) bring huge amounts of rams, calves, *ovejas de la tierra* [*chilihueques*, a local camelid], birds and game. And being all together near the house, all the relatives enter dancing around all the people, and as they circle them, they go killing the rams, the calves and the sheep and they leave them in the ground. Then they get on some high benches or *tabladillos* that they call *Meliu*, and there they continue dancing and singing (de Rosales 1877:150).

The description of the extended parties and the contributions made by the relatives of the housebuilder further continues with lavish detail on the shared abundance. The construction of the house is organised in small groups called *cullas* 'that go with stubbornness, and the *culla* that finishes first sings victory against the others' (de Rosales 1877:150). In response, the other groups 'get in such a hurry to finish that their hands cannot be seen (…) and everything is party and laughter' (de Rosales 1877:150). The celebrations are so enjoyable that 'sometimes it happens that the *cullas*, as they want to go on drinking, leave a piece of the house without cover, so that another party is needed to finish it, as the owner cannot finish as to not lose face' (de Rosales 1877:150). Similar descriptions are found in other colonial records of the tilling and sowing of the soil among the Mapuche in southern Chile (Douglas-Irvine 1928).

This narrative shows how the gathering around the task of constructing a house is in itself a playful and elaborate celebration, with ritualised moments of physical activity, feasting and resting. What could be lived as hard manual labour, is experienced and enjoyed as an entertaining competition. The instrumental nature of the activity (i.e building a functional house) while obviously present is eclipsed in de Rosales' (1877:50) narrative by the fun of the contest, dance, music and the abundant food, that the gathering makes possible.

The role of games and playing in Mapuche society is explored in other sections of de Rosales' (1877:169) recollections:

> The games that the boys and Indians have are multiple, as these lazy people without a trade whose major effort is to sow, and as they are content with little[24], it is little what they labour, and the rest of the time they spend in eating, drinking, dancing and playing.

In line with the above, during my stay in Chiloé, it became evident that the often-recalled erosion of the *minga,* especially in the last 40 years, had undermined something significant. The *minga* was central to the islands' livelihood, not only because of its communitarian and reciprocal exchange – it pre-existed Spanish occupation as an indigenous institution, and survived the long period of the *encomienda,* whilst coexisting with it. For a long time, it was widely practised by *mestizos*[25] and Indians of Chiloé – thus, virtually utilised by all but the reduced number of Spanish 'feudatarios'. Therefore, paradoxically, as the *encomienda* spread, so did the *minga*. The celebration elements of the *mingas* are a common thread in all historical reconstructions of life in the archipelago. Consider, for example, Urbina Burgos' comment on the *minga* in the late eighteenth century: '[the *minga*] was mostly a means for sharing time together' says Urbina Burgos (2013), 'sometimes the reward could be a simple meal… [the famous *pan de minga*, an oversized bread loaf made of potato] but well-shared and well-talked' (264).

As recognised in existing accounts (Daughters 2014), the *minga* works as a system of communal debt and reciprocity. In the historical descriptions presented above, it is also possible to recognise certain agonistic and competitive elements, reminiscent of more spectacular forms of gift-giving, such as the Potlach (Mauss 1993). I want to suggest, in addition to these two already established elements, that in the *minga* the blending of celebration and enjoyment with what today might be labelled by most Chilean people as 'productive' work, was (an continues to be) an explicit effort. This can still be found in contemporary forms of *minga* experienced nowadays by my interlocutors, as well as in other ethnographic

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[24] The idea of being 'content with little' ressembles Sahlins (2006) description the 'original affluent society'.

[25] While *mestizos* (born from Spanish and Indigenous) were not supposed to exist, all historical records of Chiloé describe with rather uneasiness how similar and hard to distinguish the Spanish and the indigenous population were.

descriptions, such as drinking while working in the production of apple *chicha* (Daughters 2014).

Focusing on the joyful element of the *minga* allows to see a series of significant contrasts between activities carried out during the *minga* and *encomienda* emerge. For instance, in a *minga* the first thing to do with what has been collectively produced, is to share it with those that had made the task possible – as in the case of food harvest and *chicha* making – which strongly contrasts with the forced nature of production for tribute of the *encomienda*. In the latter, what was extracted would circulate and be finally put to use miles away in an explicitly hierarchical arrangement. The ceremonial sharing of food as gifts (besides the feast) to those assisting to the *minga* also contrasts, for instance, with how the Spanish *encomenderos* demanded food from their *encomendados*, *besides* the extraction of their work (Urbina Burgos 2004).

Thus, the *minga* can be interpreted as a way of inhabiting the territory and building relatedness that does not rely on 'work' as a separate activity, nor as a grievous imposition that comes naturally with 'Man's' constant state of necessity. This notion of work was strong among the feudal lords' philosophical justifications of the *encomienda*. During the Spanish colony, the *vecinos* (those of Spanish descent, and therefore with political rights) of Castro would compete for acquiring *encomiendas* and argue fiercely against the reduction of the time and work they could extract from the 'Indians'. The missionaries' accounts talk about the material wealth of Indians, *mestizos,* and Spanish in Chiloé as remarkably similar, where an 'egalitarian poverty' (Urbina Burgos 2013) was a shared condition. More than a means for extraordinary material accumulation, the work demanded by the *feudatarios* was a way of them avoiding their own work. In their insistence on maintaining the *encomienda*, they complained[26] that not counting on the service of 'their' Indians would make them fall in shameful toil and pain, something that did not match their status as Spanish nobles at the service of the Spanish king. For instance, they argued that without forcing the 'Indian' population to work, the *vecinos* 'would be forced to exercise themselves in the work of their houses, which by its mechanics is unbecoming of the nobility'

[26] The opinions of the *vecinos* of Chiloé are taken by Urbina Burgos from the official communications of the local *Cabildo* (governance space that gathered all *vecinos*) to different Spanish authorities.

(Urbina Burgos 1983:148). Whilst providing the means to amass a modest material wealth, the *encomienda* allowed them a dignifying and rightful rejection of work.

Interestingly, one of the arguments for the abolition of the *encomienda* by the end of the eighteen century was that the 'Indians' had already become 'Christian and industrious' (Urbina Burgos 2004:277). Nevertheless, the denigrating image of the *Chilote* people as lazy has persisted throughout the centuries (Urbina Burgos 2002), suggesting that the transformation expected by Spanish institutions and rule was not truly complete at the end of the Spanish colony. To put the institution of the *minga* in its wider context, I now look more closely into the interplay between playfulness and freedom as indigenous political projects, that were interrupted by the colonial work ethic.

Playfulness and political freedom

I have suggested playfulness as the understanding of the meaning of action (Graeber 2001), that better distinguishes the *minga* from the extractive, work-centred forms of action of the foreign coloniser parties. In this section, I expand the larger political context that gave ground to the practice of the *minga* in southern Chile, and why it can be understood as belonging to a tradition that valued and sustained freedom, whilst rejecting authoritarian entrenchments of power. Following Graeber & Wengrow's (2021) approach to history, I situate the *minga* as central for an active search for freedom, as a self-conscious political project.

The *encomienda* was not only a way of exerting control over labour and appropriating its products, but a means of creating a certain subjectivity. In this case, shaping indigenous peoples into a new humanity in which they would devote their living hours to the sole object of endless production. Idleness was explicitly policed by Spanish settlers as a vice – '*el vicio del ocio*' (Urbina Burgos 2004:198), mostly because it gave space for too much freedom: escaping from their *encomenderos*, Chiloé's *Indios* would meet in *cahuines* (big gatherings) usually in the inner islands of the archipelago, far from the gaze of the Spanish. There they would play games, drink, and enjoy time together. Colonial records of chroniclers show that such assemblies preceded Spanish occupation as important social spaces, that blended games with political debate and the

administration of law (Douglas-Irvine 1928). This is to be expected, considering the sophisticated deliberative tradition of the Mapuche people already in place, which is documented by the time the first agreements of peace and setting of boundaries with the Spanish were agreed on.

In these gatherings, indigenous people would also sometimes conspire. Famously, the archipelago's great rebellion of 1712 was ignited when a large group of indigenous people met for playing *linao* (a game similar to Western rugby) in Quilquico, a town far from the settlers' reach (Urbina Burgos 1990). That rebellion, in which 30 Spanish *encomenderos* were killed – and more than 300 indigenous lost their lives in retaliation – was a watershed moment for forcing the loosening, and finally abolishing, the *encomienda* regime later that century. This revolt inaugurated a more defiant refusal to comply with the forced labour of the *encomienda*. The institution ended in the archipelago in 1782, pioneering its abolition in the rest of Chile, and with its official ending, the 'Indians' shifted to paying tribute directly to the Crown, just like the neighbouring people of Spanish descent (Urbina Burgos 1990). Free from the *encomienda*, during the last period of Spanish rule in the continent, indigenous communities in Chiloé managed to sustain a considerable degree of political independence[27].

This kind of rebellion, to recover a certain form of autonomy, is consistent with the descriptions of the political organisation in southern Chile, as previously registered by the Spanish on their arrival to the archipelago. It shows a form of political power based in persuasive oratory and collective decision-making, which De Rosales (1877) further describes as follows:

> They do not have a King, or governor, or head to whom they recognise and give obedience as supreme lord, nor their natural pride can take any subjection. And hence they also have no mayor's police, *correjidores*, bailiffs, let alone clerks, receivers [*receptores*], attorneys, as well as no jails, shackles, chains, or any other kind of prison, or orca, or knife (1877:137).
>
> There are only Caciques and Toquis, that are dignitaries and people of respect, and they are recognised; but without superiority or domain to be paid tribute or *feudo.* Neither between them there are *alcabalas*, fifths [*quinto,* from *quinto real,* a form of tax] nor impositions; neither real nor personal services. That each one serves himself and sustains himself with the work of his hands, and if the Cacique does not work he does not eat. The Caciques are the heads of the families and

[27] This recognition of autonomy is usually presented as one of the reasons to understand why this province remained in support of the Spanish monarchy and fought by its side when the independence movement reached the south of the country.

> lineages, so they do not have a cacique recognized beyond those of their lineage, and they order the things of peace and war with much peace and love, and as if begging, because if he is imperious, the subordinate ignores him and gets what he wants (1877:137).

This form of political authority resembles what was found by Jesuit missionaries among the Wendat people in North America, who also lived without any form of enforceable authority from the figures they perceived to be the 'captains' of that nation (Graeber and Wengrow 2021:42). The lack of institutions, such as prisons and police, is noted in both cases, with the absence of taxes particularly standing out in the case of Chile. For the missionary's gaze, all these structures where conspicuously missing, thus reflecting the 'barbarism' of these people, together with other practices like polygamy, cannibalism and sorcery (de Rosales 1877; Goicovich 2018). During the period in which the Huilliche kept their political independence, their form of organisation relied on flexible and non-enforceable forms of authority, such as temporary war leaders. They exerted their honourable position mainly by speaking first at gatherings, and hosting meetings to reach common agreement, thus explicitly telling the Spanish that they had no authority to coerce or force other people to do their will (de Rosales 1877:138). Political meetings themselves would also be special occasions for sharing food and drink.

I want to draw attention to the commonality of this political organisation and the more 'economic' [28] activities associated with the *minga,* such as the abovementioned building of a house. The displacement of freedom in order to sustain playfulness in the complexly layered activities like the *minga* – that needed spaces free of subjected labour – was the simultaneous subjection to a new cosmology of value: one that put the Spanish monarch at the centre and created the 'settled' indigenous population as indebted to his generosity, existing in the lower tiers of a hierarchy of moral quality. As the last arriving subjects to the empire, they were deserving of the charitable care of their keepers. This care was mostly perceived as attending to their 'needs', whilst being converted to Christianity – the two processes used in overcoming sinful attitudes, such as idleness and disobedience (two deeply related and undesirable approaches to life).

[28] I use 'economic' in scare quote to recognise that defining the *minga* as an economic activity is already an imposition of meaning that does not necessarily reflect how it was understood by those performing it.

In later accounts by Spanish settlers visiting Chiloé, being a 'remote' province was seen as being particularly needy (that is: poor[29]); but also, often described as grateful of the 'generous efforts' of their noble keepers. As shown earlier when describing the *encomienda*, the discourse of care and provision was the other side of the introduction of a masculinist notion of work based on the production of commodities, which were sustained by the tasks carried out by women and children being seen as irrelevant. This irrelevance was not just a rhetoric or symbolic recognition: at a national level, the circulation of indigenous children as servants was so naturalised during the Spanish period, that it continued extensively under Chilean rule (Poblete 2019).

I do not intend to argue that the hosts of the *minga* lived in a fully 'free' dynamic, as being free of any sense of obligation and coercion. Or that there were no gendered differences when performing these activities. During the *mingas* (as well as in everyday life), a lot of what we would call 'work', had to be done mostly by women, to keep the guests fed and warm. But there are reasons to believe this composed a radically different moral economy from the one that took shape under the Spanish settlement[30]. Here, the language of debt can help to understand the contrasts. In the account by Jesuit de Rosales, we can find relevant value given to the role of the activities done by women and children. For example: when a baby girl was born and people came to visit to get to know her, the family would serve the guests with food and *chicha,* saying that the new-born had cooked it for them with much dedication (de Rosales 1877:166). The tastiness of the stews and drinks would be praised by the visitors as referring to the grace of the child, hence celebrating her birth. In that gesture, the baby was included in a position of generosity, as giving something to the community, literally from the moment she was put into the world (by a woman, in a process that put her life at risk). Such situations strongly contrast with the sense of

[29] This notion of poverty refers both to the lack of riches, such as gold, to be extracted, and to the Spanish's view of the land as 'sterile', 'uninhabitable and useless for the service of his Majesty' (Urbina Burgos 1983:66-67) and unable to produce food for the Spanish settlers.

[30] We could take the opposite view as the historical accounts show that, even under the harshest years of the *encomienda* forced labour, indigenous people found the way of tricking the vigilant gaze (sometimes quite literally, by going into the inner islands) and give space to non-productive activities, in forms of false compliance as those described by Scott (1985).

indebtedness, in which the indigenous people were automatically located, when being unilaterally declared subjects of the Spanish king.

Having suggested that the functioning of the *encomienda* imposed gendered differences on the value and 'work-quality' of different activities, it is important to also point out the rich tradition of feminist historical perspectives on how the exploitation and rendering invisible of women's domestic labour is a foundation of capitalism (Federici 2014; Díaz Corral & Carrasco Bengoa 2018; Carosio 2017; Folbre 2020; Mies 2014 to mention just a few). Therefore, as these historical registers show, indigenous societies that lived in the south of Chile, had significant divisions across gender lines: most political leaders were men, whilst women were described as in charge of what we could call 'reproduction'. Whilst these might imply that indigenous women were 'oppressed', I do not think having gender differences, or even what under some analytical frame might be labelled as oppression, invalidates my analysis; as following Strathern (1990), it is not possible to know if the categories that we currently associate with exploitation, were actually present in these societies. The idea of freer, or more egalitarian societies that are being examined in this chapter, must be taken as a useful perspective to think through different political possibilities, and not as absolute or perfect measures of abstract senses of equality. Ultimately, as Lugones (2007) suggests, the very category of 'gender' can be understood as a set of modern/colonial hierarchical differences[31].

My interpretation of the *minga,* particular to the geographical context of Chiloé, also depends on very specific geopolitical history that cannot be merged with what happened in other regions, where it was (and still is) also practised. As previously mentioned, the *minga* can be found especially in the Andean region (Central Andes in particular) of South America, again being described as a practice of 'reciprocal labour' (Guillet 1980). However, as described by Faas (2017), the coexistence with the Inca empire was a crucial element of the development of this institution in that area, as it significantly shaped the meaning of the *minga* in the communities practising it. According to Harris (2007:152),

[31] There is a rich debate and struggle to make visible the role of indigenous, specially Mapuche, women in Chile, as colonial registers have erased their agency and crucial role as healers and leaders (Quilaqueo Rapiman 2013). And Lugones thesis is part of a wider debate on the articulation of a modern/colonial patriarchy in alliance with previously existing patriarchal arrangements (Cabnal 2012).

Andean work parties under the Inca empire were ‘a direct prestation to the state’. In the Inca-dominated Andes, the *minga* was co-opted to impose labour obligations towards the empire (the *mit’a,* or ‘turn’), a position then taken by the Spanish colonists, much in continuity with that previously existing regime. The imperial *mit’a* was also sustained in terms of exchange between the imperial power and the communities: ‘the practice was underwritten by a discourse of reciprocity with Inca rulers who “reciprocated” with tools and materials for state projects’ (Faas 2017: 105).

In Chiloé, there was no such continuity[32]. As a Mapuche-Huilliche practice, the *minga* existed outside the reach of the Inca empire, that never managed to put Mapuche territory under its dominion. It can be only speculated, nevertheless it is important to consider, that a higher relevance of the playful and festive sense of the activities involved in the *minga* could be related to the same rejection to political subjection through the position of debtors towards the Inca empire. This could resemble the explicit escape of taxing structures in Upland Southeast Asia, as described by Scott (2010), thus reinforcing the point that both the decentralised political structures and the cultivation of playful ways of doing things were part of a self-conscious form of ‘creative refusal’ (Graeber 2013) even before the arrival of the Spanish.

This leads me to reconsider which conceptual approach about the *minga* is most productive from the anthropological perspective. As evaluated earlier, the *minga* has been widely described as an organisation of labour, for instance by grouping it with other forms of reciprocity, mutuality, and institutions, to achieve ‘collective tasks’ (Montandón 1951). However, I believe that this understanding reflects more on the imposition of categories from a particular (prevailing) tradition of social sciences, over practices of ‘subsistence’ that define them primarily in their rational-instrumental value, and as barely covering the minimum needs for survival. Urbina Burgos (2013), for instance, describes the *minga* as part of his description of ‘agrarian work’ in the archipelago during the Spanish colonial period, first describing its ‘useful’ value, followed by the cultural ‘layer’ that goes with it. However, I suggest an explanation that highlights a different dimension:

[32] The Spanish officials adopted the idea of mit’a in their imposition of the *encomienda*, referring to ‘mitar’ or ‘to pay the mita’ when describing the abuses done by the *encomenderos* (see for instance Urbina Burgos 1983:144)

that the *minga* in Chiloé precedes and has continued to resist the encapsulation of certain activities as instrumental in the form of 'labour' or 'work'. More than an inadequate replacement to unavailable, more 'modern' or efficient ways of working, it embodies a sense of action, that does not separate the 'economic' from other human relations.

It is important to highlight that mutuality and reciprocal obligations, as described so far, are not to be taken as a terrain of smooth, 'equal' or non-conflictive relation. As Bacchiddu (2019) argues, the rules of hospitality and hosting in Chiloé are fraught with tensions. Not fulfilling an 'appeal' to join a *minga,* for instance, can seriously disrupt even the closest social relations. Therefore, it is not to downplay this tension with a trivial understanding of playfulness and celebration, as the key feature of the *minga* as naively care-free. It is rather to point precisely at this encounter; the celebratory, excessive, and festive elements of coming together as a (re)creative force of social relations: a *serious play.* This is a practice that is not outside relevant rules of social life, but is still far from more bureaucratised forms of accounting – like those present in the Andean version – that gave Inca-influenced institutions, formally resembling the insular *minga*, a different political meaning.

This reading helps understanding the power dynamics embedded in the *minga* in the same horizontal fashion described above. Bacchiddu (2019) describes the particular form of power relations that are generally present in Chilote hospitality, which she highlights in order to understand the deeper meaning of situations like the *minga* requirements in contemporary Chiloé. In a visit to a home in Chiloé, she argues, the host is temporarily subjected to the demands of their visitor, at the mercy of what might be asked from them. But this sharp asymmetry is fleeting, as 'that power is meant to circulate, to bounce from one interlocutor to the other' (Bacchiddu, 2019:136) in the longer temporal development of the relationship. The one that is subjected to a demand today, might hold the upper hand as they visit another household tomorrow. This approach, that Bacchiddu describes as a *perspectival hierarchy,* offers a contrast with the strictly fixed (and harshly

policed) identity hierarchies, embedded in the Spanish-ruled cosmological order[33].

Thus far, I have proposed that the resistance and opposition to the *encomienda* by the mix of displaced indigenous people – many of continental Huilliche origin – when being subjected to it, must be situated in its wider political and moral opposition to work as a structuring principle of society. Imposing work on others requires certain political structures, some of which had been actively rejected by the Mapuche even before the arrival of the Spanish. The rebellions to end the rule of *encomenderos* were nested both in non-hierarchical political organisations, as well as a playful approach to activities that sustained indigenous livelihoods.

In proposing play as both an alternative to work and to hierarchical forms of political organising, my aim is not so much to present an 'either, or' typology of human societies, but rather to open an analytical space to think of work relations as just one framing and organisation of human activities that can, and has historically been, actively rejected (Graeber & Wengrow 2021). This political dimension of work as a paramount value is important to understand my following analysis on the ideological power of productivism and energy as work, as well as the rejection of these agendas in the Chiloé archipelago.

New colonial relations under the Chilean state: productivity and care

Following my interest in the emergence of 'work' as a category, and its political/epistemic role, I now look into the continuation of this modality of action in the relation between Chiloé and the Chilean state. Rather than focusing on a general historical overview of the archipelago, I concentrate on the commonalities and continuities of a certain coloniality of power, that connects historical power positions beyond institutional changes (Quijano 2000; González-Casanova 2006). I unveil how the development of racialised judgements and descriptions of the people of the archipelago, in the post-independence period, were strongly moralising in their reference to both the (un)willingness and the possibility to work.

[33] A lot of the administrative effort under the Spanish colony went to secure and ascertain the racial purity that entitled the *vecinos* to their political rights, though there were also anxieties of becoming "like the Indians" due to the close everyday interactions like eating the same food (Earle 2012).

This entwinement of control and care is fundamental to understand Chilote's own perception of the personal value that comes from work.

From several perspectives, Chiloé has been analysed as a 'backwards' place, such as through their supposed attachment to 'primitive' forms of agriculture and, notably, the rejection of the plough (Paredes 2020), as well as in reference to its geographical isolation. The late annexation of Chiloé to Chile in 1824 was followed by roughly a century of relative distance from the process of state-making that took place in the continent (León León 2015). Nevertheless, towards the end of the nineteenth and in early twentieth century, the archipelago was actively targeted as a place to be made productive through foreign immigration, in a second post-independence wave of internal colonisation. Paredes' (2020) account of the change and persistence of cultivation techniques, exemplifies the external gaze on the territory. State officials of the time were perplexed by the Chilotes' attachment to manual techniques for opening of the land with *lumas* (*amomyrtus luma*), that is, wooden sticks that were hardened in fire. The weight of the body would be used to push the stick into the soil. Paredes tells of different travellers' descriptions of this method, as making man 'an animal sadder than the ox' (2020:43). The prevalence of this technique inspired schemes to increase the use of the more efficient and modern plough. In 1858, for example, the Nacional Agricultural Society, together with the government, organised productivity contests to promote its adoption, which failed dramatically.

According to Paredes (2020), the Chilote indigenous population's reluctance to engage with the plough was contrasted, in official letters, with the productivity of subsequent European migrants. The newcomers arrived as part of a national policy to make the newly annexed (continental) Mapuche territory economically profitable, during the second half of the nineteenth century. The Europeans – which in Chiloé were mostly German, English, and later Spanish – were positively compared with the lack of productive drive from the previous waves of Chilote migrants on the continent, including their proper use of the plough (Paredes 2020:42). This outlook, as reported by the official news on the area, reproduced a racialised trope of European superiority that came from an internal, natural disposition to hard work. Similar perspectives were still upheld, often unproblematically, in casual conversations in my field. Miriam, for instance, would often talk about a certain family friend, a son of German migrants, that were

beautiful in their whiteness and blond hair, but mostly remarkable for their work ethos. His family and daughters would be 'pure Germans' that had kept their blood 'intact' and kept a house beautiful and orderly 'just like those in Germany'.

I would find similar, subtle discourses of racialised hierarchies among my other interlocutors. For my friends in the cities – most of whom are working directly or indirectly in state positions, such as local councils and schools – the internal milieu of Chiloé had sharp differences. 'Truly' indigenous people were mostly located in the inner islands and isolated rural areas of the main island. Together with that, indigenous people were mostly perceived as undifferentiated '*indígena*', or, if asked, as Mapuche or Huilliche. The indigenous nature of these places also made them locations to avoid as being dangerous for travellers and those 'from the outside', even to people of Chilote, but urban origin. Simultaneously, the work of state divisions and programs that promote organisation and economic entrepreneurship today often focus on these smaller islands, as they concentrate the majority of indigenous population (Valdivieso 2021).

These more casual references to indigeneity contrasted with two distinct phenomena. The first, a strong sense of Chilote identity, that could be easily expressed by the people I met as a shared repertoire of certain traditional foods, music, religious practices, dress codes, vocabulary, etc. that are particular to insular reality. Secondly, for my politically mobilised interlocutors whom I will introduce in more detail in the following chapters, a distinct indigenous identity was fundamental. This identity was most often articulated as belonging to the Huilliche people and involved the stronger adoption of their indigeneity as a process of *re-existence*[34]. Re-existing means recognising that, while they had never actually 'left' the archipelago, an active political work was required to make their existence as people (the term use was *pueblo-nación* or just *pueblo*) concrete. This is why, as detailed in the introduction, some put more emphasis on the contrast of their ethnic origins as Huilliche being different from the continental Mapuche, focusing more on the Chono and Cunco elements of the insular ancestry, in what could be understood as a creative process of ethnogenesis (Corr & Powers 2012).

[34] Re-existence is a term use more widely in Latin America as an alternative to ideas of 'recovery' or even 'rescue' that highlights political agency (Mondaca 2013:13; Machado Aráoz 2017).

To some extent, the gradual change and public positive valorisation of indigenous identity might explain why today there are over 300 'official' indigenous communities (Corporación Nacional de Desarrollo Indígena, personal communication), when only a few decades ago the Huilliche population was estimated to be as low as 1% (De la Calle Ysern 1986). And yet, among my host family and their friends, there was an idea of 'all of us being mixed' – a typical discursive blindness to race and racialisation, also present in the rest of Chile (Tijoux Merino 2022), which further invisibilises racist practices.

This local configuration of ethnicity must be understood historically: in actively taking sides with Spain during the independence wars, Chiloé was annexed, first and foremost, as a 'country of enemy Indians', and 'barbarians' (Mondaca 2019). This hostility and suspicion remained present in the mentioned migration and productive policies of the post-independence century. It also implied a blurring of the specificity of the different indigenous peoples that had continued and continue to inhabit the archipelago to this day – while, in contrast, many people are able to trace back with pride their Spanish heritage by several generations. It has been only in the last 20 years, after the recovery of democracy, that indigenous peoples' struggle for re-existence, together with policies of recognition from the state, have made it possible to imagine an 'allowed' form of indigeneity (Richards 2007).

The search for overcoming, or somehow educating, a hostile and 'unproductive' Chilote subjectivity, took a more caring side through education. Reverting to the historical recount: the labelling of Chiloé among the places 'abandoned by the state' – an idea of 'being far' that started early under the Spanish but remained stable through the centuries – implied the obligation from the Chilean state of reaching out to the most remote places of its territory. The establishment of the French-imported *normalista* educational system is exemplary of this underlying continuity as a guide for new policy interventions.

Starting in 1842 and ending abruptly in 1974 during Pinochet's dictatorship, the *Escuelas Normales* established an educational model that moved the task of education from church to state, thus living its golden age under the 'Teaching State' (*Estado Docente*) in the 1930s and 40s (Prieto 2010). As a nation-building endeavour, the idea of Teaching State was part of a wider approach of 'inwards development' as a strategy of economic growth (Socías Muñoz 2015). The

Chilote teachers formed in the *Escuelas Normales* – the first one opened in Ancud in the 1930s, before those prospective teachers had to travel to the continent– were key figures in their communities, acknowledged as models of wisdom and advice, beyond their work in the classroom, especially in the rural areas.

The almost mythical figure of the *normalista* teacher is an exemplar of the ambiguities of the Chiloé-Chile relations. From one perspective, their efforts to 'lift the cultural level' (Urbina Burgos 1983:115) and the framing of the experience of teachers, especially in the smaller and more rural islands as part of a wider 'educational apostolate' (Socías Muñoz 2015:10) or as 'lay missionaries' (Prieto 2010:144), reflects a vertical and hierarchical insertion in the communities where the schools were located. On the other hand, however, this role was widely cherished and legitimated by the communities themselves, due to the involvement of teachers of those more 'isolated' regions:

> 'They had to watch over the state or material of the school, committing the neighbours to the repairs through the *mingas* system[35]: having the ability to relate to the Municipality to obtain resources, dealing with parents to convince them about the priority of the school in a specific peasant context in which having children meant incorporating them into the household economy from an early age. From this perspective, the teachers had a double task: educating the children and modifying the habits of the community' (Urbina Burgos 1983:123).

The role of *normalista* teachers is still remembered and recognised today, even though the system was terminated almost 50 years ago. Rural communities continue to tell stories of how such educators put special emphasis on 'habit formation', such as hygiene and moral values that had to be, first and foremost, embodied by the tutors themselves (Sandoval & Aguayo 2007). In other words, the discourse of caring and shaping roles towards the communities' moral quality, under the care of the *normalista,* resembles some of the key elements of the *encomienda.* Both – Spanish Christianization and French *la mission civilisatrice* – are part of what Moore calls the Civilizing Project: both a process and a project, in which 'Human lifeways outside "the West"— but virtually including all peasants and most workers within the West — were relocated into a new cosmological domain, Nature' (2022:161). With this comparison, I do not intend to gloss over

[35] While this fragment might suggest a state cooption of the *minga* into what might be called 'public works', I did not find any contemporary reference to this (other than the *minga* 'spectacle' for touristic ends). *Mingas* continue being organised between individuals or families.

the crucial differences between *encomienda* and national educational systems, but rather to highlight the particularities of Chiloé, that made these two institutions particularly close in the reproduction of distinct, 'outside' qualities and 'inside' indigenous nature and disposition.

These historical records of the universal establishment of education can again find echo in the present. Miriam, a public employee of the only university in Chiloé, is a contemporary witness of the effort and 'sacrifice' that is put into education, and the fruits it bears across time and generations. She would often share stories of 'effort' in which the protagonists managed to 'move forward' and 'emerge' (*surgir*) in life. For instance, she told me about a very poor girl, raised by her aunt, that had managed to study medicine. Now, she could provide her aunt with everything they had lacked in the past. The aunt, Miriam told me, had taught the girl about the need to study and become 'a professional', as a means for not having 'such a sacrificed life'. Other testimonies followed a similar scenario. A key intergenerational aspiration, as stated by Miriam and her family whenever recalling a success/failure story, was that *'the first thing is to be a professional*'. I would hear such statements also when listening to the *rancheras* playing on the radio: *'and if you think I have failed/ do not make the same mistakes/ get ready and study a lot/ and look for better roads'.*

These narratives reflect a shift from the moral improvement made through agricultural work (during the colonial period), to a newer arrangement, in which education is paired with the ethical project of fulfilling kinship obligations and becoming a respectable person. When talking to my friends in the field, being a hard-working, trust-worthy and a professional person would commonly come together. Once, when I was planning a trip to Santiago, Pamela offered me a contact: 'I know someone that can drive you to the airport. He is a kinesiologist, a professional' I was told, to feel more reassured about the person's trustworthiness. 'I met you when you were very little and now you are a professional!' was another remark I heard when a group of people were greeting each other. The identity of holding a professional title, regardless of the practical content of it, gave an aura of respect within the community, which I experienced as a judgement of my own moral quality.

In essence, from the imposition of the *encomienda* to the state-led effort of alphabetisation and education of the peripheries of the nation, hierarchy and care

are intertwined in subtle ways. More than being imposed, the generation of capitalism in Chiloé since the arrival of the Spanish, brought new possibilities of care in intimate relations (Bear et al. 2015). From the state's perspective, the creation of a language and diagnosis of moral lack and economic need calls for an ethically engaged intervention from those 'above' in the scale of civilisation. This brings the language of sacrifice in two ways: from those committing to the improvement of Chilote communities, and from those that have stayed in poverty, and have sacrificed their lives for the upwards change of their descendants. Just like Santa Lucian Catholics, described by Mayblin, speaking of sacrifice is a way to 'encompass what it is they do when they care for one another' and how love reveals itself in the world 'in a vertical kinship relationship' (2014:344). This permeable hierarchy of peoples and territories, carries its own possibility of integration into the larger world of 'modern' well-being and success in taking care of others. The 'missionary' figure of a teacher can be close and affectionate, perhaps even someone from the local town and/or a relative. Nevertheless, they must undergo a radical transformation (like migrating to the continent), to be able to guide others into moral improvement.

This mixed language of acknowledgement of potential improvement, together with 'hard work', as the route to integration into wider and more beneficial forms of belonging, fits into the larger, national level of change in social policy. With democracy recovered in 1990 in Chile, a language of a 'social debt' to be repaid from the state to its citizens, underpinned efforts of reaching out with expansive social programmes that had been unthinkable for almost two decades of dictatorship (Rojas Lasch 2015, 2019). The repayment of this debt was framed as a responsibility from the state to conduct people into development and prosperity through work. Allowing people to work their way out of poverty became the main strategy of inclusion. As stated by President Eduardo Frei in 1996, 'there is no more dignified way of leaving poverty behind than one's own effort' (Rojas Lasch 2015:87). This approach of debt acknowledgement and commitment to repayment, permeated social policy discourses and changes, but not productive or environmental ones. There has been no recognition of an 'ecological debt' towards zones of exploitation, such as Chiloé, that needs to be repaid after decades of neglect. This argument is important in understanding why ecological degradation has so far remained in a different framing of debt/indebtedness

relations, and how this has crucially shaped the suppositions and goals of energy policy.

Overall, the central role of work and personal improvement in state-making processes has a deep history, both in Chile and in the Chiloé archipelago. During my fieldwork, the willingness to work would often be used as a defence mechanism, whenever there was a suspicion of moral failure – '*I am a worker, but now I am unemployed*' I was told by a man asking for money on the streets of Castro, during the first months of the Covid-19 lockdown, which resulted in loss or suspension of employment. Regardless of a temporary situation, this man's words suggest that hia disposition to work remains. The explanation of his wider contribution to the society, beyond his circumstantial 'unproductive' situation, resembles the apologetic and widely used idiom of 'being sacrificed' (*ser sacrificado*) as a positive personal or family quality. Much like in colonial times, when 'need' (*necesidad*) was a way of describing a state of material lack, today a particular kind of poverty can be explained as being 'sacrificed', or as a characteristic of 'people of effort' (*gente de esfuerzo*). Chapter 2 further explores the moral positioning, that this notion of work as sacrifice gives to the industries settled in the archipelago.

Conclusions

This chapter begins with my interlocutor's comments about the *minga*, the role it plays in their lives and in the understanding of their own identity, as well as in the insular history. In reflecting about his radical turn in life from salmon growing pools to permacultural farming, Daniel would often share with me how even though now he worked harder, nothing felt better than doing things for your own will.

I have argued that the imposition of a work ethic through the *encomienda* institution emerged not so much as the capture of work, or the value produced through work. Rather, its implementation meant the violent imposition of 'work' as the most important modality of action, in partial submission of more playful arrangements that sustained livelihoods in the past. This brief review of the 500 years of Chiloé's history, together with its ubiquity found during the fieldwork, give the *minga* a key analytical role that will connect the following chapters with the deeper history of this province. While the *minga* has significantly changed in the last five centuries, the persistence of the playful and festive element in

contemporary Chiloé offers a significant thread of continuity, with the more explicitly political meaning of the *minga* being explored further in the following chapters.

I have outlined one possible historical reading of how 'work' came to be the centre of moral and political relations in Chiloé, often taking the language of debt and obligation. This suggests that 'work' and productivity (as moralised concepts), did displace, but not fully erase, the previous configuration, which prioritised more playful and less productive forms of inhabiting the world. Such arrangements existed together with a different sense of political freedom. This indicates that the social changes that came because of Chiloé's colonisation by the Spanish, grounded an understanding of *work as freedom*. More precisely, the new political structures that were set out during the colonisation of Chiloé, created supposedly 'needy', racialised subjects, that could exit their need through work, thus becoming subject to different state-led interventions for doing so. Being subjects of the Spanish, and later Chilean states, meant the subjection to labour. In that process, the formal end of the *encomienda* was less important than the continuation of interventions that built on the same premises. This disciplining understanding of work resembles the arguments used to narrate the abolition of slavery in Imperial Britain: 'since working for wages was inherently civilising, and since low wages encouraged prudence and sobriety, to be exploited was to be educated.' (Scanlan 2021, np).

Overall, the above analysis opens an often overlooked dimension of political and economic transformation in Chile: the subtle ways in which the work ethic has been rejected, but also adopted and transformed. As the analysis of energy, connectivity, autonomy, and senses of future are further developed throughout this thesis, these tensions will be revisited and revised in the emergence of work as a modality of action, arguing that the experience of *work as sacrifice* both enables and constrains actions, as well as the ways of making sense of one's life, their relations, and moral projects.

The contradictions, assumptions, and ethical possibilities of this configuration of work, the persisting relevance of the *minga* in Chiloé*,* and the particular form of abundance that work implicitly addresses, will be crucial for my approach to energy. Elementally, the productive capacities of nature, of which energy is just one variation*,* were configured in tandem with the subjection of the people that

inhabited such territories into work. Chapter 2 will focus on the more recent interventions of the Chilean state over the archipelago. I will situate recent energy transformations in wider political disputes over infrastructure and connectivity, both related with the circulation of value and waste as a social-ecological dynamic.

CHAPTER 2: INFRASTRUCTURAL INTERVENTIONS AND SACRIFICIAL RELATIONS

'People who want the [Chacao] bridge, do not have the best interest of Chiloé at heart. We do not need a bridge. What we need is a hospital.'

—Pamela

In the summer of 2020, during the lunch break of a historic archipelago-wide assembly in Curaco de Vélez, on the island of Quinchao, whilst in a conversation, a young Chilota woman summarised in one sentence the debate we have so far developed: 'They say that this land is poor, but then, what is it that I see every day in the trucks leaving Chiloé?' She was referring to the continuous flux of lorries taking over the single, narrow highways of the Isla Grande, carrying mostly salmon products, materials, and waste to the mainland, and to local dumping sites. Her question pointed to the central point of the discussions that would occupy us that day: if, according to official assessments, the Chiloé archipelago is characterized by poverty and need, how come it generates a constant flow of highly valued products that are successfully sold around the world? The image she invoked condensed the paradoxes of extraction and Chilotes' frustration over ecological degradation and persistent lack of access to basic infrastructures, health services and education – all while being presented, as part of a wider national success, a 'remote' area finally inserted in the globalised economy.

Alongside with the exploitation of people depicted in the previous chapter, the creation of a colonial settlement in the Chiloé islands also inaugurated a period of exploitation of the natural environment. During Spanish rule, larch boards (originally cut by Chilotes mostly from the continental surroundings of the Chiloé archipelago) were used instead of silver for payment of tribute, and in, virtually, all marketplace transactions. That initial logging was the beginning of a progressive deforestation of all of Patagonia, that only worsened after its annexation to newly independent Chile (Torrejón G. et al. 2011). Early commercial exchange, mainly with the Peruvian *virreinato*, was ecologically intensive and very disadvantageous to the inhabitants of the archipelago – a trend that was enforced in the decades to follow. In a way, Chiloé was always at the vanguard of the expansion of capitalist extraction. However, it was only under the 20th

century Chilean state that the policy language of connectivity and infrastructure consolidated as a politically relevant, differentiated field of actions and demands.

Moving onto the contemporary Chilean state, this chapter focuses on different disputes around connectivity, production and mobility, that explain how the relations outlined in Chapter 1 have transformed over time. The increasing inclusion of Chiloé into Chile, I suggest, configured new possibilities for Chiloé inhabitants: of being not just recipients of promises of care, but also demanders of care from the state. This relates to the already outlined in previous chapters relation of energy with work, as this possibility of care emerges through the productivity of Chiloé.

As it has been documented, and according to the narratives of my politically mobilised interlocutors, the single, most important economic and political intervention the archipelago has witnessed in recent history, is the arrival of salmon farming (Torres & Montaña Soto 2018). The export-oriented productive policy that accompanied the salmon farming was part of wider economic reforms imposed during the 1973-1990 military dictatorship (Barton 1998; Gerhart 2014), which widened access to a regular wage paid in Chilean *pesos*, the national currency. Salmon farming is concentrated in the coasts of the continent, just next to Chiloé and the archipelago (see Figure 2), and most recently, increasingly further south to the Aysén and Magallanes regions. In 2022, 10 companies – of mixed national and transnational property – encompassed 80% of the production, in a consistent trend of market consolidation (Salmonexpert 2022). Workers from Chiloé accounted for 21% of the employment generated nationally by the industry between 2005-2021. Simultaneously, those employed in salmon farming represented, on average, 4% of the occupied population (Puga 2023), with most of the work being concentrated in salmon harvesting and processing.

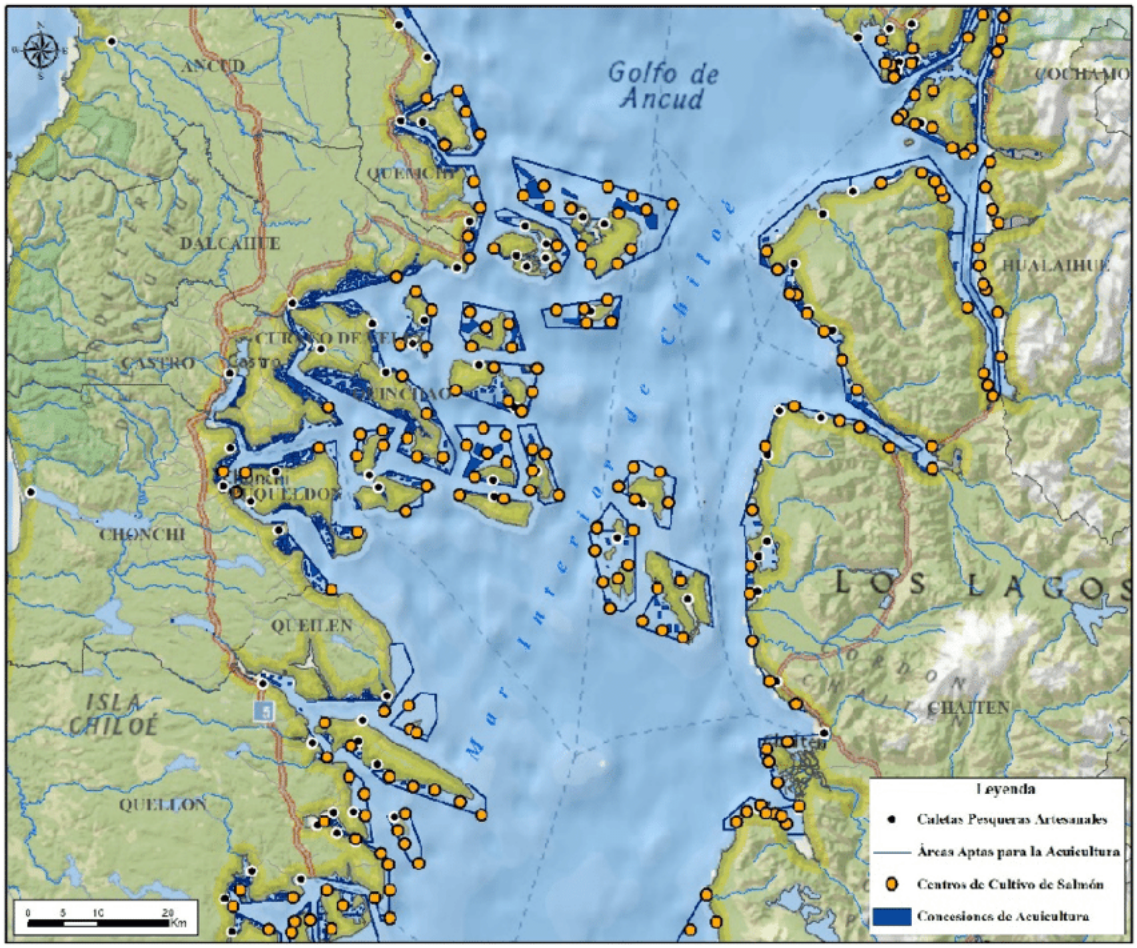


Figure 2: Orange dots represent salmon farming concessions in Chiloé and continental coast. Source: Bugueño-Fuentes (2022).

This transformation marked a generational break in the narratives of what it means to live in Chiloé: older people still remember life before this aggressive form of industrialisation, whilst the younger cohort does not. Salmon farming has also given the foundations to speak about Chiloé as a sacrifice zone (Lerner 2012). It has brought a social-ecological collapse to all the territories it has intervened in. The destruction of marine ecosystems due to the antibiotics use, and intense waste generation, have come hand in hand with an increase in peoples' dependence on money and buying of outside goods for everyday activities. Being described as both a success and a tragedy – depending on one's point of view – salmon farming has shaped the infrastructural requirements of the archipelago, especially of the main island, and changed how people relate to the state (Bustos-Gallardo 2021). Through its expansion and cycles of boom and bust, as Bustos-Gallardo (2021:374) argues, 'the actions that states and firms take to support industrial aquaculture affect the individual's identification with the commodity and expectations about reciprocity, power, and possibilities'. This

indicates that, even though the direct employment in this industry is limited, its impacts shape possible subjectivities across the archipelago.

The energy interventions and disputes that are being explored in this chapter are analysed in relation to the preceding scenario, which was primarily characterised by the consequences of salmon farming, and secondarily by issues such as waste generation and deforestation. I further elaborate on how in Chiloé, sacrifice signifies these processes of ecological degradation as an exchange, in which 'something must be destroyed to create something new' (Mayblin & Course 2014:309), particularly as a contribution and submission to a wider good: the national economic progress. In understanding sacrifice, I develop the affective dimension of collective memory in shaping environmental imaginaries and positions, for and against, resource extraction (Kojola 2020).

As an infrastructural element, regulated through national political bodies, energy interventions differentiate spaces as remote, uninhabitable/inaccessible, potentially productive, or worthy of sacrifice. These categories play important epistemic roles in building the promises of infrastructure (Anand et al. 2018) that, ridden with tensions, do not always circulate smoothly. Infrastructures 'have long promised modernity, development, progress, and freedom to people all over the world' (Anand et al, 2018:3); however, these promises are multivalent, and often perceived as failed. This chapter argues that the actualization of sacrifice through energy infrastructures, for some of my interlocutors, includes fears of neocolonialism, loss of sovereignty and autonomy, and the perpetuation of colonial practices. However, I also show how in disputes around infrastructure, autonomy can be asserted in ways that *invite* the involvement of state and its promises of care.

I develop my argument by looking into three processes: first, the incipient installation of wind farms in the archipelago, and how they have been rejected and critiqued by my mobilised interlocutors. There, I suggest that the emergence of ecomodernist narratives around renewable energies worked by denying that a logic of sacrifice was at play. In the next section I explore the ambivalent desires for connectivity and autonomy in the opposing cases of a local campaign, in support for boat connectivity between one of the inner and the main islands, as well as the efforts of a Huilliche indigenous community to access electricity off the grid. Finally, I analyse the disputes over a proposed Waste to Energy (WtE) facility

in Chonchi, that attempted to gain social approval. In unpacking the issue of energy, I show how the polysemic category of 'waste' shadows that of energy in its productive, positive sense, thus reformulating the problem of waste overflow as one of the unrealised value (Harvey 2017).

The promise of 'innocuous' wind farms

An analysis of wind farm projects in the archipelago, reveals the overlapping justifications and temporalities that support this form of infrastructure as 'environmentally friendly'. The stories of the two largest projects of this kind – one partially implemented, the other unbuilt – show how the wider struggles over connectivity are the focal point of the debate. I further argue that the enthusiasm towards wind farms, defended by their investors, combines a sense of economic opportunity, with a more novel ecomodernist policy framework. This optimistic approach is blind not only to the direct ecological costs of single projects, but also to the consequences of making formerly 'remote' areas easier to reach.

The first electric infrastructure to arrive in Chiloé as part of a national development effort was based on fossil fuel[36]. This kind of infrastructures are still predominant, with currently three diesel-based energy generation plants accounting for most of the produced electricity on the Isla Grande, and smaller generators supplying the inner islands individually. Two small hydroelectric plants and two large wind parks complement this. The two wind parks are, in fact, two separate stages of a single project: they are called San Pedro I and San Pedro II but are usually referred to as 'San Pedro'. The park sits on top of the Cordillera de Piuchén, the highest (comparatively low when seen in contrast with the nearby Andes) and most important mountain range of the archipelago (Figure 3), which additionally plays a crucial role in the ecosystem, by holding and keeping water in its high-altitude peatbog.

[36] The first installation of public luminaries in the cities started in 1917, with energy generated from a dam. Electricity was 'weak and rationed' (Urbina Burgos 2002:64) as well as very limited to wealthy urban residents until 1940, when a national electrification plan led by ENDESA (*Empresa Nacional de Electricidad* SA) extended this service more consistently, fuelled by coal and coke (ENDESA 1956).

Figure 3: Google Earth view of the area affected by the San Pedro project (from the article written by Schmid-Araya & Schmid 2021).

Both the original and expansion project of San Pedro were approved with a Declaration of Environmental Impact, which in contrast to the more complex Environmental Impact Study (DIA vs. EIA in Spanish), supposes that the project has 'no significant impact' to the environment. Presenting a DIA, made San Pedro easier and quicker to approve than other projects of its kind, partially because it was presented as two smaller projects, rather than single larger one – a known trick described by my interlocutors as 'project fragmentation'. This means that each project sits just below the legally established environmental thresholds, that set limited requirements for low-impact projects. In the mid-2021, the project had 48 operating wind turbines, with some of the originally planned turbines still uninstalled.

This project was one of the initial reasons for carrying out the research particularly in Chiloé, as it is one of the first documented conflicts over wind energy in the country. Soon after my arrival, I was made aware of the unattended impacts that the towers had on the delicate peatbog soil and the conflicts with the few nearby families that had been directly disturbed by the construction work. The scarcity of local population and organised indigenous communities in the mountain had probably restricted the possibility of the incursion of the company taking a different shape, one of collaboration and building of longer relations of reciprocity, as it has been the case among some Wayúu communities in Colombia (Schwartz 2021) in the earliest incursions of wind farm projects in La Guajira.

All my interlocutors coincided in the role of the discourse of environmental friendliness of the project, articulated by the owner of the park, Drago Bartulín

(Durán Sanzana et al. 2018). Identifying and assessing the scale of the damage that the park had provoked, remained one of the central concerns of my interlocutors, who were frustrated about the lack of information that existed about the site's original state, prior to the intervention. This lack of understanding of the ecosystem's real value, was a constant among Chilotes that were involved in social-environmental conflicts. The installation of San Pedro I and II has been described by Natho Anwandter (2017:138) as an appropriation of sustainability's discourse based on three elements. First, promises of economic cooperation and support to the community[37]; second, the idea of renewable energies as a type of collaboration with nature to reduce CO_2 emissions; and third, promoting the wind farm as a way of increasing regional autonomy, due to the diversification of the energy matrix, and as an 'exemplary', specifically 'Chilote' project.

As I interviewed more people that had been openly opposing the project in its initial stages of construction, this final idea of the farms going on benefit of the archipelago's economy continued coming to the fore. In one conversation, I listened to César's reminiscence of the day when the first two towers were installed. At the inauguration, a celebratory mood had reigned, and national and local authorities had been invited to visit the plant at the mountaintop. César, too, had been invited; he runs a local radio station and has a prominent role in staying in touch with issues of interest to other inhabitants of Dalcahue. He recalled supporters of the San Pedro wind farm brushing off the criticism by insisting on the project's top environmental standards. However, he explained, the hosting territory of Dalcahue had received zero benefits. César blamed the local administrations for demanding too little from large projects like this one, as not even a decrease in community's electricity bills could be expected. 'They [the owners of the park] pay taxes in Las Condes (a wealthy council in Santiago), not here' he emphasised, whilst suspecting more blatant forms of corruption, like direct bribery, as a reason for its smooth approval.

Exploring this disagreement was, therefore, an early lesson regarding the impossibility of disentangling energy, or 'energy conflicts', from existing wider

[37] While in his interviews with Natho Anwandter (2017) Bartulín mentions support to the families living near the construction work of the park — like to solve water infrastructure issues — his interventions have been sporadic, not organised around a principle of territorial sovereignty as is the case of the Wayúu in Colombia (Schwartz 2021).

disputes and unfulfilled promises. From the Chacao bridge to salmon farming, as well as indigenous land, sea dispossession and deforestation, my questions on energy would often tie back to wider and longer-term acts of negligence or plain aggression, sponsored or overlooked by the state. Jaime Velásquez, a leader of the non-governmental organisation, Willi Lafkén Weichan, revealed that the idea of extracting energy from the archipelago was part of a broader instrumental relation, that the state had with the territory. Velásquez explained how the existing regulation allowed for 'cherry-picking' the communities the regulating bodies would consult for a given project, narrowing down the incumbent public to those already in favour of such large projects. Such situation also took place with the construction of the Chacao bridge.

For Jaime, the so-called 'electric highway' (the same Surelec line that I develop below, that is to run between the continent, near Puerto Varas and Ancud in the north of the Isla Grande); the construction of a highway connecting the northern tip of Chacao to Quellón in the south; and the bridge leading from the main island to the mainland, were all part of a Chilean government's utilitarian approach towards regional development. This approach, as stated by Velásquez, overlooked indigenous people's human rights and violated international treaties, such as the 169 ILO Convention – a key legislative element of environmental resistance in Chile and Latin America, approved in 1989, that establishes special safeguards to protect indigenous and tribal people (Biblioteca del Congreso Nacional de Chile 2014). It gives, among other guarantees, the right to free, informed and previous consent whenever a project is looking for an environmental approval.

In Jaime's view, the pattern present in a variety of projects being approved, as seen in the case of wind farms, was a repetition of what had happened with sea concessions to private salmon farming companies – which is the focus of his organisation's, Willi Lafkén Weichan, advocacy work. These concerns echo what has been found in other contexts regarding renewable energy advancements, such as wind parks in Oaxaca, Mexico (Howe & Boyer 2016; Alonso Serna 2023), and in Greece (Argenti & Knight 2015). In situating wind ventures alongside other structural problems, the perception of relations of coloniality and exploitation were directed by Jaime primarily towards the state. That is, it is the state, rather than foreign companies or countries, that is enabling the arrival of new variations of

the same known logic of dispossession. This, therefore, is in contrast with the feeling of colonisation from one country over another, as it is the case of Greece in the advancement of solar and wind energy, in continuation of previous waves of occupation, such as the Ottoman empire and the Second World War (Argenti & Knight 2015). Even in recognising the potential environmental good of the wind farms, there are often fears of being excluded from the economic benefits that these will create. This ambivalence is typical of projects that promise security through jobs and economic growth, that too closely resemble previous experiences of exploitation and erosion of autonomy (Gardner 2012; Stensrud 2016).

San Pedro I and II were approved with no vocal opposition during the period in which concerns could have been legally considered. By contrast, Salvemos Mar Brava[38] told the story of a long, and eventually successful battle against the materialisation of another wind farm in Chiloé. Salvemos Mar Brava is a movement that opposed – and continues to oppose – the wind park titled 'Parque Eólico Chiloé' in the SEIA, that was to be constructed in the Mar Brava beach, in the north of the municipality of Ancud. The movement was led by people working on tourism and biodiversity conservation, together with people living close by to the area of the project. An initial version of the wind park entered the state's environmental evaluation system in 2010. However, as a response to the critiques and concerns raised by the Salvemos Mar Brava group, it failed twice to gain approval, before finally being passed in 2014. With its Environmental Permit (RCA, *Resolución de Clasificación Ambiental*), Ecopower S.A.C. had permission to install 42 wind turbines. The wind turbines would be installed near a coastal area which, though not densely inhabited, is considered as a natural beauty spot, tourist attraction and an important biodiversity hub, especially for birds. Ecopower, the company running the wind farm, has consistently denied that the project would have any relevant environmental impacts. While the company got the project approval in 2015, the construction had not yet started until mid-2021. The company alleged to have started some minor construction in 2020 to avoid having their RCA revoked, in a gesture that sustained the expectation of the future existence of the wind farm (Weszkalnys 2015). This was much to the dismay of Salvemos Mar Brava, that verified on the ground that the supposed construction

[38] Information on this movement can be found in http://www.parqueeolicochiloe.com/

work had not been carried out when indicated, and that therefore Ecopower was in violation of the law. Their denunciation was accepted by the regulating bodies, which meant that mid-2023, while this thesis was being written, The Parque Eólico Chiloé RCA was cancelled.

Here the stories start interweaving. In principle, the concept of renewable energy suggests a 'clean' and harmless production of energy; it implies a kind of moral authority of renewables over fossil-based forms of energy (High & Smith 2019). Similarly, San Pedro I and II were justified by the company, with at least partial success, as being innocuous to nature. San Pedro was also portrayed as 'filling' the electric transmission capacity that links the Isla Grande to the continent. As for 2023, a single high-tension line connects the archipelago to the SEN. Therefore, hypothetically, the park would 'protect' the territory from additional wind park projects, which would not be economically viable due to their disconnection from the national grid – something that turned out to be both a privately and publicly advocated position. Until the time I left the field, I was told, Bartulín, the park's owner, has been willing to defend the construction of the park and its beneficial nature, keeping a policy of 'open doors' that showed his self-assurance (promoting, for instance, visits from local schools).

The image of a neutral ecological impact also relied on the remoteness of the location of the project inside Chiloé itself, described in the DIA as of 'hostile climate and completely uninhabited' (SEA 2013:2), therefore not affecting any human population. In this discourse, the alleged remoteness of places to be recipients of wind parks must be understood as a category in the making (Saxer & Andersson 2019). Remoteness – a concept that, as described in the introduction, dominates imaginaries of Chiloé – is 'embedded in particular visions of development through connectivity' (Saxer & Andersson 2019:145) and harbours particular promises of economic yield. In this case, the remoteness of Chiloé and the Piuchén mountain range are described as appealing for the installation of renewable energy infrastructure.

Different elements configure slightly different versions of wind farms' ecoauthority (Howe 2014). In the case of San Pedro project, the owner interweaves doing what is 'good for the planet' (as an unquestionably correct action) with entrepreneurship (as a personal moral quality), demanding trust on the good overall impacts of the project. The promotion of Parque Eólico Chiloé in 2010,

when it was still in process of being approved, also included promises of new jobs, that in the media were reported as being 'over a thousand'[39], which was denounced by Salvemos Mar Brava as a blunt exaggeration. This resonated with the general knowledge that *no one* worked at San Pedro. The plant was controlled, I was told in several interviews, 'directly from Spain'.

There were also ways of reducing the suspiciousness of these projects as coming 'from outside', and as continuation of colonial legacies. Parque Eólico Chiloé, for example, made sure to appear in the local press reassuring that they would pay their taxes and provide an income to the Ancud municipality (Ecopower, 2014). According to my activist friends, Drago Bartulín helped dispel the usual critiques of these projects being led by and brought from outsiders to the archipelago. From this narrative, joining the national energy network as a provider of 'clean' energy, was supposed to be the beginning and the end of a brief adventure in wind energy generation. Nonetheless, the case of Parque Eólico Chiloé – that started trying to get approval through SEIA around the same time as San Pedro I – shows that this did not change the position of the Isla Grande as a place of potential extraction. In a way, as it is further explored in Chapter 5, the need to construct new 'evacuation' lines to harness the powerful, and now proven, winds of the island, only became more evident and urgent.

Boyer (2014) proposed the term 'energopower' as an amplification of the genealogy of modern political power, that moves beyond the government of humans and focuses on 'the twin analytics of electricity and fuel' (2014:325). Boyer's theorisation incorporates the historicised approach to energy, later developed by Daggett and others (Hughes 2017; Franquesa 2018) and is situated in a wider literature looking at infrastructural elements (Harvey et al. 2016; Hetherington 2019). Through this perspective, the disputes over energy infrastructure in Chiloé reflect the claims that the central state administration can manage to enforce in the archipelago – all environmental approvals are given by a single, centralised inter-ministerial national level committee. As seen in the case of Drago Bartulín, the need to harness and connect energy to different political scales can contribute to, and support, further claims for exploitation, which were

[39] In La Estrella de Chiloé, reported in Salvemos Mar Brava Instagram account https://www.instagram.com/p/CnFtdo_J3he/?img_index=1 accessed on the 26th of July 2023.

perhaps previously unsuspected. When a place is connected in such way, further connection is encouraged.

The two abovementioned cases were successful in passing the existing bureaucratic assessments of their impact, however their value generation opportunities (both of energy and of money) have fallen within different timelines. While existing connectivity and the rapid approval of San Pedro allowed it to be built and connected to the national grid, whilst using the existing infrastructure, my interlocutors had learnt that the building of the full set of wind turbines had been halted, in expectation of a new line. Likewise, the Parque Eólico Chiloé project remained suspended in expectation of a new transmission line, which was meant to be built in the next few years.

Besides the neat linear story that could be tracked in the circulation of technical descriptions, environmental impact studies, and permits that consider all disputes and doubts as past and solved, these two projects remain open to contestation. From the beginning of Parque Eólico Chiloé, and since the installation of the San Pedro park, different activists have questioned the insufficiency of the required environmental assessments. During my fieldwork, I learnt about fragmented efforts to visualise the damage by the abovementioned projects, as well as other energy interventions. I develop in more detail the case of El Manzano – a terrain close to the capital city of Castro – and the limited but ongoing resistance to a new electricity substation in Chapter 4.

Other energy generation projects located south of the main island, have been presented and later retracted from the SEIA evaluation process due to explicit opposition, usually from organised indigenous Huilliche communities (Tironi & Sannazzaro 2017). Moreover, during my fieldwork in Chiloé, a different modality of projects, such as more sparsely located wind turbines, were too approved without vocal opposition. The overall perception of existing renewable energy projects was either positive or neutral, with the role of ‘remoteness’ playing an important part in understanding this approach: for most of the people I met, especially those living in the cities, the impacts of wind turbines seemed too abstract and detached from their daily concerns.

In sum, large renewable energy generation projects in the archipelago have so far followed an entrepreneurial or ‘business opportunity’ model, that points to a

wider (in this case, national) possibility of contributions from Chiloé, led by private initiatives. The projects of San Pedro and Mar Brava, rely not only on the 'objective' scientific identification of a landscape's wind potential. Rather, they are accompanied by large-scale infrastructure, that transmits the generated energy to the places where it is considered to be needed. In order to turn wind into an energy resource, these infrastructures depend on a broader, relational material world (Richardson and Weszkalnys 2014), affecting each other synergistically and unpredictably. To seize these opportunities, timing is key. There is never certainty regarding how many projects are aiming to get green light for implementation – as described in Annex 1, the expansion of energy infrastructure is led by private investment, and the state has only an indicative role. In practice, from the investor's position of power, time can be frozen, extended or accelerated according to need. Thus, the social life of wind farms is largely located in its unfinished and unbuilt nature (Carse & Kneas 2019).

As it has been pointed out by my interlocutors, the lack of secure and affordable electricity in the archipelago is, ironically, not part of the mapping of needs and calculations that lead to decision-making. This tension in the priorities of provision has brought wider, more politicised energy struggles, that relate to connectivity – a dimension further developed in the next section.

The ambivalent desire for connectivity

The conversations in Chiloé about these renewable energy developments would often drift onto other struggles, making it virtually impossible to separate the topic of energy from their concern of the wider political and ecological local context of Chiloé. Talking about energy meant diving into a deeper history of failed infrastructural interventions and plans, that affected the everyday lives of the inhabitants of the archipelago. As a territory marked by long commuting times and protracted journeys, connectivity was never *not* a topic of conversation: the state of the roads makes them unreliable and dangerous; health treatments often require long trips to Puerto Montt (the capital of the region, situated in the continent) or even Santiago; and gathering wood, as described in Chapter 3, is a year-round domestic concern. Beyond energy, the changes in the infrastructure and materiality that connect and disconnect the archipelago are part of broader intra-state demands, concerns, and mobilisations.

Out of the multiple ongoing issues, below I develop two contrasting cases that rely on the language of connectivity as a political arena in different ways. The Quinchao Assembly refers to inclusion and responsibility, whilst for Agua Clara autonomy is the key trope. While these political framings might be explicitly elaborated and pushed by social leaders, they are still crosscut by ambiguities, tensions and contradictions. These, therefore, show how the need for connection as a social quotidian experience is embedded in larger political subjectivities, that also mirror economic valuations. Through a thorough examination of both cases, I further build on my discussion from Chapter 1 regarding the historically complex relationship between care and domination in the archipelago, and how it complicates notions of coloniality.

In early 2020, I attended an archipelago-wide meeting on the island of Quinchao. The local assemblies gathered there were not unique to Chiloé: in other sectors affected by environmental conflicts, similar articulations emerge and often persist, beyond the particular conflict that initiates the organisations. In the case of Chiloé, most of these assemblies could be tracked to the *Mayo Chilote* 2016 mobilisations, and even though some had remained 'dormant', the recent national event had reignited the debate. Present were also members of other collectives, such as feminist organisations and groups like CESCH, which I was part of.

The meeting opened with a short film titled 'Isolated' (*Aislados*), which talked about the recently won struggle of the Quinchao archipelago[40] community (grouped in the *Asamblea Archipiélago de Quinchao*), which regarded a reduction of the ferry fare that connects their island with the Isla Grande. This is the assembly I described in the opening vignette, which gathered different local assemblies, usually one per council. The price had recently significantly increased by local standards, after many years of no change. The protagonists of the 10-minute documentary – produced by the assembly itself – explained how connectivity was a peoples' right, and how the unregulated, privately-run ferry system, that gave them passage between Quinchao and the nearby coastal town of Dalcahue, was in violation of that right. After unsuccessfully complaining through official channels, between the end of 2019 and early 2020, their form of

[40] A smaller sub-section of the Chiloé archipelago under the jurisdiction of the Quinchao municipality

protest had escalated to cutting the road that led to the pier, thus stopping the constant flux of vehicles and people between the two islands.

Opening the assembly with this documentary seemed fitting for this particular gathering, which aimed at discussing how to work at a provincial level, as the new constitution referendum was meant to take place in weeks to come. The idea of successfully refusing the boat fare increases, resonated with the 2019 Santiago revolts, ignited by a metro fare increase, thus giving a sense of empowerment to all the people attending. 'After October' – that is: October 2019 – was referred to during the meeting as an opening of a scenario of new political possibilities to be seized, and 'dignity' was often invoked as the key political action principle. Representatives from different collectives and local assemblies, many of which had emerged or re-emerged due of the 2019 cycle of politicization, were present.

The eclectic mix of organisations gathered that day needs some context to be fully understood. In Chile, organisational affiliation is low in comparison to other countries (Somma 2021). Most of the assemblies I knew and heard about in Chiloé confirmed this pattern: they rarely convoked a constant membership of more of a dozen or so of people, many of them participating in multiple groups at a time (for example, being part of a feminist collective and a local assembly simultaneously). The assemblies were usually fairly mixed: from school teachers, college students, people working in biodiversity conservation, filmmakers and medical workers at local health services to farmers living in rural areas, to name a few. Most non-indigenous spaces included at least a few Huilliche members, although in some urban spaces they were absent. These assemblies were unanimously non-partisan, so they lacked the support and command of centralised political agendas. Still, in moments of increased conflictivity, these spaces were key as repositories of learnings from previous waves of mobilisation, and acted receiving and canalising the interest in participation of people that had not joined before. Many of these assemblies had hosted massive *cabildos* by the end of 2019, which were for many participants the first political instance of debate they had joined in their life. By early 2020, as tension started to dither, the more long-term and constant organisers of these assemblies were trying to keep that tide of interest up, in an effort to put the needs and demands of the archipelago in the upcoming constitutional process.

As the documentary film and the subsequent discussion showed, the mobilisation of the Quinchao assembly appealed directly to the central state, demanding a fiscally run crossing ferry, free of charge for its users. This particular political appeal to the state was so important, that the Quinchao council's mayor too took part in the social assembly. The decision, after all, was not in the hands of the local council, thus motivating the whole community (including local authorities) to be on the demanding side of Quinchao civil society vs. the central state power. Their demands were grounded in the historical memory of a free fiscal boat that had operated several decades ago. In the documentary, older people remembered what it was like to live under that system, in which the *balsa* (a small sailboat) would pick the passengers up, whenever they signalled their need by lighting a fire on the opposite shore. Their recollections of this guaranteed right formed a moral ground for reclaiming the state's responsibility towards the insular inhabitants: a duty of care, that would materialise itself by the state making it its objective to remove any obstacles to people's free movement beyond their homes, in the inner islands of the archipelago. In addition, the documentary commented on the decay of the local hospital of Quinchao, which had resulted in people needing to travel more frequently out of the island for medical reasons. There were also memories of the trauma caused by having to migrate from the inner islands to go to school, which had been lived by previous generations.

The concept 'fiscal' was used as a way of saying 'state-funded' and 'state-run' – a type of direct public provision that was much more widespread before the neoliberal reforms of the 1980s, which was exemplified by public schools, known then as *escuelas fiscales*. Figure 4 is an example of the promotional images the assembly used in their social media campaigns. The use of the term 'fiscal' was clearly anachronistic, as it does not really exist as a descriptor of public provision today, but it conveyed a sense of possibility based on previous arrangements.

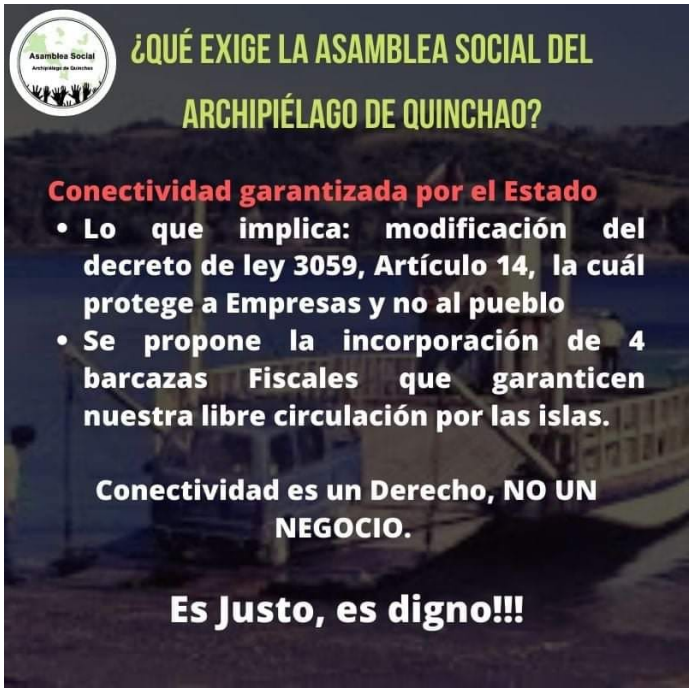


Figure 4: post in the Quinchao Social Assembly Facebook page, stating their demands for a fiscal boat. The last two lines read 'connectivity is a right, NOT A BUSINESS' and 'it is just, it is dignified!!!'

A contrasting approach to this aspiration of state-guaranteed connectivity was found in the isolated area of Agua Clara, part of the southern region of the Isla Grande, Quellón. Agua Clara is both the name of the coastal area and of the indigenous Huilliche community that lives there.

In February 2020, I travelled there from Castro, to meet with Aníbal, a *dirigente* – that is, a leader and representative – of the indigenous community. Aníbal had contacted CESCH years ago, during a seminar on energy conflicts and potentialities in the archipelago. From Quellón's sea port, Aníbal fetched me on a small boat, and it took us roughly two hours of navigating the swallow waters, teeming with wildlife and packed with buoys of *chorito* farming, to get to his family's home. In front of us, a small island showed a possible future for his land: the light posts opened a painfully bare path across the forest, bringing electricity to the sparse houses that peppered the island. 'That is what we do not want for ourselves', Aníbal stated, as he saw me gazing at it from the boat. His community was trying to find funding for the installation of domestic units of solar panels to have electricity without the diesel-fuelled generators they currently used. It was not their first attempt applying for public funding: in 2013 they had already obtained financing for agricultural production through sustainable energy, funded

by FOSIS[41]. While some of the infrastructure acquired during the implementation of that project was still functional and in place, many families had seen parts of it fail, making their panels less reliable or simply useless, having to spend more on diesel fuel for their generators.

I was there to discuss a potential collaboration with Universidad de Los Lagos, applying together for funding that would enable the replacement of the old solar panels and power inverters that had been overused. Together with members of CESCH, we intended to apply to a FOSIS 'social innovation'[42] project, which focused on piloting solutions for old, hard to solve 'social challenges'. Among the identified challenges at the time, was the provision of domestic potable hot water and electricity. Between the sharing of a large *curanto* with Aníbal's family and visits to other members of the community the day after my arrival, we started looking at the numbers and restrictions of the project's expenditure. We found that the limits to capital buying would not allow spending on the bare minimum equipment that the community needed. In drafting and re-drafting of the ideas and budget, it became evident that Aníbal and his neighbours were skeptical and reluctant to putting too much effort into such a meagre possibility. We needed to get creative to succeed.

In later conversations, Aníbal explicitly stated that his community did not want for the 'main line' to reach their island, asserting a form of 'right to remoteness' (Schweitzer & Povoroznyuk 2019). He viewed with suspicion what could transform quickly into a land road for further state access and exertion of its authority in Agua Clara. A new line would also have made the community depend on the private company that runs the electricity supply in the region. Aníbal later recounted some of his more physical confrontations with the police in previous waves of protests, whilst I told him about the October 2019 protests in Santiago. He seemed very happy to hear the story, and when taking breaks from the more technical discussions relating to the funding application, he showed me a picture of himself in Plaza de la Dignidad in Santiago, that he visited only weeks before

41 FOSIS stands for *Fondo de Solidaridad e Inversión Social,* a service of the Social Development and Family Ministry. The official name of the program implemented in Agua Clara is '*Programa de producción agrícola basado en energía sustentable no convencional'.*

42 Innova Fosis.

the protests took place. This conversation made sense in the wider history of his community: Agua Clara adjoins the Tantauco Park, a private estate owned by former president Sebastián Piñera that was historically reclaimed by many indigenous communities of the archipelago, including Aníbal's. This form of dispossession related to conservation is a common pattern in the area (Mondaca 2013), which actively shaped the political alliances that were sought after by people like Aníbal.

In his search for a different way of inhabiting their ancestral land, Aníbal also recounted some of his practices for building a relation with nature. By sharing videos of his recent visits with some of his relatives, playing music at the top with a traditional *trutruca,* he stressed how important it was to go up the mountain, 'to honour it', whilst asking me to join him next time, to understand what he meant by the need to respect the land.

His community had already been involved in mobilisations and had taken it upon themselves to oversee the correct use of seafood farming in their area[43], in an acknowledgement of the lack of capacity, or will, from the state to protect their rights. During another boat trip, Aníbal used a GPS machine to check the exact location of one of the buoys from a mussel's private company. Such buoys were abundant across the seashore. While talking about the impacts of seafood farming, Aníbal expressed that it is his dream to start a local cooperative to cultivate a wider variety of seafood, outside mainstream commercial circuits, that would not only be sustainable, but would also bring a regular income to his community. He was familiar with the requirements to create such a cooperative, however all existing economic support that could have been used towards it seemed insufficient. An extensive amount had to be allocated to consultancy and 'education' of the cooperative members, whilst very little money remained for the initial capital investment – the same issue we faced when applying for the FOSIS 'social innovation' project. Nevertheless, Aníbal remained optimistic about gaining funds in the upcoming rounds of application. With this conversation, Aníbal showed his and his community's experience and skills in using government schemes and resources. My first visit to Agua Clara ended with a set task of

[43] Mytiliculture is newer than salmon farming, and its extension has been led by private companies as well as some smaller plants managed by indigenous people like Aníbal.

finding complementary funding sources for the FOSIS project, whilst having a wider university party go to the *comunidad* in March 2020. However, those plans were interrupted by Covid-19 pandemic, which suspended all in-person teaching and activities in the university for the rest of the year.

These two cases show how energy and connectivity intertwine in conflicting ways. The struggles over who gets to access electricity, and under what terms, as Gupta (2015) has argued, are attempts to dispute possible futures. The electricity brought by the centralised grid is not the same as the one generated in Agua Clara. While the demand of the Quinchao Assembly was not directly about energy as such, the prices of fuel and the demand for subsidies are directly related with energy policies. This example shows how energy can be nested in larger configurations of responsibility – in Spanish, often expressed as *hacerse cargo,* taking charge of – and justice.

As explored by Franquesa (2018) in his study of wind farm opposition in Southern Catalonia, the places rendered peripheral by the state often relate to its action in tension between desires for autonomy and dependency. Similarly, to Chiloé, southern Catalonia too has a history of being seen as 'an increasingly peripheral and impoverished rural region' (Franquesa 2018:7), despite the fact that it has been the focus of a constant stream of energy projects. In Franquesa's terms, the increased dependency on activities such as nuclear and wind power generation, are an erosion of the possibility of reproducing an autonomous life. For that, the advancement of wind farms, as part of an energy transition agenda, is lived as an affront to one's dignity. Something similar is present when denouncing the injustices of unaffordable mobility. However, in this case, there is less hostility towards a more active involvement from the state, which is required in the autonomously defined terms of the assembly. Simultaneously, in the case of Quinchao, the request for inclusion and connectivity takes a form of 'economisation of justice': the identification of an inequity that can be solved through tariff corrections (Alvial-Palavicino & Ureta 2017).

In the case of Quinchao assembly's recent victory, the 'promise of infrastructure' (Anand et al., 2018) in the shape of a ferry, imagines a desired future based on a responsibility once fulfilled in the past. The call for the return of the so-called fiscal ferry, gives a moral and political undertone (intimately linked to the historic memory) to a change in prices, that were portrayed as a bitter, but ultimately

inevitable, adjustment to the global market, or 'neutral' indicators, such as inflation. At the same time, this inclusion also reaffirms a different identity: the notion of being island people – *insulares* – and the insistence on maintaining a different way of life from that on the mainland.

Agua Clara, on the other hand, is a community that treats the state diplomatically through bureaucracy and documents (Nahum-Claudel 2016); as a source of resources but also as a force that is better kept at a distance, and mostly uninterested in their territory. Aníbal and his community are striving for off-grid electricity but would also like to see more generous, and unconditional, economic support for their entrepreneurial projects that rely on entering wider markets.

The circulation of energy has multiple meanings of value and how it circulates in the very physical sense. While 'peripheries', such as Agua Clara and Quinchao, only exist as peripheries in relation to the urban centres of the archipelago, and more widely to Chile as a whole, their demands for incorporation do not mean a full blending with a Chilean (not even a single *Chilote*) identity. The insularity of Quinchao, or other smaller islands, is radically different from the experience of the Isla Grande, especially at the cities. Through its policies and regulations, the central state determines which areas are worth reaching out to – *hacerse cargo*. When aiming at creating particular infrastructures, both communities and different elements of the state can draw from a wide policy repertoire that has equally varied social, political, and ecological implications.

A sector like Agua Clara can get electricity through state-funded 'social innovation' or through the regular (slower) extension of the main grid, which can take an indeterminate amount of time, up to several years. Inhabitants that commute between islands in their everyday life, can assert their right to mobility going beyond existing regulation of the transport provision. By doing so, they reject the idea of having their life dictated by the outside circumstances, thus they resist the irresistible push to migrate to more 'central' parts of the archipelago. In the first case, Quinchao *isleños,* who aim at moving freely, reassert their value as people who deserve easy access to health and education, and as keepers of a traditional way of life that should be valued by the nation as a whole. In the second case, in Agua Clara, the aim is to keep the circulation of value under local control as much as possible – for example, by having control over economic production, which goes hand in hand with a quest for political autonomy.

In Chapter 1 I suggested that the mixture of demands for productivity and promises of care, marked the historical evolution and transformation of the Chiloé-State relations. This chapter suggests a shift: from the state, the terms of care continue to be embedded in promises of productivity. However, care can also be demanded on different grounds, as a recognition of a different form of value in the form of dignity and autonomy. Seeing the shifting boundaries of conflict in such detail also allows to nuance the notion of coloniality in energy studies: while in some places indigenous communities organise and reject incursions to their land by referring to colonialism, (Dunlap 2018; Howe et al. 2015), in other settings they build relations of reciprocity with energy corporations (Schwartz 2021). My analysis supports this ambiguity by further exploring whether different notions of autonomy can coexist, and under what circumstances.

Creating value: Waste to Energy and the rejection of sacrifice

I first heard of the possibility of a Waste to Energy (WtE) plant being constructed in the archipelago, as often happens, as a rumour. As a WtE facility was supposed to be established in Chonchi, the local communities were being reached out to, to be informed about the wonders of this proposal.

Tamara, from CESCH, raised the alarm by sharing how she had been approached via telephone, by a man that wanted to 'work together' to see this alternative materialising. The PowerPoint presentation she received as part of the man's proposal, was shared via WhatsApp to the community in his lobbying rounds. The document explained the proposed plant with key opening questions: 'what do you want to do with waste in the next 20 years?'; 'Are you interested in the industry of the zone [Chonchi]?'; 'Do you want to transform a sacrifice zone into a green zone?' 'Do you want to transform the ecological passives?'[44]. With this unsettling tone of both opportunity and threat, the presentation then goes on to present the company's existing WtE plants around the world, as a proven and safe technology. It ends with a description of the challenges: 'Think (at) long term. Think in teams' and linking WtE as a successful example of 'the circular economy'.

[44] The terms '*pasivos ecológicos'* or '*pasivos ambientales'* is often used to refer to waste or other toxic remains, like tailings.

This offer came at a critical moment for the archipelago, as a provincial Sanitary Alert for the lack of properly functional landfills had been declared in April 2019, thus generating heated quarrels, particularly in the Ancud municipality. One of the most critical conflicts of 2020 was the implementation of an illegal dumpsite in Puntra, which was facilitated by the council of Ancud, and enforced by the police, against the local community's will, that had attempted to stop the arrival of the rubbish trucks by blocking the road. The decision, harshly imposed by the local authorities, had come after weeks of the rubbish being left uncollected in the streets of the urban area of Ancud, thus fuelling the residents' increasing concern and anger. The extraordinary circumstances established in the rules of the Sanitary Alert, allowed the council to enforce the use of the precariously improvised landfills, postponing the need to build such sites with a legitimate Environmental Impact Assessment.

The use of a state of emergency to manage waste overflow can be seen as a wider crisis of democracy, with the council resorting to authoritarian techniques to dismiss environmental injustice concerns through its emergency legal powers (D'Alisa et al. 2010), which was a useful discursive aid for the council to legitimise their acts. With this precedent, the tensions and increasing threat of the ecological impact of industrial and domestic waste, were palpable in all councils of the archipelago, including Chonchi. Letters and declarations, signed by public figures and activists, had circulated rejecting the transformation of Chiloé into a new sacrifice zone due to this unmanaged situation[45].

The crisis in Ancud had triggered environmentally minded individuals and collectives, from different areas of the archipelago, to discuss what would be the best solution, different to the use of precarious emergency landfills. In one such meeting in the summer of 2020, I found out from Rodrigo that *all* landfills of the province were working with their corresponding Environmental Permits (RCA) overdue, often clearly overflowing and putting the surroundings in critical biological danger. Beyond the problem of domestic waste, Rodrigo also shared that most of the toxic and dangerously leaking dumping sites were of organic,

[45] See for example this letter published in 2022 https://www.elciudadano.com/actualidad/crisis-de-la-basura-en-chiloe-organizaciones-y-personas-naturales-solicitan-a-autoridades-poner-fin-a-irregularidades-y-zonas-de-sacrificio-e-instalar-mesa-de-trabajo-con-la-sociedad-civil/03/18/

industrial waste coming from salmon farming, thus corresponding to private contracts that were not subject to environmental requirements, as they were signed before the law mandated them. Rodrigo, a man in his fifties who lives near the landfills, had shared this presentation on multiple occasions similar to the assembly that gathered us. While he participated in multi-sided commissions (‘*mesas de trabajo*’) that were trying to solve the issue, he saw no significant progress. These deposits had proliferated without any fiscalisation and had made life in the Mocopulli sector, in Dalcahue, unbearable.

The situation was occasionally covered in local newspapers and on radio networks but seemed utterly impossible to resolve. The Covid-19 pandemic came as a new reason to renew this state of Sanitary Alert in 2020, and it remained in place until the time I left Chiloé.

Considering this critical scenario, the concept of waste-to-energy (WtE) played on the promise of unlocking a system unable to cope with the uncomfortable and threatening material reality of industrial production and mass consumption. Based in Chonchi, the introduced earlier socio-cultural association – Aitué – was one of the organisations that denounced the dubious claims of this technology being environmentally innocuous, by spreading informative posters that explained why this was not a solution to the rubbish crisis that the community was going through. However, while the company drew its legitimacy from policy documents and businesses that insist on WtE as a secure technology ‘proved and common in the United States and Europe’, it also made a tempting case for generating energy through an abundant ‘resource’, an almost perfect ‘win-win’ scenario.

The focus of the WtE promotion was on what is currently being wasted and the double seizing of an opportunity, to make rubbish ‘disappear’ and replace it with energy provision. This narrative of value under the idea of ‘circular economy’, brings together economic viability and environmental gains in a ‘win-win’ formula (Ariztia & Araneda 2022). Under this ecomodernist frame, environmental actions are subordinated to the market principles of ‘green business’ (Ariztia & Araneda 2022:11). Energy is also a delicate topic in a place where wood, an ecologically damaging and hard to obtain resource, continues to be the main source of household heat. In that context, the WtE proposal was received with skepticism from grassroots organisations. Aitué was one of the first such collectives to raise

alarm and craft a counternarrative to the company's story and, likewise, share it via WhatsApp. The counternarrative explained some of the mechanism's hazards, including the danger posed by leftover ashes after burning of the rubbish. Aitué also insisted on creating a more holistic and comprehensive strategy to address the overflowing of waste in the archipelago. As part of the 'Alianza Basura Cero' (Zero Waste Alliance), the organisation put together a strong campaign that challenged the win-win narrative.

An audio recording shared by Aitué as part of their campaign explained the documented effects of the ashes of WtE processes and how they can negatively impact human health. The toxins, they explained, accumulate in nearby plants and animals, which are then consumed by humans. In a recreated dialogue, someone initially supportive of the WtE plant, responds to this information with pretended shock: 'But how? The gentleman talked about this being modern and a form sustainable development'. To this, another person responds: 'On the contrary...if we burn residues, the industry has no other source of inputs than natural resources. So, it continues exploiting the planet to generate more and more products. But if instead of burning rubbish we recycle it, we can obtain products from what we call "waste", which can be re-inserted to the productive chain, and that is a truly eco-friendly cycle!'.

The fact that the 'sacrifice zone' label was used to spread the news about, and support, the new WtE proposal was not a coincidence. The man who contacted the Chonchi communities, mobilised a discourse that he knew would appeal to a sense of threat. In line with Ahmann's (2019) study of incinerator plants in Baltimore, the kind of optimism he invoked is a form of subjunctive politics, that plays with the idea that alternatives to the materialisation of the project are so much worse, even if the garbage incinerator has its downsides. Hence, such proposals 'make[s] sense only when set against the spectre of the more toxic past and recast as restricted orientations toward the future' (Ahmann 2019:335). As in other parts of the country, in Chiloé the concept of sacrifice zones has been widely appropriated, covering the rejection of both the proliferation of landfills and of the supposed solution offered by the WtE projects. It also circulates in other forms of organisations involving ecologically related issues and street art (see Figure 5). Sentences such as 'we do not want to become a new sacrifice zone'

invoked in activist spaces, gave testimony of a learned lessons from past disasters.

The promise of avoiding sacrifice must be located in the wider social-ecological context. During my stay in Chiloé, recurring events such as the red tide outbreak in 2016, however on a lesser scale, were constant. In one of such events, in April 2021, several of the activist groups I participated in, shared news and pictures of extensive salmon deaths in the nearby continental Comau Fjord, which were collectively curated by both environmental and indigenous communities. Previously, in July 2020, a member of the Chilean Navy, denounced an unusual number of dead cormorants washed up on the shores of a lake in the Quellón southern sector[46]. The investigative report produced by the Agriculture Ministry was also shared in multiple networks. Both reignited conversations on how Chiloé's inner sea was a sacrifice zone.

Figure 5: sign in the streets of Castro. It reads 'we are not a sacrifice zone. For the defence of the sea, the land, our lives, let us stop capitalism!'

Narratives and sharing of reflections from activists and political collectives on the *Mayo Chilote* in 2016 would also use the concept of sacrifice to summarise their struggle, which would then be shared in spaces such as the assembly described at the opening of this chapter. In the polysemic capacities of the notion of

[46] A report presented as part of an official complaint to SERNAPESCA suspected intoxication in the birds.

sacrifice, it is mobilised from one perspective by the WtE prospective project as a form of narrowing the comparative field (Ahmann 2019). The plant is positively evaluated in contrast with the current situation – too much waste, too little or too expensive energy sources – foreclosing, for instance, the possibility of reducing waste generation.

Outside these more explicitly politicised circles, what was described elsewhere as sacrificed, was instead put in terms (and recounts) of lost abundance. This was for example documented in 'Sovereignty' (*Soberanía*) – a film put together by three young Chilean filmmakers, who went to the archipelago in May 2016, when the protests regarding salmon farming and the red tide outburst erupted. These protests expressed both a rejection of salmon farming, and the demand for a monetary compensation for the economic loss resulting from local fishermen no longer being able to fish in the surrounding waters. The film follows some residents' critical responses to the episode of massive algae bloom around the archipelago: 'We used to go and get what we wanted from the sea. A bucket of seafood...we went and picked it up on the beach because it was abundant. Today, as I tell you, there is none of that' – as stated by a Huilliche woman, with a sense of grief. She explains that the future she desires for her grandchildren, is one where they are 'roaming free, without asking for permission' in the seas of the archipelago. In this case, the loss of what is sacrificed – the sea – is both the loss of a form of livelihood and of a sense of political freedom that came with that practice. The 'asking for permission' refers to the zealous guarding of the salmon factories and to regulations like those, that make it illegal for people to catch the salmon that escaped (which happens regularly).

The opposition between Aitué and the lobbyist, shows how similar memories and notions of loss can support competing visions of the future. As Kojola (2020), drawing on Weszkalnys (2016), argues, regarding different positions around future mining projects, affective connections with the past modulate the environmental imaginaries and timescapes of those who mobilise politically. Using the language of sacrifice when presenting the plant as a modern solution to modern problems, the WtE lobbyist referred to memories of a lost, healthier nature; an exit 'forward' that would seize an opportunity, transforming a threat into a form of care. This 'caring' would require a joint effort between the community and the private corporation that is running the plant. In their divergent approaches

to collective memories, different positions, such as those of Aitué and the WtE lobbyist's, 'promote different forms of development and technology to enact their visions for a good life' (Kojola 2020:904).

The back and forth between the groups resisting and opposing both new landfills and supposed solutions (such as WtE), aimed to denounce past negligence in mismanagement and lack of compliance with existing regulations. The limited space available in the archipelago, such as Chiloé, throws a more general contemporary problem of waste and pollution into sharp relief. All waste generation is a form of displacement – or, as Douglas (2002) states, in relation to pollution – matter out of place. Pollution comes to the fore as 'an enactment of ongoing colonial relations to Land' (Liboiron 2021:6), as no land is ever truly empty or detached from surrounding ecosystems. Within the conflicts around waste, the notion of sacrifice comes to signal the unbearable levels of this form of violence, which ranks some people and places as more disposable than others. The WtE proposal emphasises a convenient removal of a material concern, out of the sight and need of care from the people of Chonchi. All while creating value as abstract energy and responding to Chiloé islands' pressing need for energy. By focusing on a larger scale, it hides the heterogeneity of the world (Tsing 2012), or more precisely, the contingent origins and reasons for the 'excessive' waste existence.

I suggest an additional reading of what is at stake in this rejection. Connectivity and the determinacy of value/waste, come together in the dispute over the pertinence of WtE technology. For this plant, waste can become valuable only through a particular connecting infrastructure, that in its contribution to society – the value it creates – would then shape wider notions of what is needed. In other words: the installation of an incinerator plant could create a new dependency (Harvey 2017) on current local rubbish generation, reducing incentives for waste reduction and recycling, thus making it more expensive to reduce rubbish pollution in the future. Parallel to Harvey's (2017) study of a proposed WtE plant in Cusco, Perú, it is useful to understand the paradoxes of autonomy and dependency. Harvey explains how, in the context of a dramatically polluted municipality, WtE was suggested as a way of escaping from the incompetence of local politics. A new community figure (*mancomunidad*) was proposed as an

emergent political figure, that would bypass the official authorities' incapacity to solve the problem.

Through this social re-engineering, waste is transformed into 'matter with a potential of becoming a lucrative and sustainable resource', whilst committing to introduce the processing infrastructures that 'then require a system to sustain flows of money and to keep politics at bay' (Harvey 2017:688). Once WtE is installed, not producing waste would be like losing a 'renewable resource' after creating the machinery to harness it. However, these social-ecological implications are never presented from the investor's side, in this wider, political sense.

With only one fully operational moderate-sized wind park, Chiloé remains 'latent' as a place still in need of being put to work, regardless of the extraordinary story of material extraction and circulation, precisely for its huge untapped potential. Both in wind parks and in corporate-led proposals of WtE 'waste' takes the meaning of 'wasted opportunity', harnessing 'potential' in an optimistic tone: we can always correct ourselves and start seizing the opportunity today. Both ways of thinking about energy share an optimistic, ecomodernist gaze. Paradoxically, this potential for value generation depends on the framing of what currently exists as value-less, or even as waste, over landscapes that might otherwise remain indeterminate (Alexander & Sanchez 2018).

Conclusions

This chapter had analysed the relation between infrastructural energy interventions and notions of sacrifice. I have argued that previous waves of destruction and unequal relations with the continent, and hence the Chilean state, are actualised by a memory and fear of sacrifice. I recounted the recent history of large wind park ventures, an industry that has aimed to enter the archipelago as bearers of ecoauthority, which has been challenged by Chiloé inhabitants. Additionally, I have situated energy-related demands in the wider relation of different areas and collectives of the archipelago towards the state; evolving senses of autonomy and responsibility; as well as in the insular debates around waste as both a threat and an opportunity. Throughout these different infrastructural interventions that attempt at connecting and extracting, sacrifice modulates different fears, expectations and demands around what it means to

recognise value in something, and how that value is harnessed. This use of sacrifice is part of a wider environmental and political timescape of lost abundance. The multiple references to the past among my interlocutors, show the importance of developing an archaeology of present affects (Weszkalnys 2016) that explain what becomes relevant and precious to them.

The opening sentence of this chapter shows the two perspectives that shape these debates. Pamela, a civil servant in the local council, who made that comment, is aware of the long discursive and political battles that the attempts of building the bridge have brought. One proposal (the bridge) sees the urgency of circulating value from one direction to the other (from the archipelago to the continent). The other (the hospital) sees the need to sustain the value (the health of the people) in Chiloé. This opposition reflects the tension of a commodity-based gaze (the leaving trucks filled with wood and salmon) and a human economy (sustaining the bodies of people). Of course, larger discourses and justifications of the bridge still refer to 'taking care of the people' as their ultimate goal; and the idea of a hospital could still be seen as a step forward in improving the 'human capital', and therefore, productive capacity of the Chilotes.

Chiloé, in its insular nature, shows how energy is always embedded in a wider infrastructural context. Connectivity becomes urgent when it aims at circulating value in the 'right' way. For some, this means opening a way towards the continent and its energy needs, while reaching isolated homes with electricity, for example, can be put to the back of the bureaucratic queue. Pointing out these contradictions, like my mobilised interlocutors do, is a way of questioning the encompassment of the wider common good, that the national economy is supposed to represent (Appel 2017). Such contradictions resemble what Gudynas (2016) calls the 'compensatory state': that is, a style of development that emerges from progressive governments to support the continuation of extractivism as a necessary step to implement more inclusive social policies. It is under such promises that the state can also be invoked in its responsibility over the people of Chiloé, as it was done during the 2016 *Mayo Chilote* mobilisations, or by the inhabitants of Quinchao. Although in the case of wind development in Chiloé extraction is not directly made by the state, public agencies and administrative bodies do play a role in legitimising the primacy of contributing to 'the economy'. In its multiple use, this compensatory logic could be understood

in a more widely distributed sense of a ‘compensatory society’ as a moral discourse.

I have explored how sacrifice might be positively used to acknowledge the worth of hard-working, ‘sacrificed’ people (see Chapter 1). In the environmental dimension, the fear of becoming a sacrifice zone expresses not only a direct ecological destruction, but also the risk of becoming subjected to new relations of dependency. This can be elaborated explicitly as neocolonial encounters. In this tension, ecomodernist promises of new, impact-free technologies (like wind energy and WtE) attempt to deny the bargain of sacrifice.

Many of the connectivity and productivity struggles are experienced haphazardly. Chapter 4 will further discuss how practices of planning, and bureaucratic tools, are co-constitutive of what my interlocutors identified as a threat to their lands and, therefore, to themselves. With the wider insular context on energy struggles developed in this chapter, Chapter 3 focuses on the everyday activities that sustain domestic heating, as one of the most important elements of domestic life in Chiloé. It will offer a more intimate look at what it means to inhabit territories affected by centuries of extraction.

CHAPTER 3: KEEPING A HOUSE WARM. ENERGY FRICTIONS IN CHILOÉ

'Are you cold? Go run over there and back. Then the coldness will be gone' Daniel, my friend, teased while the small party made of my two hosts Andrea and Samuel, Daniel's partner Susana, their daughter Sayén, and me, were working on the processing of apples for the annual *chicha* making. An activity that must be done outdoors, in the early days of autumn, made it hard to keep oneself warm, as it required moving around and washing different types of apple that had been collected by Daniel and his family the week prior. The day was cold and humid, and the sun was setting faster than in the summer days. We longed for the warmth of the house, and the always heated kitchen. However, due to the urgency of finishing the processing in time before nightfall, we could not afford to go inside and leave the work undone. With his usual humour, Daniel explained that the quoted above joke would be typical for people working in the salmon industry, who would tease each other, when working outdoors in the growing pools. As he and the other workers also could not go inside (under very different circumstances), they would have to use the warmth generated by their own bodies to overcome the cold.

Daniel's memory of this ironic 'potential use' of endosomatic[47] energy, can help understand some of the aspects that remain hidden when talking about 'energy' as a commodity. This chapter traces the everyday experience of energy in Chiloé, following its main domestic form: the use of fire for keeping one's house warm. In principle, the use of exosomatic energy – that is, energy obtained from sources outside human bodily capacity – might be found in virtually any activity, from moving around on a bus, to the way lighting is made more efficient with LED bulbs. This is how 'energy' is typically understood: in an abstract sense that can be quantified, encapsulated, and written down in energy demand reports. By challenging that understanding, I track the emergence of energy sources that focus on the conversion of elements of the Chilote ecosystem 'into resources for various projects of production' (Bear et al. 2015:np). I put a particular emphasis on home heating and firewood, as a key to access the more complex experience that is inhabiting the Chiloé archipelago in its entwined social and ecological dimensions. I extend my description beyond the economic rationale of 'energy

[47] Energy generated by the body.

savings' and 'efficiency', instead focusing on how the practical effort of provisioning oneself with energy is put at the service of creating and sustaining social relations.

Through this chapter, I delineate the emergence of energy as a commodity and the approach to the world that it requires: the abstraction of nature and a recreation of the web of life (Moore 2015; 2017). In his understanding of 'the web of life', Moore proposes a historicised analysis of capitalism as the creation of a different nature, with the emergence of cheap fuel as a key element to accelerate production in the early stages of colonisation. Moore (2017:617) describes how, in as early as 1603, the increase in silver extraction in Potosí implied the destruction of the living world that surrounded the mine, including the forest. Here, I analyse the traces of this productive relation in the context of Chiloé's environment, which can also be tracked, through wood extraction, all the way back to the Spanish period (Urbina 2011), therefore enabling the landscape to be read *as history.*

First, I explore the role of energy in homemaking and practices of hospitality in southern Chile. In asking 'what is energy for?' inside the house, I describe some of the practices of care and hospitality that start with the home's hearth (Murray et al. 2017; Bacchiddu 2019) and that build, I suggest, an aesthetics of *sufficient abundance*. Starting from the fireplace in the kitchen, I follow different networks of relations that make the materiality of wood and other heat sources available for use. I do this through an approach to energy supply chains as a heterogeneous set of practices (Tsing 2009), in which a commodified understanding of energy emerges only under particular circumstances. Inspired by the Gens approach, I develop an understanding of energy that 'does not begin with markets and explicit economic practices' but 'it focuses instead on the diverse and wide-ranging practices of life and production that cross-cut social domains' (Bear et al. 2015:np). As in other places of southern Chile, to stay afloat, the energy arrangements in Chiloé must combine formal, informal, and illegal practices (Baigorrotegui 2018). Thus, I will argue that the choices between different sources of heating, reveal energy as embedded in social relations, and that wood knowledge and practices play a central role in Chiloé in constructing a sense of identity and solidarity (Thomas 2018).

Finally, to expand the particularities of domestic energy in Chiloé and its affective dimension, I approach wood extraction as a practice that is inserted in a larger, historicised landscape of accumulated damage that occasionally comes to the fore in a punctuated way. Following the idea of slow violence (Nixon 2011), I explore the limits and the price of nature's use for the state-led notions of productivity, including state-promoted agriculture. The idea of overlapping landscapes' histories (Mathews 2018) contributes to my understanding of sacrifice zones as experiences outside the spectacular, ritual dimension, that often dominates approaches towards sacrifice. Furthermore, it supports my argument, that the usual equation of 'energy = labour' hides, precisely, this particular history of accumulated dependencies and lock-ins, thus creating 'work' as a detached and self-contained category. I aim to destabilise the concept of energy by re-embedding it in particular ways of inhabiting a territory, in which ambivalent relations with extraction become generative (Jaramillo 2020; Penfield 2019). This analysis will be further developed in the subsequent chapters, which discuss local forms of resistance to the expansion of the energy frontier in Chiloé.

To build my argument, I first describe how social relations underpin both the provision and the use of firewood in houses in Castro, as a paradigmatic example of energy use in the archipelago, and as structuring the space of the domestic. I then look into the wider ecosystem of home heating alternatives, and how they reveal the inclusion of Chiloé into larger supply chains. Finally, alongside other human interactions with the island ecosystem that can be grouped under the label of 'putting the land to work', I connect the damage that using wood as fuel inflicts on the landscape. This perspective will allow me to historicise the current critical degradation of the island ecologies, thus expanding on how the cumulative violence that emerges is entwined with contested projects of *Chilote* subjectivity.

Making a house a home in Castro

Weather in Chiloé is known for its inclemency. Besides constant rain, temperatures rarely go above 20°C, except during the summer in January and February. Nights are uniformly cold, whilst in the winter the minimum temperature stays just above zero degrees, with occasional sub-zero temperatures appearing at night. Snow is a very rare occurrence, and only falls on the Piuchén mountain range a couple of times a year. Houses in Chiloé are built with these conditions in mind, which means not so much that they are well insulated, but that, virtually,

all have a woodstove. Much of the housing is informal and self-constructed with thin wood and a metal cover, thus they would be impossible to inhabit without the stoves inside.

Miriam's home is, in many ways, a typical Chilota house, and Miriam representative of a Chilota professional urban middle class. She works as a secretary at Universidad de Los Lagos, and has remained single and without children. Located on the coastline of Castro, her house was built over 20 years ago, when her now deceased parents were still alive. It replaced a previous, larger house, that is the recurring protagonist of all the family photos from her youth that hang in the hallways. Next to the house, Miriam's father used to have one of the first wood-processing plants of Castro. The small plot of land now also hosts her sister's Pamela house, which sits right behind Miriam's, with the two houses sharing a fence facing the street. There Pamela lives with her three daughters. Fully made of wood, Miriam's house (where I lived during my stay in Chiloé) has a kitchen with a dining table, a separate dining and living room, the main bedroom located on the ground floor, a bathroom and 6 additional rooms located on the first floor. The first floor was where the other residing lodgers and I stayed during our time in Chiloé – each of us had our own, small and simple individual room. On the staircase walls that led up to the second floor, were pictures of a bygone Castro from the early twentieth century, as well as old-fashioned dolls resting on the bookshelves, keeping outdated collections of encyclopedias and magazines.

The dining and living rooms were cheerfully decorated with different sets of glasses, plates, and little statues, although those spaces were rarely used. Most of our everyday meals (and indeed most of our interactions) took place in the warmer kitchen lounge. The structure of the house was a wooden frame, with virtually no insulation infrastructure, giving the central role to the two stoves that were used for heating purposes between the months of March and December. One of these was in the kitchen – called *cocina* or *salamandra* (Figure 6), and was also used for cooking purposes, despite a normal cylinder gas-based hob also being available for use. The other stove, called *combustion,* was placed in the living room and used only for heating. The name comes from its particular mechanism: a closed burning chamber slows down the combustion, thus making the wood last longer than traditional wood-burning stoves.

Figure 6: the cocina *cooking stove at Miriam's house*

During my stay, Miriam spent a lot of her time at home taking care of the stoves, and their smooth functioning. In 'normal' times (that I managed to briefly live through before the Covid-19 pandemic) she would turn on the kitchen stove when returning home during lunchtime, thus warming up the house for when she comes back from work in the evening. When unable to do so, Bety, the woman taking care of her sister's house next door, would light it up for her. During my stay at Miriam's, when I remained home on some occasions (before the lockdown), she would try to light up the fire before leaving to work or ask Bety to help me light it up early in the morning. We would resort to the *combustión* in the evenings when the cold became unbearable. During the day, the heat of the *cocina* would be used for preparing lunch – the only hot meal of the day, usually made of meat and potatoes cooked for a long time on fire. The *cocina* was also used for boiling water for tea, coffee, from breakfast to the *once* (light evening meal) in the evening, as well as for night-time herbal teas – *infusiones* – that we would drink before going to sleep. It also functioned as a last resort clothes dryer, whenever the humidity or rain made it impossible to dry our sheets or jumpers outside.

All in all, a day without the warmth of the *Salamandra* would be a tragedy for our attempts to inhabit the house in a convivial way. Miriam would spend most of the time at her sister's house – as it was newer, it was heated with natural gas, besides the usual firewood stove – so we would rarely run into each other while getting hot water from the kettle. Similarly, I would seek refuge in my room, whilst putting more layers of clothing on.

The crucial role of the hearth-produced heat has been described as central to the endless process of building relatedness through food sharing (Carsten 1995). For instance, in my house in Castro, the kitchen fireplace was a key element in an active production of what I call an aesthetics of *sufficient abundance*. While the expression is oxymoronic, I aim to describe a sense of overflow of possibilities of action, that is nevertheless modest in its material requirements, and therefore widely available for all Chilote people. As the fire was kept on, we were always ready to pour a cup of coffee, or tea, as mandatory offerings for anyone visiting the house. The kettle makes a noise signalling that the water is boiling inside. Miriam made sure the noise could be heard, sometimes moving the kettle back to the centre of the stove whenever I had left it on the side.

It took me some time to get used to the indoor humidity that this would create and stop putting the kettle aside, when I knew that the water was boiling. ‘My mother taught me to always have the water ready for any visitor to come in’ she often stated. Her mother was for Miriam a model homemaker, expert in sewing, cooking, and food preserving. I saw her put her lessons into practice more than once, both with her sisters and closer relatives that would make a ‘quick’ stop at the house. They would refuse any tea or coffee a couple of times before finally accepting it, whilst Miriam would make sure that any visiting person had been properly offered the corresponding meal, depending on the time of the day: ‘did you have some tea, some coffee? We have a little bread’ (*tomaste tecito, cafecito? Hay pancito*). This modest description of the offering is typical of Chilote hospitality, and a form of enhancing the host’s generosity (Bacchiddu 2019). It was also a usual practice of Miriam to leave a little pot on the kitchen stove, filled with water and eucalyptus leaves, or orange peeling, which left a distinct smell and humified the air in the room. Thus, the boiling kettle can be seen as an object integrating and enacting readiness for hospitality, that is built into the domestic space, and its overall maintenance.

Figure 7: recreation of a typical Chilote fogón *in the Museum of Chonchi Traditions (*Museo de Tradiciones Chonchinas*)*

My impression was that a good fire should never be left burning to waste without giving its heat to something other than the room. While Miriam's house and lifestyle were distinctively urban, this approach is in continuity with traditional, rural, *Chilote* practices: historically, in the now bygone *fogones* (central, open stove wood base of the house – see Figure 7) the heat of the fire would be used for cooking, but also to dry collected seafood, thus making it easier to preserve. This practice resembles what was already explored in Chapter 1, and conducted by Bacchiddu (2019), analysis on the dynamics of Chilote hospitality in rural Apiao. There, food is readily available and automatically offered to any visitor without much room for rejection. The constant fire is central to being able to quickly offer food and drink and gives the setting for the ritualised interaction of mutual visiting. As a native from Santiago, the disposition to food sharing was new to me. The lack of wood-burning heating in the capital, means that visiting each other requires more planning and preparation from the hosts.

Throughout my stay at Miriam's place in Castro, this aesthetics of abundance as readiness to host would play out in other practices, such as apple gifting during the harvest season. Apples and apple trees are omnipresent in the archipelago: any household outside the urban area has multiple trees, that start yielding early on, are easy to maintain, and grow quickly. They provide for the autumn harvest, during which some apples are transformed into *chicha and* some to apple vinegar, for use throughout the year. However, a generous portion is also reserved for eating fresh or in the form of apple *empanadas.* In the early weeks of April,

whenever Miriam and I bought fresh produce from local vegetable sellers (*hortaliceras)* that offered their locally grown and seasonal harvest, we would also be gifted apples – a result of their plentifulness, thus the cheap price and kindness of the sellers.

Such displays of generosity can be understood as alternative postulates of abundance (Tassi 2010) that go beyond the practical or 'economic' use of goods, such as apples. Tassi (2010) is interested in abundance as a 'cosmological principle of the *cholo* community' (194) in Bolivia, that is reproduced in the market and through religious activities. This aesthetic of abundance is material and sensorial, an excess of goods available for consumption, as well as conspicuous dressings for religious dancing. From a spiritual perspective that opposes traditional Christian understandings, 'this continued and repeated statement of material abundance, stimulates spiritual forces to reciprocate and reproduce plenty, and instantiates that constant circulation between human, material and spiritual domains' (Tassi 2010:207). I suggest a similar mechanism is at play: without a direct relation to religious practices, the readiness and the display of abundance through certain key edible elements, allows the reproduction of practices of reciprocity in both market and non-market contexts.

The imperatives of sharing abundance became more salient in March 2020, with the first impacts of Covid-19. In the wake of the first collective incursions into confinement, and following other manifestations of solidarity, social media were filled with pictures of people leaving bags of apples hanging from their houses' walls, for others to take if they were in need. In April 2020, Miriam received two large baskets of apples (Figure 8) that we attempted to eat before they went bad, with each of us eating several apples a day. The fruit came from Miriam's friend, who owned a small estate near Castro – a common occurrence that I would hear of throughout my fieldwork: 'in Chiloé everyone has a relative with a piece of land in the countryside'. The plentifulness of apples for a period of time would reach virtually anyone, with people willing to take some for free, or almost for free.

Figure 8: apples gifted to Miriam in April 2020

For such vast quantities of apples not to go to waste, we would bake large batches of sweet apple *empanadas* (a popular, usually savoury pastry) in the oven, which would then be gifted to Miriam's nieces, colleagues, or neighbours. The always hot oven also allowed Miriam to bake bread and gift it to families that she heard needed support during lockdown. Miriam's friends would send messages over WhatsApp, alerting each other when and if some people in the neighbourhood did not have enough fresh bread or firewood. This would usually refer to older people that were already in a precarious situation. Donating to these families was a gesture that made her happy in her ability to take care of others – which was often expressed as a way 'to help' - *para ayudar*.

During the first weeks of the pandemic, Miriam became suspicious of the bread sold in our local corner shop, which we bought from regularly before Covid-19. 'Too many people touch it', she told me, when she stopped buying it. Baking our own bread became the sanitary alternative. She baked for the two of us, but also experimented with different types of bread – with beetroot, or in playful shapes – which were then gifted to her family whenever they came for an occasional visit; a gesture that would be returned in subsequent visits by bringing abundant food to share, or a special bar of chocolate. The pandemic restrictions, and less frequent family visits (Miriam was one of five very close sisters, all living in Chiloé) made these gifts of higher significance and were seen as a way of showing concern. Occasionally, a more distant relative would show up and, though unable or unwilling to come in, would still make the gesture of gifting something, 'as a

little thing' – *traje una cosita* – passing it through the fence, before saying goodbye.

To directly donate firewood to families that had been identified by neighbours and activist networks as 'in need', was an extended act of care. Miriam and I contributed to some of these initiatives, and there was an overall mobilisation to donate 'food and firewood' as a locally oriented emergency response to the first Covid-19 lockdowns, which also happened during the first weeks of the cold season. Firewood, then, was in many senses positioned as an essential concern and a primary need. Families without it were in a seriously desperate situation, both of economic poverty and social abandonment. 'This family has nothing to heat their house with', Miriam commented when checking her phone, which was a very stinging sign of the dramatic crisis that Covid-19 has brought to the community. In contrast to urban contexts, where access to energy is centralised, in Chiloé the bounded and portable nature of wood made it feasible to think about 'energy donations' – a form of in-kind support otherwise hard to imagine and enact.

Thus far, every step I have described in relation to getting 'thermal comfort' as part of energy use, challenges the distinction between 'needs' – in the sense of utilitarian, maximising reason, – and wants – in the sense of what we could 'do without'. What is a 'minimum' energy use? In the intimacy of home and in the interconnection between different homes, the lines between domestic work, leisure and sociality are blurred. The obligation to keep one's relations going on in an adequate way, even in an anticipatory sense (keeping the kettle boiling, even if no one comes), and a responsibility to respond to other's unfortunate situations with generosity – not just by giving food but baking bread oneself – are the essential dimensions required to understand 'what is kept on when the stove is kept on'.

These caring responsibilities can be understood under the label of *cariño* (Murray et al. 2017), as it has been explored among rural Mapuche women in continental Chile. This concept was also used by Miriam and the other women I interacted with closely during my fieldwork. *Cariño,* as described by Murray et al. (2017), is a caring practice that demands being alert and aware of other people's needs (actual or potential), as a constant of quotidian interaction, thus balancing respect for other people's autonomy with 'being there' in a supportive way. According to

Murray et al (2017:376), food preparing and sharing, as response to unexpected visits, is central to the reciprocal exchange of *cariño*: 'food and mate sharing are somehow *cariño* itself'.

A slight overabundance of readiness for sharing, or a s*ufficient abundance*, is part of this responsive ability. Bread must always fill the *panera* (breadbasket), even if there was so much, we would have to throw it away as it got stale[48]. The stove should be constantly switched on and warming the water, even if we were not planning to have a hot drink anytime soon. There was always the possibility that someone might knock on the door and would have to be asked to come in. It was, therefore, inconceivable to have one's kitchen sitting empty and cold. This ethical requirement to be hospitable and receive any potential visitor, was stronger than even the persistent calls for people to stop socialising, which became the official guideline during the Covid-19 pandemic. The hearth stayed on.

Firewood frictions: the embeddedness of energy

As energy – in Chiloé conceptualised mostly as firewood – is a key element for the possibilities of care and affect among close relatives, as well as more distant friends and acquaintances, it is also embedded in the local and global supply chains, therefore exposed to their disruptions. In this section, I follow firewood, given its more prominent materiality (in contrast with electricity) and particularity to my setting, to show how commodified understandings of energy overlook the contingent collaborations that make the use of firewood possible. The sight of Miriam bringing a sack of finely cut wood into the house from the shelter in the backyard, in order to keep the house warm throughout the day, was the end point of a wider process that connects the inside of the house to local, provincial, and global supply chains. Seeming the most intricate and demanding part of overseeing a household, getting wood for one's home relies on a web of relations, in which domestic management skills and experience play key roles.

Following Tsing's (2009) understanding of supply chains, Miriam and other household keepers have a central task integrating a highly standardised, and deeply diverse, domestic economy of wood-fuelled fire through different forms of

[48] While there was little overall concern with food waste, in the countryside this was solved by transforming leftovers into animal feed.

affective and physical labour. Her navigation through uncertainty and availability of heating sources is entwined with practices of care and exploitation. Here I build upon the insights of anthropological studies of extraction in Latin America, that show that there is no contradiction in engaging in extractive practices sometimes judged as morally and ecologically wrong, such as mining and oil extraction (Jaramillo 2020; Penfield 2019) and sustaining relations following ethical principles.

One cold morning, in early February 2020, I was woken up by the noise of a truck outside our house, which unloaded freshly cut wood in the south-facing yard (Figure 9). I knew it was fresh for the green and firm leaves that still covered the big trunks. 'It is from the native forest' Miriam told me with sadness, when I pointed out how beautiful the wood was. I later learnt that it was *luma* (*Amomyrtus luma*), considered one of the best tree species for making firewood. Miriam expressed her sadness, whilst stating that CONAF (National Forest Management Agency) was supposed to ensure the sustainable cutting trees for wood practices, however, she did not sound she believed it. She was also very worried about getting the right amount of wood on time, which was needed for the duration of the year, with the purchasing of it having to be done specifically during the summer.

Figure 9: load of wood received in the summer of 2020, in Castro.

The first delivery had only brought 12 *metros* (cubic meters) of wood, however 24 *metros* were needed for the supply to last until the end of October, when the winter coldness gave way to a more bearable spring. It is important to buy the

wood in the summer, so that it is dry and ready to be burned at the start of March or April. The ‘dryness’ does not refer (as I originally supposed) to its outside dampness (for example, as a result of being exposed to the rain), but to the *inner* dampness, that comes from having been recently a living tree, which can last for months after being cut.

The first batch of wood had to be prepared further before being ready for the *cocina.* In the following days, it was arranged that Luchito would cut the wood into pieces of manageable size, before storing it in the backyard wood shelter. Both tasks are paid for separately, but on this occasion Luchito did both. He was a ‘jack-of-all-trades’ that had recently acquired an electric saw that would make his work much easier when visiting different houses during the wood-provision season. As Miriam has known Luchito for a long time, he came to the house often during the rest of that year, to continue cutting wood (the original batch was so much wood that we had to store some without cutting it first). Years of managing her house had given Miriam the savviness in knowing who to hire and what were the right prices for each task. She was proud of her contacts for obtaining wood, as ‘cheaters’ – as she called them – would always try to sell wood of lower quality or less than the meters that were paid for. Luchito was of this trust, ‘*de confianza’,* thus he would be treated with *cariño,* and offered coffee, water and a light sandwich when doing the job. Nevertheless, Miriam would be careful and spare a special bottle for him, making sure to clean it thoroughly when returned. Luchito, as well as the unprocessed wood, belonged to a liminal space between inside and outside of the house, a barrier that became more salient due to Covid-19 contagion concerns.

Luchito was a character like many others that populated the stories of Miriam and her sisters, which included generosity and openness to people from outside their family network, often poor, but that had shown with effort that they were mostly trustworthy. I say ‘but’ because in general conversation with them, signs of poverty (and alcohol consumption) among people they heard about or saw on the streets were seen as suspicious, and even as indicating potential of violence, particularly in males. Nonetheless, in the stories I heard they were always proud of how their parents, for example, had had the same gestures of hospitality with poorer kids of the neighbourhood when the sisters were young. They would often be invited in and given a meal and food to take home. In that sense, gestures of

care and support is always interacted with a position of power to assess the moral quality of disadvantaged others. Distance could be shortened, but not suppressed.

Penfield (2019) tells how the use and selling of gasoline among the Sanema indigenous people in the Venezuelan amazon is not just one of the reproduction of global inequalities. Instead, gasoline is a key and vital element at the centre of Sanema social worlds, with an ambiguous potential of being both harmful and a source of immense wealth. Sanema people trade gasoline while engaging in dangerous trips to reach clients working in extractive activities. Here, similarly, the managing, assessing and processing of wood is immersed in possibilities for ethical action. The success of its trade and preparation for burning depends on the capacity of people like Miriam to stablish ethical relations.

I would later learn that virtually all wood sold as it was to us is outside any regulation or forest management plan. Chiloé in this regard is somewhat different from the rest of the country, particularly the areas closer to the centre. ‘Over there you still have good wood, you are lucky’, a driver taking me to the Puerto Montt airport on the continent told me later that year, as on their side of the channel, they were used to buying eucalyptus wood, the only one available at a cheap price, and with a much lower calorific power. They had run out of primary forest, whilst the eucalyptus grew in plantations. The remaining – but rapidly disappearing – native *Chilote* forest, was much sought after for the good quality wood that could be obtained from its trees. This is why securing good quality wood depends on quality contacts and being foresighted.

This perspective on the contingency of energy reminds us of how it is embedded in specific energy services and social practices (Rinkinen et al. 2019) that, in some cases, normalise the availability of cheap fuel. However, the entrenchment of the use of wood under this configuration goes beyond the prices to pay. An example is the city of Coyhaique, in the nearby Aysén region. There, Baigorrotegui (2018) suggests that the contiguity, connection and levels of decentralisation offered by wood make it preferable to use over other energy sources, that are constructed within more fragile infrastructures (such as solar panels). The coexistence of formal, informal and illegal practices used to navigate the extractive markets of energy in southern Chile, constitute with what Baigorrotegui (2018) describes as a ‘variegated background’.

Nevertheless, the social infrastructures of wood provision can also fail. ‘I have found someone that has good wood to sell’, Samuel (my host in my second home, introduced in more detail below) told me once in the fall of 2021 when as most people we were starting to run out of wood reserves. It was too late in the year, in *Chilote* terms, to be buying wood, and indeed, we received a truckload of wood that was almost impossible to lit until the beginning of spring, due to its dampness. ‘It was not what I was promised’ was the only comment Samuel made in response to our frustrations, confirming that his contacts had failed him. We improvised with techniques alternating between what was left of our previous, drier batch, with the newer one, to maintain the fire on in the stove. Later, more wood was bought directly from our neighbouring landlord, who cut the forest on his own land, in an informal way.

As described in Thomas’ (2018) study of firewood use, also in the nearby region of Aysén, firewood knowledge is deeply embodied and sediments through a lifetime of engaging with different types of wood, its transportation and processing. Following Scott (1998), Thomas (2018:95) describes this as a kind of *métis* – ‘Firewood is produced through human actions - certainly firewood is different than deadwood or living trees - but it also produces certain types of people and the social relations among them. Firewood knowledge and practices mark who belongs and who does not’ (Thomas, 2018:96). In giving a common experiential ground to Chilotes, the use of wood creates bonds of solidarity and identity. Conversely, it is also constant subject of doubt and suspicion. Both in Aysén and Chiloé people would always question the honesty of those involved in the trade regarding the quality, quantity and availability of wood.

In Thomas’ (2018) analysis, the use of wood produces a sense of belonging, a geographical marker that sets Aysén apart of the rest of the country. Managing firewood knowledge correctly is a matter of life and death, as fires are common. For people in Aysén, by being a place originally colonised by Chilote migrants at the beginning of the twentieth century, firewood knowledge has a similar relevance, which was shared with me during my stay, for my and others’ safety. As further explored in my analysis, the use of wood is also an affective marker, as it allows belonging to particular communities and networks of relatedness, as well as different forms of taking care of each other.

The increasingly fragile supply chain of wood, already in need of constant evaluation and strategic decisions by those trying to obtain it, showed its limits with the national lockdowns that took place between March 2020 and June 2021. People were spending more time at home, mainly or at least partially heated with firewood, rather than in workplace and public indoor buildings, mostly heated with natural gas. Those choosing a supposedly more 'ecological' option by using the more expensive pellet-based stoves, had run out of pellet around mid-August, across the country. Pellets are small, manufactured pieces of 'recycled' wood, that is rescued from already existing plantations and processing of (exotic) tree plantations on the continent, such as *pino radiata* (or so it said in their packaging, adorned with green leaves). These are burned in special stoves, that require electricity to operate. The shops that sold pellets all year round experienced a shortage, with the supplier communicating that the foresighted stock for that year had finished, with no more pellet production being underway until the next cold season in 2021.

In an effort to secure as much pellet reserve as possible, Miriam informed me that the local homeware shops were restricting the sales to only 10 pellet sacks per person, whilst having long queues forming outside. She worried about her sister and brother-in-law, that had to queue in the local shop to buy the last arrival of pellet bags. According to Miriam, this was not enough and would only keep their house warm for a couple of weeks. People of the same household would, therefore, queue separately, trying to trick the sales restrictions, thus allowing for informal and kinship network to help overcome the restrictions that had been put in place.

In early September 2020, this widespread pellet scarcity overlapped with a roadblock instigated by truck drivers, made in the continent's main highway and national protests, which demanded more protection of truck drivers in the face of violent attacks towards them in the Araucanía region. The roadblock left the archipelago without access to natural gas, which in most places, is used together with wood or pellets to heat the water for bathroom use. Gas is used in most places, apart from isolated rural areas, and it is delivered by a truck, in gas cylinders of different sizes. With gas nowhere on sale, households like Pamela's struggled with their last reserves, eventually running out of it to use their heating system. As they did not know how to properly light up the fire in their stove,

Miriam's nieces would spend their mornings in our house, that had the warmth of the *cocina*. They were not willing to spend lockdown days in pyjamas in a freezing house.

Subsequently, Miriam noticed we, too, were running low on wood. She foresaw that we would soon finish our annual supply, a month earlier than it was common in previous years. 'There is no more wood', she would comment skeptically as she held her phone in her hand, calling and texting all the people she knew to see if it was possible to get a few meters delivered to us, getting only negative replies. Whilst she managed to obtain more reserves, there was no certainty it would last until the summer. Then, during several weeks we could not find anyone to cut the wood into smaller pieces. She could not get a hold of Luchito or any of her familiar contacts. Sometimes, someone would say they would come, but then cancel last minute. We had to use the scarce very small pieces of wood and then try to fit the larger ones once the fire was on. The difficulty of assembling all the elements that made our house a comfortable home required a considerable amount of time and effort, and throughout the winter it became increasingly difficult to accommodate to the different shortcomings. Later, and as natural gas was again available for sale in Chiloé, we would often rely on Miriam's sister's help, as her house could be kept warm without turning on the stove. All of this was amplified by the impossibility of leaving the house due to the Covid-19 restrictions.

The overlapping of multiple heating systems – gas, pellets, firewood – and the way my household moved between them, demonstrates the fragility and contingency of the capitalist network in securing the domestic space as one for a certain kind of activities. To understand the creation of domestic space in Chiloé, it is necessary to expand its limits beyond the house. From the local forest being cut only a few kilometres away from the cities to the pellet being brought from the continent, and the gas imported from Trinidad and Tobago to Chile, the different strings of these supply chains are navigated by people like Miriam, in dedication to their social worlds and the modest obligations that come with their reproduction.

A scarred landscape

Thus far, I have explored the role that firewood plays as a source of exosomatic energy, sustaining relations of care, which existence is contingent to different infrastructures and formal, and informal, economic networks. Here, I develop the other side of the coin: how the conversion (Bear et al. 2015) of forests into wood destroys and reassembles life; thus, how different forms of slow violence create, as described prior, sacrifice zones. If the use of firewood produces situated Chilote subjectivities, the consequences of its sustained harnessing extend beyond the human and produce a particular Chilote landscape. The multiple layers and fronts of ecological destruction explored here, as well as in Chapter 2, allow for a reading of Chiloé's ecology through its longer, cumulative biological history. Building on Tsing (2015) and Tsing et al.'s (2017) ideas of inhabiting a damaged planet, I elaborate on what it means to acknowledge Chiloé as both ravaged by the expansion of extractive frontiers and as sustaining relations of care and productiveness. I refer to the experiences of my interlocutors, as well as my own intimate and sensorial experience of Chilote landscape (Mathews 2018). Mathews (2018:387) proposes a reading of 'anthropogenic forest histories' in northern Italy, a landscape that, like the Chiloé forest, has been marked by international trade, capitalism and industrialization. I draw on this multi-species approach to address how the reticent approach to wind farms in Chiloé described in Chapter 2, is part of a wider process, as throughout the centuries, 'power-laden histories of natural-resource extraction and state-making leave traces on tree and landscape form' (Mathews 2018:395).

By bringing land productivity elements to the discussion of firewood and energy, I want to suggest that the sediments of centuries of land exploitation are experienced in Chiloé in a way similar to what Nixon calls the 'unhurried metastases' (2011:56) of slow violence. Nixon developed the idea of slow violence to make sense of forms of environmental pollution that, even though are undoubtedly damaging, are harder to grasp than the more intuitive temporalities of sudden disaster. Nixon's notion of slow violence is meant to make sense of 'violence that occurs gradually and out of sight, a violence of delayed destruction that is dispersed across time and space, an attritional violence that is typically not viewed as violence at all' (Nixon 2011:2). In this section, I expand this approach to other relations with the land that, like the provision of firewood, combine

different strategies and trade-offs. It is because the relations that allow people in Chiloé to see part of their landscape as potential energy are part of a wider family of productivity relations, that exist in the same territory. Thus, situating energy in this larger context is fundamental to understand the misgivings of my activist interlocutors.

As already indicated, the second half of my stay in Chiloé took place on the outskirts of a small village in Dalcahue – Cuesta Alta, where I was hosted by Andrea and Samuel. I had met Andrea after joining CESCH in the summer of 2020. Originally from Santiago, she had spent time abroad studying philosophy before settling in Chiloé, where she had been for already 3 years when I met her in her mid-thirties. She had grown up in a family notable for their political activism during the dictatorship, and had found her revolutionary vocation in working with rural women in Chiloé, supporting their facing of multiple violences. Samuel was older, an experienced guitarist that had spent years in the archipelago, working side by side with older traditional musicians that were hardly recognised, in Samuel's opinion, in the cultural value they represented.

The couple lived in a rented house, built just next to that of their landlord, Don Carlos. An energetic man in his early 70s and a lifelong inhabitant of that area, Carlos has kept his land productive in multiple ways, including the cutting of wood. Although Carlos did not live in the neighbouring house, his family had a house in the town of Dalcahue, which was his main residency. He would often stay in the house next to ours one or two nights a week, in a back-and-forth arrangement – a common practice for families that have migrated from the countryside to the urban parts of the Isla Grande. His land was divided into several sections, including a large segment of potato cultivation, cleared fields for sheep and cattle grazing, pigs and chickens; an orchard of approximately 15 mature apple trees and remnants of an old forest – one that was being slowly cut down for selling wood. During the weekends, his son would assist him in cutting down the largest trees that bordered with the already cleared areas. Additionally, Carlos kept a vegetable and fruit garden in our house's backyard, which his wife and extended family would come to tend and harvest regularly. He used synthetic fertilisers to keep it growing at a rate spectacularly faster than our smaller, 'chemical free' patch in the front yard.

Don Carlos' exploitation of the forest is part of a longer tradition of wood exploitation made by Chilote *tableros* – that is, table-makers – that ravaged the insular and continental forests since the described in Chapter 1 *encomienda* times. While the Spanish period saw the first introduction of Chilean wood to the overseas, used for construction of buildings such as churches; in the XIX century this took a different, industrial approach (Urbina 2011). Larch extracted from Patagonia and other archipelagos, such as Guaitecas (at the south of Chiloé), became widely exported worldwide for the construction of railways – an industry made possible by foreign investors' money. Trees were now made a resource that sustained the expansion of industrial production.

This configuration of land productivity enables further understanding of the intersections of work as a human and as a 'natural' activity. Andrea had once seen Carlos' son spreading the blue fertiliser crystals barehanded, not respecting the minimum safety measures (just as I had seen Miriam doing so in her flower garden) to manipulate the toxic substance. Andrea and Samuel, having taken a rather different approach more aligned with their political perspective, were cultivating their crops and flowers by following permaculture principles. They had been learning about the growing of tomatoes, rocket, mustard, kale, beans and corn, among other associated herbs and flowers together with Daniel and Susana, introduced above, and all saw the incorporation of those practices as an integral part to their political commitment and activity in the archipelago (see Figure 10). In that spirit, and as I had incorporated into their routine, we had learned how to make bokashi – an organic fertiliser that we were able to produce due to the abundance of animal waste and other organic resources, which we could find around on the land. It took some hard physical work to get the mixture right. 'I offered to sell it to him, but he was not interested' Andrea told me with frustration at the beginning of my stay with them, when the first batch of bokashi was ready, understanding that it might be too much of a bother to prefer bokashi over a ready-made fertiliser.

As handling fertilisers bare handed goes against safety requirements, Andrea was worried about Carlos's family health, but also about the chemicals spreading to the other side of the house. 'If the government offers you chemical fertilisers, and they actually work in making your plants grow big quickly, why would you use anything else?' Andrea told me, whilst trying to explain our neighbours' (in her

opinion) irrational decision. In their search (that soon would become mine as well) for less chemically exposed vegetables, they noticed how much these chemical fixes had taken over and dismissed the previous traditional practices of landscape management. Andrea and Samuel were friends with families who sold some agricultural produce and vegetables from their orchards, yet they remained suspicious when told that these products were 'organic', as once, by chance they caught the same people pouring chemical fertilisers into the soil, when it was believed that no one was watching. In sum, the deeper they explored into their permaculture initiative, the clearer it became how prevalent and naturalised more productivist approaches to agriculture were.

Figure 10: our small 'chemical free' orchard in Cuesta Alta

But the loss of less industrial forms of food production was not a spontaneous process. The 'quiet' deterioration of the soil is the cumulative consequence of trying to brand Chiloé as a production site of 'traditional' or 'typical' products, like garlic and garlic-based 'gourmet', such as garlic paste and garlic-seasoned salt, as such produce populates tourist-oriented shops in cities like Castro and Dalcahue. During the summer, INDAP (*Instituto de Desarrollo Agropecuario*, Institute of Agricultural Development), promotes a series of commercial fairs (*Expo Mundo Rura*l) throughout which such products are sold to the visitors, thus

comprising a significant realm of action of the state in the inner islands (Valdivieso 2019). During one of these events, that took place in February 2020, I saw a mix of curated displays of the products being sold, accompanied by cultural performances of 'traditional dances' and selling of 'typical food', which is the main characteristic of such kind of commercial fairs.

In line with the introduction of the plough described in Chapter 1, here the productiveness of the land via agriculture must be located in wider projects of state inclusion. Through the idea of 'improving' the 'poor' population's quality of life, indigenous people, such as Mapuche, in the continent, are incorporated into state action (De la Maza & Bolomey Córdova 2020). This 'artificially fertilised' ideal of entrepreneurship is in line with a wider subjectivity of the indigenous entrepreneur that appeals to ideas of autonomy and independence, while creating new dependencies on the state and the market (Di Giminiani 2018). According to Di Giminiani, becoming an entrepreneur as a 'peasant' (*campesino*) or indigenous Mapuche person depends on the commercial viability of foods that have often been prepared for domestic consumption only. Food like honey and the garlic-based products mentioned above, fall into that category and are often exported overseas. In Chiloé, the notions of productivity in agricultural policies follow a market-based notion of value generation, thus falling under the same policies as the continent. This overlooks the often negative effects these activities have in the landscape and sidelines traditional practices of seedkeeping, among other practices intertwined with the reproduction of healthy ecosystems. Interventions from state-led agricultural productive policies have often had disruptive and unaccounted for effects in other places of southern Chile, including, for instance, the arrival of previously unknown forms of potato diseases, that affect seeds delivered by the state (de la Maza & Bolomey Córdova 2020).

Such policies are nevertheless contested. Organisations such as the *Asociación Nacional de Mujeres Rurales e Indígenas*, ANAMURI, and the *Red de Acción en Plaguicidas y sus Alternativas*, RAPAL are fighting for the recovery of the soil (Calcagni 2023). Their work points at making visible the invisible loss and wider biological damage the productivist outlook so far described implies. While living in Cuesta Alta, my household participated in a cooperative of food production and consumption, self-described as a Slow Food movement, *La Melga*. La Melga

aimed at breaking the dependency from artificial fertilisers, and supported suppliers so they could sell their produce at more expensive prices. While it remained a niche approach, mostly for upper-middle class urban people, the group was striving to reach and extend the network to other supporters of agroecological production.

My daily walks revealed a similar landscape of damage beyond agricultural cultivation. The widespread extraction of sand (using bulldozers and transport trucks) left large holes, which later became little lagoons whenever it rained, as the accumulated water could not be absorbed by the complex layers of 'normal' soil. I could often smell and see the burning of rubbish in the open, usually in the houses so far off the main road that they fell outside the circuit of the municipal rubbish-collecting truck. Piled up trunks of recently fallen trees would appear near almost every house, evidencing the slow destruction of the forests (see Figures 12 and 13). Others, less interested in the wood business, would burn the forest down to make room for their animals. 'Controlled' (but illegal) fires would occasionally appear at night, in the horizon of our home in Cuesta Alta.

Additionally, the land cleared for pasturing had the occasional micro patches of planted eucalyptus – an option taken by some 'because of a subsidy that promised you would be able to sell the wood at a given price', as I was told by a taxi driver on the way back from the airport. Furthermore, planting such trees was a quick solution of drying soil, thus making it easier build in it (the soil in the archipelago is very thin, with water always close to the surface). The abovementioned recollections indicate how 'plant forms emerge as a result of biographies of individuals and their histories of encounter with other beings: firewood cutters, fires, or epidemic pathogens' (Mathews 2018:402). In Chiloé, the different opportunities to make a living out of the land actualise longer historical processes – like the original larch cutting of colonial times – even when the processes of regeneration have been clearly interrupted.

Figure 11 (left): border between patch of forest and a recently cleared zone.

Figure 12 (right): recently cut trees waiting to be transformed into marketable firewood (Cuesta Alta).

If we understand colonialism as the embodiment of a particular political ecological relation, it is possible to find that the different waves of coloniality are present, in the literal sense, across the landscape in Chiloé. The most evident is the much commented on salmon industry related sea pollution and destruction of marine biodiversity, and the resulting formation of ecological rubble (Gerhart 2017); a process also affecting the continental fiords. People still catch and eat escaped salmons, which have uncontrolled and unknown levels of antibiotics in them, not recommended for human consumption (I was offered some in inner Tac Island during summer of 2020). Bioaccumulation of this same industrial-oriented medication in the food chain, spreads antibiotics resistance across continents in migratory birds, as it has been recently found among *Zarapitos* (Hudsonian godwit) (Navedo et al. 2021). This coastal bird flies yearly from Chiloé to Alaska, potentially spreading antibiotic resistant bacteria and genes, thus causing a global footprint to the localised and concentrated salmon farming industry. These

findings make legible and raise – at least temporarily – the alarms on the cumulative effects of extractive activities, as explained in Chapter 2.

These more recent, industrial-scale interventions build on previous waves of productivist relations with nature, such as the early extraction and export of larch boards, that still live on and condition life and livelihoods in the archipelago today. As a result of such forest clearing, the *Espinillo* (*Ulex europaeus*), a form of fencing brought from Europe during the Spanish colonial occupation, now encroaches on any space free of native forest. This stops the natural regrowth of the forest through endemic species. The bright, yellow flowers of the *espinillo* appear bordering the highways and uninhabited land plots with no forest cover and are the first barrier to be removed whenever someone is either trying to build or grow something in the same land. During a visit at Miriam sister's *parcela* near Dalcahue, she pointed out at a neighbouring plot of land that had been left untended and was now covered thickly with *espinillo* - 'that is incredibly hard to get rid of' she said, shaking her head with resignation, 'you have to pay a lot for a machine to clear that out and try to build anything'. During my fieldwork, it was also brought to my attention that the land that hosted *espinillo* was very fertile and good for growing other crops afterwards, especially potatoes, whilst the removed *espinillo* was used as firewood, if not directly burned on the spot.

This ambiguous relation between annoyance and potential usefulness illustrates the contradictions and historical depth of Chiloé's scarred landscape. As a form of living fence, the *espinillo* was dispersed in many regions of the world during processes of colonisation and land transformation. Its resistance to fire and impenetrability made it ideal for the task, and it thrived outstandingly thanks to the milder winters of southern Chile, as compared to the European ones. The *espinillo* is considered an invader species in several places, like Australia, Argentina, and Chile, where the first record of this plant dates back to 1847 (Muñoz 2009). Other sources report its introduction in Chiloé at around the same time, in the mid nineteenth century. It is particularly good in soils degraded and poor in nutrients, as it opens a positive feedback loop, in which the already demoted zones are impeded from regenerating through their own native species, thus exposing the soil to more erosion and welcoming even more *espinillo*. While there are other invasive species in Chiloé (such as the mink and the *zarzamora*, also used as living fences but less invasive than the *espinillo*), this case is

illustrative, as it was introduced because of its usefulness to create productive relations with the land, at an intensity that the previously existing forest did not allow.

The *espinillo*, like rubbish, can also be fuel. This example of matter flowing into the archipelago's land and being transformed into energy as an economic re-valuation, gives an account of the wide range of epistemic approaches to reality, that the archipelago's history makes possible. The possibility of transforming something into a resource by burning it, is only possible under a porous energy infrastructure, not common to most of the Chilean national realities (in which households have no direct material control on what is the source of the heat that reaches their homes). Energy is open to being assembled in different ways, building a relation that, like that of informal gold miners that engage with mining remnant in Colombia, 'is contradictory but generative, heavy with both fears and ambitions of a prosperous future' (Jaramillo 2020:50). These possible energies interact with the legal order in a makeshift way, with Chilotes occasionally using it in its favour, sometimes bypassing it, or actively avoiding it. All these accommodations are inscribed in the scarred landscape of Chiloé.

In this chapter, I have described some of the elements of the intimate relation between energy harnessing and violence exerted over the territory in Chiloé. This slow, but punctuated violence can be read as an accumulation that remains 'out of sight' until certain thresholds or eventualities, such as the crisis of rubbish explored in Chapter 2, occur. This invisibility must always be qualified: while it might not always reach the front pages of the media, by entering the more intimate spaces of conversation it is always possible to find forms of collective mourning. In Chiloé, as in other contexts, this was especially present among indigenous women that notice the destruction happening around them (Rodríguez Aguilera 2021). This would be a typical sight in many of my meetings oriented to political organising. Before we could start with the 'objectives', people would often update each other on the difficulties their surroundings were facing – from drought to bad smell in water, or fears of fires out of control. Very often, it was all about confirming that situations continued unaddressed, even when people were desperately trying to raise public alarm.

This layered conceptualisation of violence is useful to understand the creation of a cumulative kind of oppression: the slow violence of economic precarity and

debt, for instance, accumulates over time just like ecological damage, with certain events that help re-read and re-frame the violent process itself, thus removing it from its invisibilisation. The normalised damage has a painfully concrete and specific reality – as in the sudden scarcity of wood, draught, or outbreaks of red tide in the sea. In those events, a wide and complex range of sedimented experiences become intelligible. As I explore in Chapter 4, such exposure transforms subjectivities and possibilities of political agency.

Additionally, slow violence helps to understand the non-spectacular dimension of the creation of sacrifice zones. Following Mayblin's understanding of personal sacrifice, in Chapter 2 I highlighted the quotidian, ordinary dimension of sacrifice: 'sacrifice must be constant and carry on, most of the time, unnoticed' (2014:352). Something similar can be said here about the slow violence that constitutes the compounded deterioration of Chiloé. In its constant and naturalised practice, the acts that transform nature into resources in multiple ways, including forests into wood, inflict a form of sacrifice that is different to the ritualistic – that is, spectacular – focus of anthropological thought.

Putting the Chiloé territory to work might be perceived during some occasions and particular interactions as an easy extraction – just as fertilizers aid growing of the plants, and nearby forests heat up the homes. However, 'the potentiality to sustain this life in the margins of capitalism also contains the danger of poisonous relations and substances' (Jaramillo 2020:68). The implications of the ossification of these political-ecological chains of value extraction and circulation are almost always occurring in the sight of people, creating a 'haunted' landscape (Tsing et al. 2017), with the implications being lived through as dramatic, even if sporadic, catastrophes.

Conclusions

In this chapter, I have shown how the need for keeping oneself warm is inseparable from the multiple requirements of living an ethically acceptable social life in Chiloé. This connection serves as a starting point for further examination of the complex ecological transformations that emanate from converting nature into energy. As Daniel suggested with the joke I retell at the beginning of the chapter, not all energy provides the same warmth. Energy – and its production as an abstract category – is entangled in wider homemaking activities, which are nested

in broader processes of putting the territory to work. A potential fuel (a eucalyptus, a native *tepú*, an *espinillo* bush, or, as explored in Chapter 2 – domestic rubbish) can also be food for cattle, a fence, a 'cash crop', part of a forest, or simply waste to be burned or displaced out of sight. In other words, the rendering of something as a potential energy source depends not on the intrinsic or objective calorific properties of any given material: there are infrastructural and symbolic determinations of what can serve as fuel, in particular moments and for particular ends.

Returning to my theoretical questions and the argument of this thesis, this chapter has demonstrated the paradoxes that emerge from transforming elements of the landscape into energy. From one perspective, burning wood in the hearth is at the core of generative practices of care. Among my urban, middle-class interlocutors managing their networks of provision, this care is sustained in hierarchical understandings of responsibility, trustworthiness and integrity, that make the functioning of the whole cycle possible. They rely on multi-layered infrastructures of connection, supply chains, both formal and informal, that are fragile and always open to disruption. Energy comes to be at the service of an ethics and aesthetics of *sufficient abundance,* that represents a starting point for being capable of caring for oneself and for others. This abundance requires a constant slight overflow of what could be conceived as 'strictly necessary' energy use, in the narrow rationalistic sense of utility. On the other hand, this and other forms of conversion of living systems into production, create scarred landscapes, slowly constituted sacrifice zones, in which the damage is very real but remains mostly unproblematised. The disruption and recreation of the web of life allows for an understanding of Capitalocene's recent history in Chiloé. In reasserting and promoting a particular type of production, new mechanisms of inclusion through entrepreneurial citizenship serve to re-imagine and transform colonial projects of improvement by work.

This chapter has given a grounded sense of one of the central ways in which energy is part of the insular Chilote life, both in an urban and rural context. Chapter 4 switches the gaze and looks in more detail at the most relevant planning instruments around energy that exist in Chile, developing how, through planning, the state has attempted to build a particular epistemic approach to the different territories of Chile.

CHAPTER 4: ENERGY PLANNING AND ITS DISCONTENTS

Among the many things CESCH (*Centro de Estudios Sociales de Chiloé*) kept an eye on, one was a planned transmission line that was to connect the main island's north side (the zone of Ancud) with the continent. CESCH members knew this was a projected expansion, however, it was not yet under development when I joined the group in early 2020. The project – that I call 'the Surelec line' – finally appeared in the formal bureaucratic registers and entered the evaluation process in September 2020, making us consider how to react. By early 2021, Andrea, who was my housemate at that time, and I were part of the newly created campaign *Chiloé Libre del Saqueo Enérgetico* ('Chiloé, free of energy pillage' or just Chiloé Libre – further elaborated on in Chapter 5), that emerged to reject this new line. In mid-2021, transcending the original reasons for the creation of Chiloé Libre, the discussions among our group also led us to organise a series of online workshops called *Jornadas de Trabajo: Para un Chiloé libre de saqueo energético* (Workshop series: for a Chiloé free of energy plunder). Those workshops gathered a group of newly elected representatives of the archipelago's ten local councils, that were identified as in alliance with the group's concerns. All had come across our campaign in the previous months, showing interest in the topic of new energy infrastructure.

The moment we chose to organise the series of virtual seminars, could not have been more filled with a sense of political momentum: these representatives had been elected together with the participants of the national convention that would draft the new constitution of Chile. The sessions, organised by us, had been designed as a way of 'passing on' some of the tools we had learned and used in the process of opposing the Surelec line, including the application of different plans and regulations. As we knew that our strategy learnings would become of use soon, a full seminar session was dedicated to plans and how to interact with them. For that we had invited Fernando, an experienced lawyer specialising in supporting struggles against extractive projects in other regions of Chile. In his presentation, he outlined and named all existing regulations and plans: zones of touristic interest; council land plans; inter-council coast management plans; sectional plans; nature sanctuary, etc. He explained, one by one, what each of them covered and spent the following hour and a half answering questions, whilst providing practical examples of how referring to plans had helped other councils

make effective demands from private companies and state regulatory bodies. He emphasised the need of producing the mandated planification, wherever it was lagging. ‘We need to accelerate the planning machine, so when the projects arrive, they are not compatible with what the council wants for its development’, Fernando advised. He continued: ‘Sometimes it seems that these voluntary certifications [referring to a local environmental accreditation in the context of other policies] are useless, but they bring order and take the environmental issue out of the environment department and put it in the other units of the council’. In different boxes in the screen, the attendees nodded in agreement.

Fernando’s presentation was the last of three online gatherings that made up the *Jornadas*. Together with the workshops’ 10 participants, we had identified multiple problems with the existing regulations and environmental safeguards, as well as the different struggles everyone in the network had faced when trying to stop the invasive energy projects. A sense of bewilderment in facing nonsensical and inscrutable processes of oversight rules had paved the ground for the closing meeting, which served as an attempt to reinforce what the community organisers already knew and had experienced in their territories in actual spaces of bureaucratised power.

While the final session was dedicated to understanding the bureaucratic language and regulations, our earlier *Jornadas* meetings had taken a different approach. There had been many conversations about preserving the archipelago for future generations; some people had spoken about the trauma of seeing their land dying; others shared their practices of taking care of newly planted native trees as part of resisting infrastructural projects. By voicing such diverse plethora of concerns and analysing them together, we were in no ways exceptional. We were, as I argue in this chapter, part of a much wider tradition of engaging with the language of the state, while profusely challenging it. For members of collectives like CESCH and Chiloé Libre, an understanding of development and planning as an ‘anti politics machine’ (Ferguson 1990) was the starting point for their activities. Rather than further exposing the technocratic characteristics of such planning, instead I aim to focus on the diversity of ways in which people contested these means of depoliticization.

This chapter acts as a bridge between the first and the second part of this thesis. In the first part (Chapters 1-3), through the language of work and energy I focused

on certain historical episodes, as well as everyday life in the Chiloé archipelago, as it developed its political relations side by side with radical ecological change. The following two chapters develop the senses and disputes over the future of energy both at the national and multiple 'local' levels involved in the planning. Here, through the experience of land defence of my interlocutors, I outline how plans have come to participate in the archipelago's broader life and how plans become an arena to dispute notions of production.

Different planning ideas, tools and policy documents have been part of transformations – or lack of – in both Chiloé and in Chile more generally. At the national level, the last decade has witnessed an unprecedented proliferation of documents declaring goals, principles and priorities, describing benchmarks, setting targets and indicators, and monitoring the advancement of these initiatives. Planning for energy has been a particularly fertile arena for new plans. Nevertheless, the necessity for more planning and the lack of decisive power of current plans was constant among my interlocutors. In exploring this tension, this chapter describes how energy planning has been part of a wider vocabulary of relations and possibilities at different national and subnational levels, thus shaping the tactics of grassroots organisations. It presents three dimensions of what planning documents do, as well as three contestations and subversions, each more fundamental than the other.

In the first section, I focus on national documents on energy from the year 2014 onwards – a watershed moment when, for the first time, energy policy came to be considered a national energy policy, as an 'matter of state' (*asunto de estado*), whose legitimacy should be derived from popular participation. Beyond the effectiveness or ineffectiveness of what these plans claim to do, or whether they come to materialise 'as planned' (Gupta 2018; Weszkalnys 2010, 2011), I argue that these documents circulate as intentions and ways of rendering technical the 'problem' of energy (Li 2011). I analyse how the inaugural cycle of energy planning in Chile proposed the concepts of 'culture of energy' and 'energy vocation'. Both delineate forms of 'productive' vocation (or predispositions) of different parts of the country as solutions to the contradictions of energy infrastructure. In response, I explore what I call 'paraofficial' documents – that is, documents explicitly adopting the style of planning documents as a genre, however created outside of the officially sanctioned processes of planning. Such

citizenry engagement with planning both works with and challenges the exercise of government and state planning (Weszkalnys 2010:124; Allain & Madariaga, 2019).

In the next section I describe how documents are used by organised communities in environmental conflicts, where the plans show their mundane and instrumental life (Abram 2017). Based on responses to energy planning processes in Chiloé, I show how plans and other documents can be used in creative and 'undisciplined' forms (Hetherington 2011), in favour of different understandings of value. This second form of contestation reframes the concept of **'**vocation' beyond production. In their use of plans as found objects, my interlocutors engaged strategically with the promises of participation, arguing against the smooth territorial integration claimed in official plans. Contesting the idea of 'vocation' links back to the issue of the value of work and productivity explored in previous chapters, and the ambiguities that come with making a place 'valuable' (Franquesa 2018).

Finally, I explore a third, deeper contestation of plans, which subverts forms of bureaucratic containment. In the resistance to a new electric substation in El Manzano, I show how my interlocutors give practical meaning to their understanding of the interconnectedness of all life. For some, the shared Mapuche-Huilliche principle of *Itrofil Mongen* (Weke 2017) proposes, thus making it visible, a sense of abundance, plenitude and interconnectedness that opposes the basic principles of prevailing planning. This sense of plenitude (Di Giminiani et al. 2021) configures an anti-sacrificial affective relation to the land. Additionally, these strategies configure an ecological mode of attention (Tironi & Rodríguez-Giralt 2017) to nature, that overflows the attempts at rendering technical decisions over the future of energy infrastructure.

Documents as ethnographic objects: methodological considerations

Studying documents is an acknowledged crucial element of studying bureaucracy and policy (Hull 2012; Shore & Wright 1997). By aiming to understand energy plans as documents, I was interested in their quality as 'cultural texts' (Shore & Wright 1997:11), as well as key elements of power wielding in the process of creating the nation-state as a coherent, integrated body. The documents and plans that I found, which aimed at ordering energy in Chile, initially made sense

as part of what Abram and Weszkalnys (2013) describe as a wider process of internal colonization enacted by state planning bodies. Through them, 'the public good is invoked as a key alibi of contemporary democratic government...as democratic states try to govern more people and, increasingly, more things' (Abram & Weszkalnys 2013:8). Energy is a relatively novel object of governance in Chile. By expanding this perspective, I am interested in taking Li's (2005) insight of moving beyond a focus on the 'state' as a monolithic agent that exclusively gathers the agentive powers of documents. Rather, I discuss both the ambivalent resistance and desire of the state (Buitron 2017; Lea 2021; Nahum-Claudel 2016), as well as the use of documents and plans that explicitly seek to build visions of the future outside the terms dictated by the state.

At the beginning of my fieldwork, I gathered and read all energy-related plans, strategies and policies of Chile, including recent climate change commitments. The full range of documents considered in this thesis can be found in Annex 1. However, when my engagement with my activist interlocutors became deeper and more action-oriented, it soon became clear that reading and understanding of those documents required a 'guerrilla approach' (Hetherington 2011) of intentionality. Hetherington (2011) coins the term guerrilla auditors to make sense of the paradoxical use of documents which he found in Paraguay under what he calls the transparency project. While this project relies on documents that supposedly 'contain' information, the use that some Paraguayan peasants made of them showed that rather 'it is in the variable interpretive encounters that people create the information that documents supposedly contain' (Hetherington 2011:8). In the unfolding of this use of documents, the relations between those trying to participate in transparency and the government became antagonistic.

In other words, it made little sense to understand any document or plan outside of my interlocutors' concrete interest in them. Realising this wider sense-making process in my field, meant bringing other documents and plans, superficially not related with energy, to the wider puzzle of reading and understanding of the regulations. By following their concerns, the final set of documents I analysed, included official strategies and plans issued by public bodies like ministries and advisory agencies; documents that are part of international cooperation efforts or consultancies to international bodies; or more 'intentional' plans in the sense of being published by public bodies, such as local councils, but having no biding

power. Other documents openly appealed to their 'outside the state' character, presenting themselves as citizens' responses to official committees or proposals. Together, these documents delineate the 'broader ideological fields in which policy is inscribed' (Tate 2020:86).

To answer to specific requirements of the collectives I was working with, I also asked for and analysed documents obtained through freedom of information requests. Developing this kind of bureaucratic expertise was central to my activist form of research (Hale 2006). Simultaneously, the groups I participated in also generated documents, such as legal comments (*observaciones*) to the Surelec transmission line, which later became part of the wider record portfolio of the project itself. Additionally, through statements, calls to action and open letters, a plethora of the controversies I later explored, were formally exposed in documents circulating on websites, such as Facebook, and platforms like WhatsApp.

The documents I had access to were overwhelmingly digital in nature. No legal titles or permits circulated in physical paper (cf. Allard & Walker 2016; Navaro-Yashin 2007). However, this did not make their materiality less important: the possibility of rapidly exchanging documents via phones and emails, as well as using functions such as word search, gave digital documents a different social and political range of action, on which I expand further in Chapter 6.

The proliferation of plans

Energy planning in Chile is relatively recent. In 2011, the rejection of Hydroaysén set the agenda of this area of state action for the decade to follow, which was marked by a proliferation of planning documents. Hydroaysén, a joint venture between ENDESA and Colbún S.A, was intended as a cluster of five hydroelectric dams in the southern region of Aysén, at the heart of Chilean Patagonia. The stir provoked by the possibility of destroying this 'pristine' land, pushed centre-right President Piñera (2010-2014) to be vocal in his support of Hydroaysén as a clean, non-fossil form of electricity generation. In his annual nation-wide speech in May 2011, Piñera insisted on the need for new state policy to regulate mega transmission lines. Specifically, he referred to the possibility of a 'public electric highway' reaching the Patagonia region as a solution to the country's extensive geography, as well as disparate energy production system (Piñera, 2011), whilst

that same month, he gathered a presidential working group called CADE (*Comisión Asesora para el Desarrollo Eléctrico* - Adivsory Board for Electricity Development), to advise him on electricity development. The succeeding government of President Bachelet (2014-2018) continued in the same direction, thus creating a series of landmark policies that moved energy planning to the centre of public debate, with a focus on citizen's participation (Ureta 2017). Energy 2050 was the key policy, also known as the Chile Energy Policy (*Política Energética de Chile*) or just E2050. It established a series of goals to be achieved by the year 2050, including a 70% share of non-conventional renewable energy (NCRE) [49] and the 'decoupling of energy consumption from GDP growth' (Ministerio de Energía 2015a:84). Furthermore, it instituted a cycle of successive energy plans that would cover five-year periods, with a focus on participatory processes. Similar, but separated, planning processes started for the regions of Aysén and Magallanes, set apart due to their disconnection from the SEN.

Participation was supposed to be the cure for the opposition to large infrastructural projects, such as Hydroaysén (see Figures 14 and 15). The E2050 process created thematic working groups that aimed to achieve a 'balanced' mix of different perspectives, such as NGOs, universities, civil society organisations, and the private sector. This combination of different stakeholders was supposed to provide with the previously missed perspectives, thus anticipating and therefore preventing conflicts, such as the one that had occurred with Hydroaysén. While the E2050 mechanism was promoted as a policy innovation that would bring experts' and citizens' visions together, the emphasis on reaching consensus meant that the official outcome reflected a conservative middle ground, as indeed, 'the techno-economic optimisation of "plausible" futures were privileged in decision-making, over more exploratory approaches' (Alvial-Palavicino & Opazo-Bunster 2018:69). Such technocratic understanding of what 'participation' means – often invoking the numbers and reach of participation as a way of claiming legitimacy for what has already been decided in advance by a

[49] NCRE in this process encompassed biomass, wind, solar and 'mini hydro', that is, hydroelectric projects of up to 20 MW of generation. They are considered less developed than conventional renewable sources, like big hydroelectric dams. (Ministerio de Energía 2015b).

small policy elite – can be read as part of a larger process of depoliticization occurring in the energy sector (Flores-Fernández 2020).

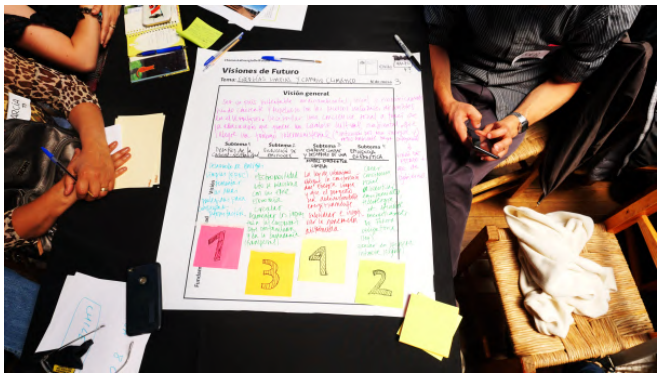


Figure 13 (left): a full page of the Ruta Energética 2018-2022 document is dedicated to a participatory workshop.

Figure 14 (right): an image of a group debate in the 2021 update of the 2050 energy policy

Following Li's (2011) analysis of community as a tool for governance, this 'rendering technical' of energy focuses on the capacity of an imagined energy-interested community, to reach a consensus and solve its internal conflicts through deliberation. Beyond being a technocratic approach, the way the working groups were framed additionally imposed certain key decisions as obvious starting points. For instance: in the E250 document, the NCRE working group was asked to 'identify scenarios of energy expansion for the energy matrix incorporating different levels of NCRE' (Ministerio de Energía 2015a:133), indirectly discarding the possibility of planning for a reduction in energy production and consumption.

A fundamental concept that crystallises this rendering technical of energy, is the idea of 'culture of energy'. Documents such as E2050, focus on 'taking care of energy' (*el cuidado de la energía*) as a translation of experts' concern of lack of efficiency and wasteful use of energy, into a language of care. Such documents address the problem through the creation of a new figure, the 'energy user', with the below excerpt from E2050 paper summarising it as follows:

> If done in a planned and systematic way, by 2035 we will have a new generation of young people aware of the fundamental role of energy in all

> human activities; committed to its promotion and care; willing to lay the groundwork for a new civic culture for the development of energy in Chile, and integrating the energy vocations of the different regions of our country (Ministerio de Energía 2015a:88).

This understanding of culture as the cultivation of personal responsibility, expresses a deeper sense of subjective transformation expected to sustain a 'new' relationship with energy. The idea of 'making responsible use of energy' – also present in the 2021 new national energy policy – and the pairing of energy with efficiency, reduces the political subjectivity to a consumer positionality. The call, present in E2050, to create a 'culture' (*una cultura energética*) according to the challenges of energy transformation, sets the stage by imagining a community united by a shared goal. As Vike's analysis of community development programmes in Norway suggests, this creation of new subjects is 'focused primarily on how to reform people and their culture so as to make them "compatible" with what is conceptualized as today's society and its needs and challenges' (2013:49). In the narrative that permeates official planning documents, taking care of energy means to take care of people. Simultaneously, a strengthened national economy manages to provide everyone with increasing energy.

Such integration into the national economy is done through identification of the energy vocation of different regions. The idea of identifying and balancing territorial vocations – be it economic, energetic or productive – of different regions, emerged not only in official energy policies, but in other planning documents, in academic and technical analysis, as well as speeches and public interventions. I interpret this notion of 'vocation' as a form of resource-making (Ferry & Limbert 2008; Richardson & Weszkalnys 2014), in which a territory must be read in its capacity, first and foremost, as a provider of resources for a unified whole. The understanding of the productive capacities of a place as 'vocation', reproduces an inner drive, a 'call' to productiveness. This works in the service of what Alarcón (2018), in his analysis of the forestry industry in Chile, calls an ideology of natural resources. That is, an engrained translation of territories into 'resources' with a given natural value, which exteriorises human agency and dwelling practices over it. Like 'community' (Li 2011), vocation becomes something that already exists in a natural state, however, which must be technically measured and, ultimately, optimised as capital.

The invitation for citizens to be 'informed' and 'educated' on energy issues, assumes that rejection or hostility to supposedly adequate energy projects, such as Hydroaysén, comes mostly from ignorance. Education, in this sense, is a way of reminding people of their ultimate commitment to the national economy:

> Energy education must be understood as a permanent learning process that goes through different stage of people's life and that has as goal their ethical, moral, intellectual and cultural development *as people*, to live together with and participate in a responsible, tolerant, solidary, democratic and active manner in the community, and to contribute to the sustainable energy development of the country (Ministerio de Energía 2021a:35, emphasis added).

The objectives and arguments of E2050, and subsequent energy policies, embrace an optimistic view of the future that trusts in the possibility of endless growth both as desirable and inevitable. 'In as much Chile continues its transit towards development', the E2050 document reads, 'the country's economic growth will continue to demand increasing amounts of energy' (Ministerio de Energía 2015a:81). This approach externalises 'energy' in relation to society. It fixes it as an object, in a way that resembles the creation of 'the economy' (Daggett 2019; Mitchell 1998) with its own independent 'forces' (Bear et al., 2015). It is also in constant need to be nurtured, thus reproducing the basic tenets of perpetual scarcity. In this view, there is no end in sight for growth, as human needs are potentially infinite – a long critiqued anthropological supposition in neoclassical economics now enshrined in global economic doctrines (Hickel 2019; cf. Sahlins et al.1996).

Beyond the incorporation of these plans in the different energy-related departments and offices of the state, planning has an important epistemic role. Documents now considered fundamental to the new set of energy policies and regulations in Chile, such as E2050 and PELP (Long Term Energy Planning), are tools that act against a powerful bureaucracy – some could argue they are rather hostile to this route. An often-overlooked contribution they make, is to outline a political discourse capable of reacting to new waves of social discontent through a consistent internal dialogue. Non-bureaucratic planning[50] like this, works more as part of political discourses and justifications of what the existing bureaucracies are already doing – a way of 'commenting on the world as it is today, and how

[50] This is not to say that these plans do not have practical impacts in the institutions the encompass. Even the more 'anti bureaucratic' policies end up creating new reports that monitor and update the indicators and achievement of goals.

we would prefer that it was' (Abram 2017:73). They imagine a possible, better society, based on ideas of equilibrium and harmony. These principles – the energy vocation of a territory and the idea of a 'culture of energy' – play a crucial role in other ambitious energy planning projects discussed in this thesis.

However, far from succeeding in settling a consensual vision of how things should be done around energy, these plans triggered a critical dialogue with organised civil society. A number of the documents presented as being more efficient and materialisations of inclusive planning have elicited counterplans contesting these claims. These *paraofficial documents* aim at re-politicising the planning tools by taking sides on issues where the consensus claimed by official documents was either forced or remained deliberately broad and unclear. By engaging with official documents as a genre (Gershon & Prentice, 2021), these efforts reveal the forms of authority and decision-making ingrained in planning.

I became aware of such paraofficial documents early on in my fieldwork, at the COP25 counter-summit (*Cumbre de la Sociedad Civil for la Acción Climática*, SCAC) held in Santiago in December 2019. The counter-summit had been organised as a parallel, actively politicised space, that would challenge the lack of strong climate action in the official COP. Printed versions of the 'citizens' plans' were distributed in half-empty rooms as part of workshops on topics such as energy justice, electromobility problems, and energy poverty.

Below, I focus on one of such paraofficial documents, namely, a response to the 2015 official planning process for Aysén. The Citizens' Coalition for Aisén, Reservoir of Life (*Coalición Ciudadana por Aisén*[51] *Reserva de Vida*) – or ARV – drafted, what they called, a citizens' proposal of energy policy. The proposal, published in 2018, aimed to give a different outcome to the one brought by the E2050 process, that had produced a document for the Aysén region also in 2018. It started by criticising the limitations of the official perspective.

Patricio Segura, a prominent ARV activist, explained the relevance of their proposal in one of the sessions at the counter-summit. The ARV coalition is composed of 12 people, from professional engineers and philosophers to birdwatching enthusiasts, all with extensive experience in environmental activism

[51] The coalition and its documents use both Aysén and Aisén in the spelling of the region's name, so both spellings are used here.

in Chile. For members of ARV, the drafting of the citizens' proposal became 'part of the process of constructing a common subject position as citizens' (Weszkalnys 2011:129) that transcended the initial objective of the document. The activists and organisations that created such documents made their grievances around energy explicit. Similar to the citizen activists in Weszkalnys' analysis of the planning of Alexanderplatz, members of ARV both sought to bring in their perspectives as inhabitants of a place and presented their counterproposal as being 'representative' of a wider public.

The ARV document (Figure 15) explained why megadams, like Hidroaysén, were not compatible with the vocation of the region to be a 'reservoir of life', and how it was possible to think about the future of energy for the inhabitants, *without* embracing the model of energy export – both to the rest of the country and internationally. Instead, their counterproposal focused on community-led, decentralised energy generation from renewables, improvements in the management of wood fuels, increased energy efficiency, and the need for better housing insulation. It concluded by emphasizing that the question of energy should never be an end in itself. Rather it should be oriented towards more fundamental questions, such as 'how do we want to live?' (ARV 2018:52). This explicit subordination of technical questions to ethical ones was also at the heart of the 2019 counter-summit in Santiago.

Figure 15: cover of document 'Propuesta ciudadana de política energética para Aysén Reserva de Vida'

Also started as a response to E2050, a similar document was drafted by a coalition from Chile's southernmost region of Magallanes in 2015. Similarly to Aysén, Magallanes sought to develop their own guiding principles for energy planning, partially because they are explicitly left out of the central planning tools that only encompass national territory up to the Los Lagos region. Instead, Magallanes and Aysén are covered by regional plans. By adopting the language of 'strategic axes' and 'short-, medium- and long-term goals', these civil society coalitions aimed to show what was possible to imagine with relatively simple changes to official strategies. These changes could include, for instance, the creation of laws to regulate specifically *municipal* energy generation. They can also be read as make-believe strategies, conjuring what regions such as Magallenas and Aysén could do if they had more political autonomy. Although they engaged with the language of the state, the activist network behind these proposals also showed how inadequate existing planning tools were. By approaching the fictional 'as if' of make-believe strategies, as integral part of all paraofficial documents (Navaro-Yashin 2007), I suggest that pieces like Aysén's citizens' proposal foreground political possibilities, through alternative imaginations of the present.

Paraofficial documents are more cautious regarding their aspirations towards the decoupling of energy availability and environmental impacts. Rather, as the ARV document presents, they ground their perspectives and proposals in a recognition

of their inevitable interrelatedness with the place they inhabit. For instance, in the counterproposal that lays out *Aysén reserva de vida,* energy projects must first consider the vocation of the Aysén region in the social, cultural, technological, economic and environmental orders, rather than be implemented 'at any cost'. Overall, these paraofficial planning documents aim to create a different bureaucratic consensus that reflects an alternative hierarchy of values, including a recoupling of people and nature. In this consensus, the energy 'vocation' does not overrun the other dimensions of life, or forms the basis for our subjective transformation, rather it is part of a more pluralistic sense of *territorial* (not just productive) vocation. By referring to a territorial vocation, the ideology of productivism is de-centred.

In sum, energy planning in Chile has been entangled with the emergence of 'participation' to render energy as a technical issue. In state planning, energy is positioned as a matter of care, resulting from a shared moral commitment to the growth and well-being of the national economy. By contrast, paraofficial planning consciously mimics and politicises this perspective on the future of energy, thus revealing it to be too focused on forced consensus. The resulting documents seek to bring energy back to its embedded ecological and social context. Crafting paraofficial documents requires challenging certain hierarchical arrangements, whilst using the already sanctioned language of bureaucracy to produce, or at least propose, alternative orders. While this engagement with planning was present among my interlocutors, a second, more improvised form of engagement occupied our everyday strategies of action.

Plans as objects: strategic engagements with documents

Policy plans, such as those described earlier, have a gestational period but also a public life. This section describes how my interlocutors in Chiloé put these plans into play in their concerns around emerging transformations in the archipelago. This 'user level' of plans takes a critical distance from, but also a strategic partaking with, the stated principles of the multiple documents that regulate what can and cannot be done.

During my fieldwork, the practical engagement with planning documents was 'activated' periodically and went something like this. I, or someone from CESCH, would receive a call, a message, or see a social media post about a negative

event occurring. This might be, for instance, a case of sand being illegally extracted, rumours about the installation of a new wind farm, or the bad smell of drinking water in some isolated area of the archipelago. The person reaching out would ask for advice of what could be done to get a sanction or suspension of the activity from the authorities. In some cases, it was possible to intervene in projects that were not yet approved. We would then resort to the multiple documents that establish environmental guiding and planning principles, to confirm whether it might be possible to input a citizen's 'comment' (*observación ciudadana*) into an open environmental evaluation process. This process could be triggered by other situations, such as the drafting of new plans, strategies, or approval processes that were receiving citizens' input and observations. If we concluded it was worth getting involved, we would resort to a variety of supporting documents, including existing plans, to help establish an authoritative context to our objectives.

An example of this form of strategic engagement with planning documents had happened during the PELP process in 2017, which I was made aware of when I first started participating in CESCH, as we started preparing for the upcoming PELP cycle (evaluated further in Chapter 6). One of the steps included in the elaboration of PELP was the identification of new, so-called, energy development nodes – provinces that, due to their supposed suitability for renewable energy generation, would also concentrate electric transmission infrastructure. These nodes are envisioned in the PELP legislation to become the desired 'electric highway' mentioned by Piñera in 2011, which was publicly planned and supported.

Alerted by Chiloé's potential designation as an energy development node, members of CESCH had drafted a comment (*observación*) that raised multiple issues on the negative impact this would have. One point, particularly, referred to the various regional and provincial planning documents. Among them, the Regional Land Planning, the province-level strategic plan named 'The Chiloé we want' and the Regional Development Strategy. None of them are legally binding (*vinculante*), nor establish a ban to renewable energy infrastructure. Nevertheless, in the *observación* made by CESCH, these documents were referred to as depicting a different 'territorial vocation', one not based on energy generation but on nature conservation. It also explained, that because the Los

Lagos province still did not have a PROT (*Plan Regional de Ordenamiento Territorial* – Regional Territorial Order Plan), it was also lacking a PER (*Plan Energético Regional* – Regional Energy Plan), which was meant to be done once a PROT was approved. Without such instruments in place, the *observación* stated that the continuation of the construction of projects of energy generation and transmission would create an 'irreparable and irreversible damage' to both the environment and the communities living in it.

I want to compare this strategy with Hetherington's (2011) study of *campesinos*' use of documents in Paraguay. There, the agenda of transparency is subverted when access to documents, such as land rights, is wielded by subjects deemed as 'undemocratic'. The tension emerges, when the claimants making use of documents do not conform to the ideal educated urban elite, that is considered the 'public' of democracy. Similarly, CESCH members, as well as other activists, referenced plans as documents that bind them to the state as citizens; however, by doing so, rather than reiterate the 'objective reason' of liberal democracy, they ground their claims in their knowledge and experience of dwelling in a specific territory – Chiloé.

Plans, in this case, acted as tokens of intention, expressing moral concern and care for the larger destiny of the territory. Bringing together both energy-related and non-energy plans, CESCH's *observación* states that existing plans 'explicitly recognise that the territorial vocation of Chiloé is tourism development, conservation and enhancement of nature and culture'. The document then enumerates and quotes the sections of the ten Council Development Plans of the archipelago and the abovementioned documents in how they support this point, including the concerns over the impact of wind turbines over peatbog soil. As the *observación* argues, the opening of the door to the 'inevitable' widespread installation of renewable energy projects, would be seriously detrimental to that vocation. Simultaneously, the use of planning language and the expertise around which instruments were still pending – for instance, not having a PROT and a PER to refer to in the region – plays with a figure of giving advice to the state on its own doing.

As I became familiar with this strategy, a conflicting sense of these documents' power unfolded during my interaction with them. From one perspective, the plans' rhetoric emphasises their participatory and inclusive nature – as a pamphlet

(2015) telling the story of the making of the province-level strategic plan, 'The Chiloé we want' states that the plans serve as 'navigation maps' and must therefore be 'participative and validated by the community'. The pamphlet is filled with pictures of people *participating* – that is, talking in front of posters with hand-written post-it notes, gathered in circles, listening, with the pictures of smiling children and in certain rural locations (Figure 16). This document is an example of how the launch of 'participation seal', during the first Bachelet government in the E2050, had permeated to virtually all subnational levels that also created their own objectives, 'vision' strategies and targets.

Figure 16: Section of the 2-pages document announcing the creation of the Chiloé Strategic Plan

On the other hand, this performance of political empowerment is short-lived. Planning documents and their descriptions of ideal scenarios exist in obscurity, unknown to most people until they become contingently useful. Even then, they appear as an external, given source of direction. Manuel, an engineer working at the Dalcahue council explained that, unfortunately, there is too little budget to implement the many ideas and projects that come out of processes like the Local Energy Strategy (EEL). After a couple of participatory workshops, Manuel and the rest of the team managing the EEL would mainly work on systematising, summarising and checking the viability of different proposals. Most of them related to increasing renewable self-provisioning energy infrastructure in homes and public buildings and improving efficiency. With his own words, Manuel pointed out a tension identified by Abram (2017) in land planning in England. Just like in land planning there, here energy planning is in principle linked to 'grand, global or existential issues' (Abram 2017:62). However, those elements are often

lost when plans come to play in everyday issues, and when they are encountered by people in their quotidian concerns.

As people reluctantly admitted in several of my interviews, of the very few that participate in the formulation stage of such plans, only a handful will ever read the resulting planning documents in their entirety – including policy researchers and anthropologists like me. It is very unlikely, that a person in public position will get to read all relevant documents before making *any* decision. Indeed, one of Fernando's main points during his contribution to the *Jornadas,* had been that council members should connect sections of the council administration that, according to his experience, were simply not talking to each other and worked unaware of each other's plans.

Nevertheless, activists and researchers at Chiloé Libre and CESCH had taken years to learn to use these documents *as if* they had the representative and mobilising power they claim to have. The harnessing of planning authority was always a difficult task: the overlapping of temporalities, jurisdictions and approval processes of the different instruments and regulations, made it virtually impossible to have a clear understanding of which action fell under what set of rules, and which rules simply did not matter. In that scenario, referring to as many documents as possible aimed to create a form of 'containment barrier' to stop the advancement of projects we found harmful. A member of CESCH would once describe this process as 'putting logs in the road' (*echar troncos al camino*) to the advancement of predatory projects.

We commented on this at one of the meetings of Chiloé Libre in 2021, while in a meeting with a newly elected representative of the constitutional convention. We talked about the difficulty of proving the wider environmental implications of some projects utilising existing planning regulations. Moreover, it seemed that any project that had been submitted to an environmental evaluation process, would eventually be approved. Even in instances that showed serious flaws in the technical proposals and where objections had been raised, the effort required to translate these into the correct planning terms, in the short window of time available within the planning process, was simply overwhelming. If transparency, as democracy, means that 'all state knowledge is public knowledge, and citizens can therefore "see" what goes on in government and in the economy', and we are living in a 'a world of perfect information in which citizens and entrepreneurs

can make fully informed decisions about how to organize their society' (Hetherington 2011:6-7) then, paradoxically, all engagement with documents becomes tactical. It would be a full-time job to solely read all the relevant descriptions of a project, as 'all state knowledge' is a lot of knowledge to possess and engage with meaningfully.

Such dedication and exposure to dealing with documents of that sensitivity, strongly shapes one's interpretive skills. For many in the Chiloé Libre team, only years of professional training and activist dedication made them capable of recognising when something was gravely negligent and could offer a relatively easy route into a persuasive objection. As stated by a natural scientist and member of Chiloé Libre: 'no normal person is able to read so many pages'. The fact that we had to become 'experts' in working with documents that, possibly, no state bureaucrat had considered in full, was a constant source of frustration for our efforts. The wielding of these plans became a continual patchwork process of trial and error, testing which documents can be referred to more easily and successfully. During workshops, such as the one described at the beginning of this chapter, previous cases of success are registered and later offered as templates, to help with whenever a new, similar conflict emerges. Regardless of our critiques, crafting detailed references to plans is, as Fernando suggested, still the only institutional tool that can be used for defending not only the council members' struggles, but other affected or concerned people and communities in Chiloé. In certain cases, it works either by 'buying time' or by deterring the owners of a project from insisting on its reworking and improvement.

Here, the already mentioned notion of 'vocation' plays a crucial role: the more the 'productive vocation' can be shown to diminish other vocations and values of a territory (i.e., tourism), the stronger the case to show that certain forms of productive activities, such as energy generation, are inadequate. The more local the plans, the more important it becomes for activists to stress a particular, different vocation, versus the national plans and policies that appeal to a sense of integration and consideration of 'the national interest'. Making such non-productive vocations visible is what makes them deserve protection. This is particularly obvious at the regional (Los Lagos) and provincial (Chiloé archipelago) levels. For example, in the preliminary 'Land-use plan for the Los Lagos region' document, one of the areas was analysed as follows:

> Andean Lakes: it highlights the great growth of the tourism sector in the three scopes, showing its productive vocation and predominance over other sectors that are in decline (Gobierno regional de Los Lagos 2013:48).

As the example of the Huillinco sanctuary outlined in the introduction shows, the vocation of the land is, at times, presented as contributing to the national good invoking a different set of values. In the Huillinco case it was nature conservation; in the Los Lagos case it is tourism. Invoking a sense of being exceptional, becomes a useful tool in appeals against being classified as a zone of 'productive' exploitation.

In other words, my interlocutors' use of plans and documents was part of a different political landscape than the national-level, more general energy plans and policies described at the beginning of this chapter. In this second modality, people are less concerned with establishing 'goals' for the decades to come, thus being more oriented to defend the vocation of specific territories – be it the archipelago in its entirety, or a particular location within it. They are more worried, such as the English villagers of Abram's work, about 'the continuity of the present' (Abram 2017:74). The sense of difference and the tools used to prove a relevant distinction that would protect a place from what are deemed undesirable and destructive interventions guide the use and interpretation of a wide range of documents. By re-crafting a variety of plans and strategies into legal commentary, activists in Chiloé build 'small acts of representation' (Hetherington 2011:131), thus expecting they will give more legitimacy to their claims.

Following from the previous subsection, the use of plans as 'containment barriers', such as the one I have just described, challenges the supposition of a harmonious national integration of different territories. My interlocutors did not unquestioningly accept the need of securing a future increase in energy production, as laid out in the E2050 policy; instead, they pointed at the dangers of undermining the delicate ecologies in which people are enmeshed. From the point of view of the people inhabiting the land, these interventions are an attempt to be valorised but not exploited; that is, to be seen has having a value already, beyond the possibilities of creating more economic value into the future. They reject the deliberate devaluation of their land that renders it disposable. As Franquesa (2018:15) suggests, for the case of wind energy developments in rural Catalonia: '[D]evaluation works as a precondition of capitalist expansion: because certain places and peoples are constructed as waste—residual, barren,

marginal, disordered—capital can justify the need to intervene and make them valuable, that is to say, value-producing'. Conversely, rejecting the possibilities of value realisations through the figure of the energy node, means re-centring the already existing ecological richness of the archipelago.

While at the state-level planning processes participation is expected to guarantee integration and diminish conflict, in practice the use of plans by activists becomes a means of contestation and disruption. What I have described as a guerilla approach, (Hetherington 2011) allows to make a case for the deservingness of a place, thus responding to the demand for productivity by establishing an exception to its rule. Alternatively, in some of the most critical and conflictive situations I found a third form of contestation that, even more explicitly, rejects the wider cosmological principles of this form of planning.

Plenitude: caring for all life without exception

In certain cases, people prefer to avoid the language of worthiness, and rather focus on the idea of taking care of all life, without exception. This is the meaning of the Mapuche-Huilliche expression *'itrofil mongen'* – 'all life without exception', or *toda la vida sin excepción* in Spanish (Weke 2017). I was introduced to this notion by Longko (head – an indigenous political authority) Paulina on a visit to her *ruka* (home) in El Manzano, on the suburban periphery of Castro.

In December 2020, when Covid-19 infection rates had temporarily fallen to relatively low levels, Andrea and I managed to arrange a visit to *fund*o El Manzano as members of CESCH. I had heard from my friend, Susana, who herself is close to Paulina, about the Longko's need of raising awareness about what had been happening in her community since 2017. Early in the morning of what would be a hot sunny day, she received us together with three other women from her community who were participating in the occupation of the *fundo*, largely to stop the advancement of a new transmission line. The line in question was supposed to reach a new sub-station situated right next to the community members' homes. Additionally, an improvised headquarters had been constructed for the community group that now hosted our visit, which physically delimited a line beyond which the construction of towers could not proceed.

El Manzano is one of the urban overflows of the city of Castro, made of precarious houses, many of which are constructed informally. There, most of the inhabitants

and members of the Huilliche community do not live off the land (although they might have sporadic contact with land, or support family, on the countryside), but rather have jobs in the city. Some women that I met were unemployed and took care of their homes. Paulina herself, for example, is a schoolteacher. Most of the members of this community, as it is often in other urban areas of Castro, are recent migrants from rural areas of the archipelago and nearby places like Melinka, and island south of Chiloé. El Manzano had seen its larger migration from the 1990s onwards.

Paulina, as well as three other women from her community, received us in the building she called her *ruka* (home) and gave us coffee and freshly baked *roscas*. She then told us about their situation. The four women had heard of the planned substation and transmission line, only after the period during which potentially affected residents could submit objections to the project had ended, and the project had been approved for construction. In turn, Andrea and I shared our news on the Surelec line that would reach the north of Ancud, a project that, as I mentioned earlier, had been admitted in the SEIA system only in September 2020, and was then still in evaluation. None of them had been aware of this until that moment. The women gave an account of the legal steps they were taking to show that the Environmental Impact Declaration of the company in charge had been incomplete, as well as the different ways in which the company had violated the law – including the 169 ILO Convention that requires the participation and the approval by indigenous residents in areas affected by such developments. In addition, they had forced the company to change both the layout of the transmission line and the location of the substation. Their occupation of the site was a way of assuring that the company would keep its word.

In their defiance, the women had started a process of cultural and territorial vindication in the *fundo*, in 2017. The company had claimed in its Environmental Impact Declaration that no protected people[52], resources and areas would be affected. In response, the community of Longko Paulina had initiated a vegetable and medicinal garden, and planted young native trees in the place that would have been intervened by the substation. Whilst doing so, they had found pieces of ceramic dating back to precolonial times, which was taken as proof of the land's

[52] 'Protected people' here means indigenous people.

ancestral and customary use. They were now building a shelter, to receive overnight visitors, whilst raising funds for their *rehue* (Mapuche ceremonial meeting point) through a *minga* of donations from different indigenous and non-indigenous groups, and individuals like us.

After the initial introductions, Paulina and the other women, took us to a small wetland, only a few meters from the *ruka*, which they had cleared and revitalised after it had been chronically polluted and partially drained by the company's activities. They drew our attention to the different birds that were swimming by and told us that sometimes one could also see a *huillín*, an endemic and endagered type of otter.

Situated on the outskirts of Castro, where the hills are more sparsely populated, El Manzano is not a popular tourist route, as there are neither special sights nor parks that would make it 'remarkable'. This is precisely how the company had described it, when putting forward its Environmental Impact Declaration – El Manzano's 'unremarkable' appearance was used to justify the lower tier of requirements for the approval of their project. The only noteworthy cultural activity of the area, according to the company's impact declaration, was an annual folkloric festival (*fiesta costumbrista*) that, they said, could continue taking place undisturbed. However, once introduced to the unexpected news of the substation and line that would destroy a wide strip of the nearby forest, the El Manzano community had organised to show the already existing richness of the place. The company claims that the community lacked 'patrimonial elements' – such as recognised and protected wetlands – had been fiercely opposed, partly by inhabiting and making it a place for potential regeneration, and partly by pointing out that precious sites, such as the small wetland, had been completely overlooked.

The cultivation and care of the apparently 'useless' land was supported, in the words of their inhabitants, by a different view of life and by the need to protect 'all life without exception' from an ancestral perspective. Their activities represent, like people being threatened with eviction for infrastructural projects in India, an 'active investments and commitments to other kinds of futures, built on the debris of the past' (Cross 2014:11). As explored in Chapter 3, this kind of care comes from a recognition of accumulated damage. As part of her heritage of the Mapuche-Huilliche-Chono people, Paulina explained the significance of what she

called a cosmovision. Her sense of belonging to her people, prevented her from just letting this destruction of life happen, however 'unremarkable' or underwhelming by *winka* (how she used to refer to Chileans) standards. She would name this approach, more formally, as the *itrofil mongen.*

The visit I have just described was the beginning of a collaborative relationship between us, as members of CESCH, and Longko Paulina. In subsequent meetings, calls and public political spaces – related to both the struggle at El Manzano and activities that would later coalesce as the campaign Chiloé Libre – the wider philosophical approach of *itrofil mongen* played a fundamental role in the project of the intercultural, Chilote struggle for self-determination.

Andrea described her learning of *itrofil mongen* as a spiritual journey, in which she had been led by Longko Paulina. Towards the end of my fieldwork, the conversations between the three of us had evolved, with Andrea deciding to become an apprentice in the ancestral knowledge held by Paulina. Part of this learning and collaboration was an expedition to the Piuchén mountain range (near where the San Pedro wind farms described in chapter two are) in the summer of 2021, which involved the two women and a small party of people, who were similarly keen to expand their understanding of ancestral ways of life. The climbing the mountain overnight had an impact on both women. As Andrea recounted later, she felt emotionally overwhelmed by what she had witnessed: seemingly untouched forests and 'green glaciers' (peat bog) full of life, including unique forms of microflora, which as she explained, came as both a revelation and reawakening of her childhood experience of climbing in the Andes mountains surrounding Santiago.

When discussing these emotions and realisations with Longko Paulina in a later conversation, Andrea also referred to her appreciation of the biodiversity of the locations they had visited together. She told about how, in conversation, Paulina had corrected Andrea's assessment and use of the word 'biodiversity': 'The word biodiversity does not really capture what we call *itrofil mongen*'. Rather, she explained that *itrofil mongen*:

> Is all you are feeling now. All the entanglements of life, all the elements that compose it. It is the animals, the microscopic life...but also the rocks, all other elements of life. This is a fragile equilibrium. It needs one thing from us: love.

For Andrea, this allowed her to name something that she claimed to have always sensed but had been unable to capture it with words: her overwhelming love and appreciation for the web of life as an integral whole – the key was to remember this wholeness, as it is an intrinsic part of what it means to be human. On the road of *Itrofil mongen*, Andrea expressed that 'there is no scarcity...there is no loneliness. One is the air, the *kurruf* [wind], the *lafquen* [water], the tree, skin, organs. This helps let go of the barriers of individualism, to believe we have come to this world alone'.

Andrea has continued exploring this term in her learning from Longko Paulina, engaging in rituals like *ngillatunes.* The *ngillatun* entails simple offerings to the *ñuke mapu* – the Mother Earth – such as toasted flour, mate with sugar, or anything that one might have at hand. *'*Our relationship is of eternal reciprocity with all that exists', Andrea had learnt. While *nguillatún* (a form of ritual petition) usually refers to an elaborate three-day ritual that mobilises several communities (Castro 2000), Andrea and Paulina performed a more modest version. In Andrea's case, as she incorporates *itrofil mongen* in her everyday life, she goes to retribute directly to the forest near our house, rather than at a *rehue.*

The active creation of a caring relation with the land resembles what Di Giminiani et al. (2021) refer to as plenitude. Plenitude is a principle that describes a 'native' form of settlement, different from the typical colonial settlement in southern Chile. Di Giminiani et al. (2021) are interested in the apparently paradoxical category of the 'indigenous settler' (*colonos indígenas*), specifically the fact that Mapuche people consider their own and their ancestors' arrival in certain locations as a form of settlement. In this, Chiloé is not different, as the memory of displacement and recent urban inhabiting are complementary and not opposed to the memories of a much older inhabiting of the archipelago. In this context, the authors suggest that the indigenous form of settlement is distinct from that of European settlers, further arguing that indigenous people engage with their territories by taking care of them: 'Plenitude, in fact, is not only an existing condition of human-land relations, but one that needs to be reasserted through commitment towards the plenitude of the land, in particular towards the preservation of existing meaningful human-land connections' (Di Giminiani et al. 2021:93). These relations of plenitude contrast with notions of emptiness harnessed in colonial relations with the land. Emptiness assumes that human labour is a way of achieving

‘unrestrained environmental transformation’ (Di Giminiani et al. 2021:100) that would make the wilderness appropriate for social life.

In my own conversations with Longko Paulina, she described the idea of *itrofil mongen* as being the wider base for the notion of *küme mongen*, which is often put side by side with the popularised Andean notions of *suma kawsay* and *suma qamaña*, translated to Spanish usually as *buen vivir or* ‘the good living’ (Loncón 2014; Weke 2017). Weke describes *itrofil mongen* as ‘the cause that sustains *küme mongen’* (2017:1) and that can be helpfully defined through words like ‘multidiversity’ and ‘pluriversality’. Hence, the vindication of a fundamentally different approach to the value of life comes to be explicitly elaborated in support of a wider political principle – *küme mongen* – part of a family of terms that have been at the centre of political arguments for indigenous people’s self-determination in Latin America (Loera 2015). While hotly disputed, *buen vivir* gained political currency in the Latin American political scene with the debates of the Ecuador constituent assembly that functioned between 2007 and 2008 (Acosta 2009). The different indigenous expressions entwined under *buen vivir* can be read as a recent intellectual proposal that solidifies what is lived as a communitarian and relational approach, contrasted explicitly to the prevailing modern, Western one (Svampa 2016).

According to Paulina, *itrofil mongen* means that no place is undeserving of care. In contrast with other concepts like ‘mother earth’ that have played a key role in political struggles in places like Bolivia and its constitutional assembly (Schavelzon 2012), *itrofil mongen* refers more broadly to a plurality of life rather than a single subject of reciprocity (a ‘mother’). All life, even nonorganic elements of the landscape, such as stones, deserve respect, care, and the reproduction of the conditions that make them the rich blend of interdependence that they are. Hence why during our visit Paulina and the other women of El Manzano community put so much effort into showing us the beauty of the wetland. Wetlands are not only elements typically recognised as technically valuable and protected environmental assets. In this case, the women had taken direct action in its recovery, and continued sustaining its defence. In doing so, following Tironi & Rodríguez-Giralt’s (2017) study of the care that becomes possible in the sacrifice zone of Quintero-Puchuncaví, they enacted an ecological awareness and a form of knowledge that overflows the official registers of documentation.

The epistemic logic suggested by *itrofil mongen* is the opposite to that of state planning. In official planning guidelines, a place that is already affected by human interventions lends itself more readily to being further disrupted. A place that already has transmission lines can be categorised as having a 'low landscape value', making additional intervention supposedly less significant. By contrast, if all life is considered worthy of protection, as claimed by *itrofil mongen*, then a damaged place calls for care and regeneration, and not the perpetuation or trivialisation of that damage.

Itrofil mongen, being based on a different knowledge, is also in contraposition to the idea of 'educating' for energy described above. Carla, a Huilliche woman and *Werkén* (messenger of indigenous authorities) who participates in Chiloé Libre, exemplified this. Her community's territory in Ancud was one of the many to be affected by the Surelec line. 'Surelec has not considered our cosmovision, our form of organisation. We do not care if the [transmission] line passes near the *ruka*, we see the territory as a whole'. In one of the online events organised by our collective, Carla gave testimony of their situation and decried the company's incompetence that blatantly misread their territory. For instance, the company had categorised one site as a field of young trees (a *renoval);* but it was actually a *pomponal* – an ecosystem crucial for the availability of underground water and medicinal herbs, actively used by the community's *lahuentuchefe* (a person knowledgeable of medicinal plants). In a stark contrast to the idea of 'educating' the public to create responsible citizens that will be mindful of energy, here, the invocation of *itrofil mongen* shows that, far from lacking knowledge, communities like El Manzano refuse to untangle what they consider an interconnected, living whole. They do not need to be educated on the places they inhabit and actively tend to. To those involved, this framing in terms of an indigenous cosmovision is of crucial priority – even if, in parallel, they also mobilise official regulations and legal tools to present their discrete observations and reveal flaws in the project.

Organisations like Chiloé Libre show the relevance of the wider, political and cosmological framing of the narratives that support extractive activities and how they relate to 'untouched' nature. So-called pristine places are saved to the detriment of already polluted or damaged locations. This brings a new perspective to the 'strategic ignorance' deployed by bureaucracy (McGoey 2012) in the context of energy planning. Ethical and political principles, such as *itrofil*

mongen, do not seek to fit into the technocratic tools and processes available for the defence of land. Rather, they critically address the extreme, overgrown practical reach that such logic brings about. Talking about and defending the unique value of the multiple elements of *itrofil mongen* raises a form of what Rayner (2012) calls uncomfortable knowledge; knowledge that cannot readily be incorporated into existing institutions without rethinking political sovereignty. More than making the land legible, it tries making the process of classification itself pointless. In contrast to the developmentalist project of national planning, *itrofil mongen* points out and defends the existing *abundance* of life under a relation of plenitude with the land.

The success of this wider case of deservingness is always contingent. Unlike the trailblazing *Patagonia Sin Represas* campaign against Hydrosaysén, which showed montaged images of beautiful landscapes in Aysén that were cut through with high-tension transmission lines, 'Chiloé Sin Torres', a very similar formulation and imagery, did not work as effectively as a slogan in El Manzano when it was launched in 2017. The case has, so far, failed to raise national sympathy and wide political mobilisation. The members of the community that received us in December 2020, have also faced resistance or disinterest from their own neighbours. For many, the real damage of the transmission line was not relevant until they saw the towers 'creeping upon them' (*viniéndoseles encima*), as recalled by Paulina. By then, it was too late to appeal to formal participation and complaints. This late realisation of the implications of the project is also an example of the difficulties of mobilising in Chiloé, as I often heard about other places where indigenous and non-indigenous communities had attempted, but failed, to act collectively when the legal mechanisms would have still allowed them to be heard and recognised. *Itrofil mongen* is a collective commitment to care in the making, not a finished form of indigenous subjectivity.

Nevertheless, the guiding ethical principle of *itrofil mongen* means not limiting their relationship with the land to what fits the sanctioned visible spectrum according to the law. It calls to act as if all life was already invaluable, and irreducible to what is written on paper. The commitment to take care of life the Huilliche community shared with us — such as in the planting new native trees — nurtures not just the very soil and water of places like El Manzano. These ethical and political horizons will also challenge, as I show in the following

chapters, the formulaic and tokenistic repetition of ‘participation’ processes in energy planning.

Conclusions

The three levels of contestation described in this chapter do not exist as encapsulated rationalities being mobilised in isolation by different people. Most of the people I met in Chiloé navigate through these alternatives, as Fernando told us in the *Jornadas*. People acknowledge the limits and possibilities provided by existing institutional orders, while also searching for cracks in them. The strength of collectives, such as Chiloé Libre, lies in the complementarity of different dispositions, experience and expertise that are needed to engage in these different responses.

In answering to increased opposition to supposedly clean energy projects, energy planning in Chile starts from the possibility of harnessing, in a conflict-free manner, what is considered to be the natural ‘productive vocation’ of different national regions. The concern over the possibilities of creating new sacrifice zones, if not mentioned explicitly by my interlocutors, is nevertheless implicit in their explanations of how the places they inhabit would suffer from such productivist aspirations.

Chiloé was not catalogued as an Energy Development Node, neither in 2017 nor in the following PELP round in 2021. The collectives I worked with do not know if the appeal to plans that was made in the submitted comments played any role in this, as no feedback was given. The proliferation of plans – official and paraofficial – has not stopped the eternal return of the perceived need for better planning instruments among my activist interlocutors. Meanwhile, the fear remains that if effective planning – that is, a planning that would allow for different values of the land – is further delayed, ‘there will be nothing left to plan’, as a member of Chiloé Libre member expressed. People like him are frustrated that the weak political usefulness of plans translates into capital-rich developers’ freedom to design the future of energy generation in the region.

However, planning still matters. In the process ignited in October 2019, many *cabildos* I attended, became mini planning workshops, collecting years of activism and politically engaged academic research on issues such as water, agriculture, and energy. This welter of knowledge was later incorporated into the

official documentation for the Chilean constitutional assembly, which commenced in 2021. At the start of this alternative planning process, nobody could be sure whether, and how, this constitutional convention would be called. However, we acted and debated – not unlike the EEL process – as if that was already true, in prefigurative support for the necessity of such a re-foundational process. This shows how plans can nurture the political imagination and serve as an already matured, and reflective guideline for what might be possible.

The next chapter builds on some of the tensions around planning developed in this chapter. It analyses how assumptions of a need for productivity and growth come to the limelight in situations that unexpectedly require suspending certain economic activities, as it happened during the Covid-19 pandemic.

CHAPTER 5: CARE AND PRODUCTIVITY IN DISPUTE

In the wake of the first wave of lockdowns and restrictions, that were put in place to stop the spread of the SARS-CoV-2 virus in early 2020, countries like Chile – situated far from the early epicentres of the pandemic – took preventive action. In Chiloé, salmon and other seafood operation plants stayed open. Considered as food processing facilities, these workplaces fell under the category of 'essential activity', thus escaping the mandatory closure that affected places such as schools, nurseries, shopping malls, restaurants, and other 'non-essential' spaces of in-person interaction. In March 2020, shortly after the worldwide declaration of Covid-19 as a pandemic, Chiloé's network of local assemblies, and other grassroots organisations, gathered in Chacao to demand the implementation of a sanitary barrier (*cordón sanitario*) in the Chacao channel – the natural boundary and the main crossing between Chiloé and the continent. Between the 22nd and 25th of March, a growing group of demonstrators managed to block the crossing for a few hours each day, with one of the banners carried by them (Figure 17) demanding 'no more sacrifices' in Chiloé. On the 25th of March, after an improvised meeting between protestors and national authorities, a sanitary barrier was granted. The barrier involved a careful examination of work permits required from anyone who wished to cross. Coaches and private cars, as well as those not working in essential sectors, were temporarily banned from entering or leaving Chiloé.

The sanitary barrier was loosened in early April, when the first 'endemic' cases of Covid-19 were confirmed in the archipelago. In the local media this relaxation of control measures was largely attributed to the lobbying power of salmon and seafood producers, that claimed the Chacao checkpoint was making their productive process unbearably slow, thus calling for a smoother circulation of their goods. As a result, the Chacao port was blocked again for several hours, until the arrival of the police, by dozens of protesters demanding the barrier to be kept in place. The blockade was soon removed to facilitate the circulation of trucks.

In contrast, by December 2020, there were demonstrations for *ending* the newly re-imposed set of movement restrictions. 'We do not want those factories of poverty called lockdown', said one of the local assemblies' digital flyers that circulated through WhatsApp calling for protests, following two months of being

under the strictest tier of lockdown. ‘WE NEED TO WORK,’ said another message (Figure 18), ‘so we can feed our families’. The demonstrations succeeded in convincing Chonchi’s Mayor to declare the ‘liberation of commerce’[53], even if it meant going against the official restrictions coming from the central government. Considering this stark contrast: what (if anything) had changed in the lapse of a few months, from wanting to suspend work, to later subsequently demanding to resume it, together with the free flow of people and goods in and out the Chiloé archipelago? What does this say about the long-standing tensions around the notion of productiveness, both as people and as a province, that have marked the history of that territory? I address these questions by examining the changing measures and policies around Covid-19 in Chile, which intersected with the planned expansion of electricity infrastructure, located in the wider energy transition agenda.

Figure 17: people holding a ‘Chiloé on its feet, no more sacrifices’ banner.

53 https://www.biobiochile.cl/noticias/nacional/region-de-los-lagos/2020/12/15/alcalde-de-chonchi-ordena-abrir-el-comercio-pese-a-cuarentena-y-no-descarta-acciones-legales.shtml

Figure 18: post shared in the Asamblea Territorial de Chonchi *Facebook page, which circulated on different WhatsApp groups in early December 2020.*

This chapter returns to the contradictions of care and productivity previously discussed in Chapters 1-2. There I suggested that understanding work and productiveness as an integral element of caring relations was riddled with tensions and ambiguities. Work can be demanding and damaging for the body, creating sacrificed lives, just like extractive and productive activities can hurt the environment in the making of sacrifice zones. In this chapter, I expand on a historical conjuncture that allowed this relation to be actively questioned and reformulated: the Covid-19 pandemic. The early stages of the Covid-19 pandemic in 2020 and 2021 opened a unique moment of suspension and interrogation of what is fundamental for society, and what people and activities are truly at the heart of 'the economy'. As suggested by the opening vignette, these negotiations were full of contradictions and changes that reflected not just the variation in epidemiological indicators and pandemic risks, but the conflicting moral and practical grounding that guided the rapidly changing decisions of different people and institutions.

'Care' turned into a conceptual battlefield during the outbreak and early months of the pandemic worldwide. The language of sacrifice, and the recognition of interdependence, became crucial to understand what was at stake in popular reactions to the novel coronavirus. Taking care of people was defended everywhere as an urgent priority. Placing 'profit over people' (The Care Collective 2020:3) and the diagnosis of living in a crisis of care (Dowling 2021; Fraser 2016) came into public debate, alongside critiques of the injustices and absurdities of

the current organisation of work (ECLAC 2020; Ferreras et al. 2022). The novel coronavirus, as these debates highlighted, came to make the ongoing, wider crisis of care in the south of Chile more evident.

By contrast, after the first shocking months of the pandemic, 'the economy' came to be positioned at the heart of the public good. In this chapter I show how, what I call a productivist approach, won ground in the debates on how to face the pandemic in Chile. Energy and electricity infrastructure were already central to promises of development, progress, and of course productivity (Boyer 2018; Gupta 2015), together with state integration, particularly relevant to the Latin American context (Harvey & Knox 2015). The Covid crisis, I argue, made the infrastructures' role even more salient. Therefore, this chapter focuses on the contradictions that the idea of economic 'reactivation' brought about when taking care of the economy became a priority over taking care of people.

Moreover, I further elaborate on the role of bureaucracy and bureaucrats, especially the 'street level bureaucrats' (Lipsky 1980), in navigating these contradictions of care and productivity in their work at the Environmental Evaluation Service, SEA. In their efforts to reject the primacy of production, 'activist bureaucrats' (Hetherington 2020) navigated the tensions of economic reactivation through a type of ethical fix (Pia 2017), rekindling older critiques of the current Environmental Impact Assessment System (SEIA).

I address these questions through the example of a controversy around the participation mechanisms in the environmental evaluation process of the already introduced Surelec line in the north of Chiloé's main island; detailing how concerns over sanitary conditions throughout the Covid-19 pandemic interrupted the normal process of citizens' participation within environmental impact assessments, as well as the different ethical positions and institutional accommodations that stalled the approval of the new transmission line. I show how for my interlocutors at Chiloé Libre as well as some workers at SEA, deciding on keeping environmental assessments – and therefore, participatory processes – going downplayed concerns around the physical and emotional wellbeing of people and communities. Making these misgivings open and part of public political debate revitalised tensions inside different state bodies over environmental concerns more generally.

My analysis reveals how notions of work and energy, as ideals of productivity, effectively hide the negative implications of such activities. I also show how, in actualising their understanding of acceptable and unacceptable acts of sacrifice, Chiloé inhabitants and state workers at the national and local level exerted and tested the limits of their political power.

Taking care of people

> 'We know about the dedication and sacrifice of our people from the south'.
>
> —Supermarket advertisement in local radio in Chiloé.

As in many places around the world, in the weeks before the arrival of the SARS-COV-2 virus, different restrictions were imposed in Chile. Avoiding closed public spaces and restricting mobility were the first enforced measures taken to prevent its spread. In Chiloé, classes at universities and schools started their academic year in early March only to be fully suspended a week later. As all the people living in my house in Castro worked in the education sector – from kindergarten to university – I gained a good insight into the speed at which concerns for the health of students and school's workers translated into a full suspension of educational activities. Many schools managed by the local councils stopped all activities voluntarily before the government declared an indefinite closure of all educational establishments. While schools cancelled classes and restaurants shifted to take-away only, supermarkets and shops such as pharmacies remained open.

The general rule was that only those activities and institutions deemed essential were allowed to continue functioning in-person, with extensive limitations to face-to-face interaction. In Chiloé, that criterion included the salmon and seafood farming industries, which nonetheless saw their work severely disrupted. As described above, the overland transportation in and out of the Isla Grande was originally stalled, thus cutting the supply lines. Industry spokespersons argued that the time-consuming document checks were incompatible, particularly with the collection of early-stage mussels from outside of the archipelago, and the quick delivery of freshly processed salmon for international trade – a delay of only a couple of hours could mean the loss of newly harvested fish. Moreover, a failure to promptly collect decomposing dead fish from the growing pools, would pose 'a

grave threat to the health of the water bodies, the environment and the industry' (Alvarado Lacrampe 2020).

While pushing for a relaxation of controls, both the salmon and the seafood industries kept working, attempting to maintain their normal production pace. As new Covid-19 infections advanced in March, so did the anxiety and anger. Organisations, through social media, called on such factories to close, whilst mayors of Chiloé used local media to demand, from salmon companies in particular, to take care of their employees, appealing to the companies' decades of making money in the archipelago as a reason to protect their workers from infection without firing them (Salmonexpert 2020). Since most of the salmon processing work is done in close physical proximity in indoor spaces, even more acute concerns were being raised. It seemed impossible that the employees could work under the social distancing and ventilation guidelines, which slowly started to become part of the mitigation measures.

After the first internally transmitted cases of Covid-19 in Chiloé were publicly confirmed, my conversations with CESCH, my host family and other organisations showed that extractive industries were the least convincing when it came to qualify as 'essential' activity. Supermarkets and banks kept working with strict sanitary controls and capacity restrictions. However, the idea of including salmon or mussels' production as food industry ignored the fact that they were produced mainly for overseas export. In the eyes of my interlocutors – and logistically – it worked like any other export commodity, and it was clear to most people that suspending this type of production would not undermine the food security of the people of Chiloé.

In response to such calls and complaints, salmon companies' representatives argued that they could not interrupt their operations, or allow workers to stay at home, without cutting their pay. In reaction to the sanitary situation, several plants announced reductions in their contracting of up to 75% of their workers, referring to trends in reduction of production that predated the pandemic mitigation measures. In parallel, the National Salmon Association (SalmonChile) embarked on a series of 'solidarity actions', fundraising money across its members to support local health services. On their website and in press appearances, the Association insisted on being 'Committed to the south' (*Comprometidos con el sur*) – naming their campaign with this phrase – and with continuing their

operations, while improving sanitary measures. Nevertheless, security conditions in those same companies did not improve, with many of the outbreaks later in the year being directly linked to the processing companies. Similar strategies would be used to gesture care even from companies that were not demanded to stop functioning, Surelec among them. The company implemented a campaign "*Junto a Chile en tiempos de pandemia*", "With Chile through the pandemic", that, among other things, delivered food parcels, funded the improvement of sanitary infrastructure in schools, provided training for entrepreneurs, mobile clinics, and funded initiatives like Wi-Fi in 13 community centres.

In April 2020, the National Union of Public Workers (ANEF) was already warning against the first attempts to 'reactivate' the economy, stating that 'the calls, from financial and business sectors, to "normalize" the country's activity, translates the costs in lives that the lifting of the limited social distancing and quarantine measures in force would have, into a new column in their corporate balance sheets' (ANEF 2020:1). Many similar declarations would follow, whenever a peak in cases could be tracked back to these companies, circulating through Facebook groups and local news websites. In January 2021, for instance, several unions of health workers in Quellón – at the heart of the salmon industry – denounced that processing plants were the virus outbreak settings. 'We call to Businessmen [*Empresarios*] of processing plants to stop and to give life the value it deserves above productivity' (Asociación de Funcionarios de la Salud Municiapl - AFUSAM 2021), said their public declaration. The Quinchao Assembly (mentioned in Chapter 2) delivered a similar declaration in March 2020, stating that 'we believe that the productivity of [aquacultural] companies is below the health of the inhabitants of the Quinchao Archipelago'.

Such political mobilisation from trade unions and grassroots organisations can be seen as a vernacular counterpart of the more theoretical and academic debate that sprouted in the first half of 2020. For instance, in 'The Care Manifesto' an interdisciplinary feminist group proposed a reading of the Covid-19 crisis that highlighted long-neglected inequalities around the arrangements that allow us to take care of each other. The manifesto is mostly a critique of the care systems – with a particular focus on health – which also denounced how 'the inherently careless practice of "growing the economy" has taken priority over ensuring the well-being of citizens' (The Care Collective 2020:11). Other manifestos

emphasized how ‘the current economic systems are organized around constant circulation’ hence ‘any decline in market activity threatens systemic collapse, provoking generalized unemployment and impoverishment’ (Paulson 2020:242), which is not inevitable, but rather a contingent characteristic of our current capitalist order.

The problems and inequalities identified in the moment marked by the early days of the pandemic go back to classic concerns of feminist anthropology, over hierarchies of value and the constant relegation of ‘feminised’ forms of activity – such as housework and forms of intimate care – to a second class (Bear et al. 2015; Yanagisako 2012). In the prioritisation of certain activities that count as ‘productive’, the processes that guarantee and sustain *social* reproduction – like the requirements of social distancing – were not equally supported and valued. In Chiloé, having to organise around family members who continued being exposed to a higher infection risk, for example in processing plants, added an additional burden to the social infrastructure of salmon farming workers (Bear et al. 2021). ‘Social infrastructure’ here refers to ‘networks of kinship and care within and between families, friends, and communities’ (Bear et al. 2021:3).

As weeks went by, attributions of responsibility and care in Chile oscillated back and forth: whilst workers demanded to be able to stop working and stay at home, the aquaculture companies positioned the continuation of their production as more urgent, thus impossible to interrupt. While other activities were suspended, salmon farming owners further complemented their relevance as producers and employers with ‘commodified’ acts of care. They would donate mostly medical supplies and mechanical ventilators, which were in a critical demand, particularly during the first months of the pandemic. For several months, until after the first peak in June 2020, the daily report of infections and deaths given by the health ministry included information on the availability of mechanical ventilators, which had become the most sought-after medical equipment. On TV, special news broke when donations or purchases of ventilators arrived in the country, which were received by special welcome committees at the Santiago airport. All in all, most public announcements emphasised that ‘whoever needs a ventilator, will have it’ (EMOL 2020), echoing President Piñera’s words he voiced during the sanitary crisis. The ventilator became a national symbol of the availability of care, and part of a discourse of reassurance in the face of increasing anxiety.

The ventilator example allows for understanding why the demands for 'more care' can be lived as conflictive (if they are ever clear-cut theoretically): definitions of care are always in dispute. Among my interlocutors, there was a perception of salmon farming not being worth sustaining during the sanitary emergency. This judgement comes from an understanding of the concrete contribution this sector makes to the insular life. Other activities, such as operating hospitals and public services, like councils, were seen as worthy risks – workers receiving the public at limited capacity in Castro, for example, called their rounds 'ethical shifts' (*turnos éticos*). Pamela, a worker of the Castro council, would speak proud of the council's capacity to continue receiving in-person the people in need of help and advice from the council. By contrast, keeping aquaculture sectors productive meant, in her view, an *unfair* – that is, unjustified – neglect for workers safety. Companies, however, highlighted that their revenues allowed them to take care of their workers, both in the form of wage payments and in gestures of care, such as ventilator donations and other solidarity campaigns. Both sides used a repertoire of care and protection on radically different basis.

Some people, such as those employed by public institutions, continued receiving payment while complying with social distancing and still fulfilling a limited remote amount of work. Miriam, the university worker introduced in Chapter 3, together with the rest of the administrative staff organised a round of Zoom surveys among the students to identify emergencies that would need the university's support – remotely working while socially distancing. As it became evident that some employers such as those of the salmon industry would not give in to such arrangements, the Chilean state later announced modest quasi-universal monetary transfers – as universal as anything seen before[54].

This response to the unrest switched back the gaze of responsibility towards the state: for some, public provision should ultimately guarantee that all workers can afford staying at home, even if their employers cut their payment, or if they were self-employed and could not generate an income. By relying on this narrative, employers in the salmon business insisted on their incapacity to suspend activities. To stop production while keeping payment to their workers was even

[54] Monetary Transfers under the name *Ingreso Familiar de Emergencia* reached 90% of the population, excluding only the richest 10%. The first installment was around 60 pounds per family member.

more unthinkable. In response, multiple organisations allied and insisted for the aquaculture industry to be suspended. ‘We are not second-class citizens’ said the declaration signed by over 20 organisations of Chiloé in October 2020, from Williche-based to feminist collectives, including local political assemblies. In the face of the ‘abandonment by the state’, they threatened to solve the issue ‘by their own hands’ and return to strategies such as blocking roads if the continued work of processing plants continued.

The notion of ‘second-class citizens’ speaks to another key aspect of inequality in the context of a ‘crisis of care’ in Chiloé: the racialised and gendered hierarchies entailed by commodity production. The shutting down of a wide range of in-person interactions allowed some people – mostly white-collar workers – to continue accessing care in a secure way, while others who depended on more informal, or manual forms of work, had to continue their activities. This was a global trend, for instance, among food delivery workers (Jirón et al., 2021). In Chiloé, workers of the aquaculture sector represent a marginalised, lower-class population of the island (Torres 2017). This illustrates how the ‘crisis of care’ is, more precisely, an unequal distribution of care: a plethora of care is available for those capable of paying for it, while the lower-class majority relies on precarious forms of informal care (Tronto 2005; Gutiérrez Garza 2019).

The argument can be further illustrated through a conflict over an emblematic energy infrastructure project that was at the centre of my interlocutors’ concern. Before my arrival in the archipelago, as explained in Chapter 4, people at CESCH were aware of a prospective new transmission line – the Surelec line – that was planned to be built to connect the north of the main island with the continent. The project was formally announced in September 2020, and a public evaluation process was opened. It made us, as members of CESCH, consider what position to adopt. By the end of 2020, we had already met with Longko Paulina who, in turn, introduced us to Werkén Carla, who lived in an area potentially affected by the prospective Surelec line. The Werkén was looking for help in the defence of her community in San Antonio de Huelden. Over the following months, we would forge an alliance to stop the construction of the Surelec line: *Chiloé Libre del Saqueo Energético.*

The collective brought together a variety of people. It expanded and shrank over time, however on average it comprised of about 9 to 11 continuous members,

including myself and my friend, Andrea, whom I mentioned in preceding chapters, Longko Paulina and Werkén Carla. Carla was our point of contact with the three Williche communities that would be directly affected by the construction of a new transmission line. Other members included an anthropologist living in the same area, as well as activists from other parts of the archipelago, with a history of previous public involvement in social-environmental issues, such as a biologist and ecologist; an audio-visual artist; a teacher; college geography students, and a lawyer. Since its creation we understood Chiloé Libre as a campaign, a platform that would not only support the particular conflict at hand, but that would also aim at turning the wider issue of energy justice to a provincial topic of conversation. As a group we concluded that the development of the new line would affect not only the north of Ancud, which was the area of influence declared by Surelec. The feasibility of the expanding number of wind farm projects in all the Isla Grande (see Chapter 2), too, would depend on the new transmission line to the continent. Hence, unlike most other environmental campaigns in Chiloé, this group gathered people from all around the Isla Grande, and not just one place to be directly affected by the project that we were all opposing.

In this instance, as in other cases of Environmental Impact Assessments (EIAs) processes in Latin America, people struggled to be recognised as citizens with legitimate concerns over the project when they were not residing in what the company had designated as an 'area of influence' (Carmona Castillo & Puerta Silva 2020). Far from being neutral mechanisms, EIAs are better understood as a government technology, 'a deeply political structuring element of neoliberal frameworks of governance' (Carmona Castillo and Puerta Silva 2020:1074) that defines, among other things, who is to be affected by a given project and who is entitled to compensation and legitimate political consideration. As a technology that aims at fragmenting territories, EIAs fail at avoiding conflict (Carmona Castillo & Puerta Silva (2020). Rather, as in the case of Chiloé Libre, these processes trigger mobilisations from different communities to defend their own understanding of space, and their sense of being affected. The communities considered to be 'inside the influence zone' were able to access a different set of bureaucratic and legal tools of contest and negotiation. Hence, we organised our concerns and comments around this principle. Figure 19 presents an example of the kind of mapping that we used to express our different understanding of 'influence zone'.

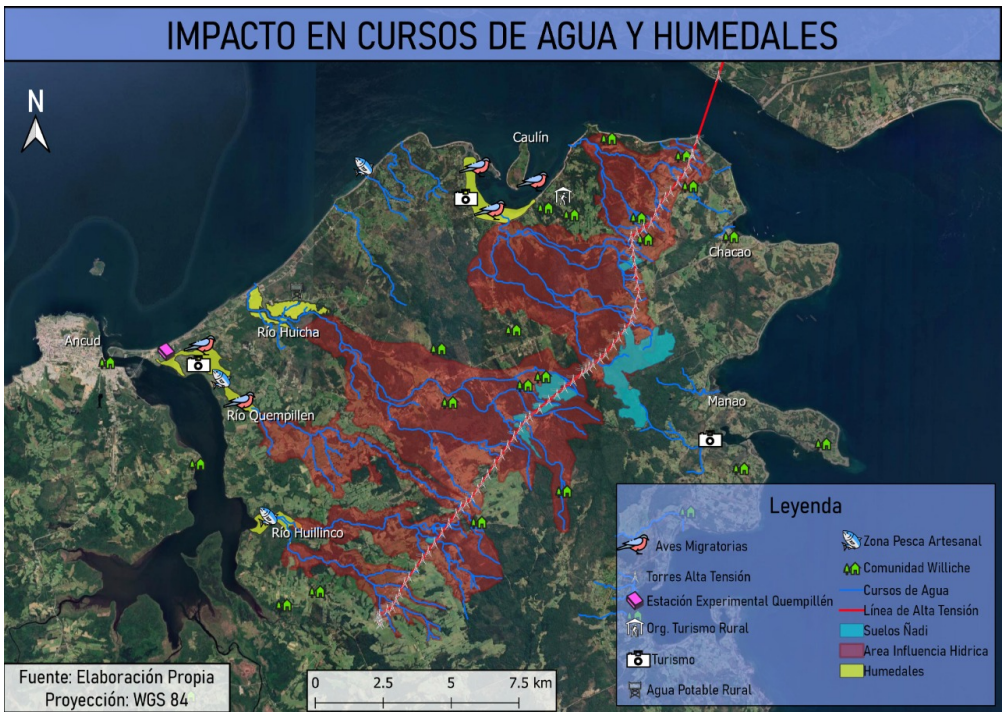


Figure 19: map prepared by Chiloé Libre showing an expanded area of influence. The image was used in our media campaigns.

The map shows, in a red shadow, an area of influence of the transmission line that transcends the narrow strip of land surrounding the towers and covers all the basins that will be intervened by the construction.

In the following sections of this chapter, I focus on solely one exemplary strategic action that Chiloé Libre considered. Environmental evaluation, too, had been disrupted by the pandemic restrictions in unprecedented ways. In April 2020, there had been an official recognition of the inadequate sanitary conditions to carry out the in-person meetings that are central to the citizens' participation process. The SEA decreed the suspension of all participatory processes, and with it, any decision-making and approvals dependent on them. Such restrictions eventually receded, even though the sanitary conditions continued improving and worsening cyclically for the following year. Towards the end of 2020, the blanket suspension was lifted, and meetings with communities in affected territories (like Ancud) resumed. In August 2020 some regions with low Covid-19 cases started public participation processes again, and as epidemiological conditions improved slowly more regions joined, first exclusively online and later in controlled in-person meetings.

In that context, we, as Chiloé Libre, made appeals and enquiries in favour of keeping the restriction – and therefore the suspensions of participatory processes

– for longer. Sending emails to different authorities, we argued that the indicators that gave separate councils different levels of lockdown and mobility restrictions showed that Ancud was still with high rates of Covid-19. In conversation with Carla, we confirmed that getting infected was a real concern among her neighbours, and meeting online was not really a possibility for them. Yet, beyond the practical barriers, Carla's community at San Antonio de Huelden could not understand that such process – that is supposed to be based on democratic principles – would be approved during such critical times. The decision to do so was received with indignation and seen as a disregard for people's wellbeing.

Under Covid-19 circumstances, the effort of facing this new project, as described in Chapter 4, was extremely demanding. Weaving the unacceptability of forcing participatory processes with larger issues of energy sovereignty, autonomy, and the potential wider ecological effects of the Surelec line became one of Chiloé Libre main focuses.

Taking care of the economy

Our appeal, as Chiloé Libre, to continue the Covid-19 safeguards that included suspending participatory processes, arrived at the wrong time. The second half of 2020 saw a shift in the state's priorities of action. The state reoriented itself toward taking care of the economy in a more abstract sense. While at the beginning of the pandemic ideas of taking care of people's health took centre stage in public debates, other competing understandings of what deserves collective prioritisation emerged during the second half of 2020. As the number of infections and deaths started to decline, 'economic reactivation' became the catchphrase.

In this section, I link ideas of reactivating the economy with the role of infrastructure investment in mediating the argument that the nurturing of the national economy is essential and should take priority over the capacity to care for people. I do this through the idea of productivism, that I consider key for an ethnographic study of the national economy (Appel 2017).

My approach to productivity and productivism, derives from anthropological understandings of productiveness as a desirable quality embedded in larger ideals of relatedness. The appreciation for abundant gardens that exceeded the actual consumption described by Malinowski (1966) for the Trobriand Islands; or

the positive appreciation of productiveness in the replenishment of self-sufficiency, as it allows autonomy among the Shuar (Buitron 2020), reflect a wide variety of different ethics of productivity (Bear 2015). As Bear suggests in her study of the Kolkata Port Trust in the Hooghly River, popular ethics of productivity combine with fiscal rules, as well as other formal practices in the everyday generation of relations of kinship and care. Therefore, the changing notions of productiveness and the political role this value takes, are the result of active negotiation and re-evaluation between different actors.

In the case of the Shuar, as Buitron (2020) asserts, productiveness is being rapidly redefined into a sense closer to resource management and the increase of salaried work productivity, alien to more 'traditional' accounts of autarkic Amazonian life. In their increasing use of powerful external sources – the state – Shuar communities, paradoxically, undermine their much-valued sense of autonomy. Similarly, in Chile, the call for increasing economic productiveness among indigenous people, has been presented as a matter of increasing entrepreneurial autonomy. However, as in the case of the Shuar, the inclusion into the market through state support effectively establishes new bonds of dependence (Di Giminiani 2018:261). Both Buitron and Di Giminiani show how the mandate of economic productivity, triggered by state policies, becomes increasingly detached from, and dominant over, other value projects.

The policy meaning of economic productivity that I address in this chapter builds on an analogous compromise of autonomy. Through a 'normativity of numbers' (Anders 2008, 2015), productivity, now transformed into an abstract measure, has come to subsume other concerns and taken centre stage in public policy's agenda. The concepts of productivism and productivist paradigms have also been used by scholars to describe certain approaches to the evaluation, planning and management of economic activities, such as in the context of 'audit cultures' (Shore & Wright 2015; Strathern 2000). A significant part of the productivist paradigms literature addresses the existence of such approaches in contemporary food systems 'rooted in the green revolution, in which food systems enact an industrial approach to food and farming, with state and industry support primarily geared to producing large amounts of standardised foods' (Gaitán-Cremaschi et al., 2018:2). Gaitán-Cremaschi links the productivist objectives to 'hierarchical and formalized vertical value chains' (Gaitán-Cremaschi et al.,

2018:8), such as Chiloé's salmon industry. In a complimentary cultural sense, Paulson (2017) describes productivism and the constant expansion of available goods as both a desire and a moral virtue that underpin the resilience of our growth-oriented paradigm. This positive frame, moreover, makes growth discourses appear 'apolitical and impartial' (Paulson 2017:440).

In economic policy settings, productivism takes a more technical language of measurement. 'Productivity' after all, is a way to referring to how much of a given good, or service, can be produced by any relevant productive unit. However, it also constitutes an ideational regime in which 'more productivity (regardless of its impact on employment or the environment) is good in and of itself' (Foster 2016:12). Foster is interested in explaining how this 'productivist regime' has taken over different policy agendas, which has led to other assumptions, such as the necessity of increasing productivity for more prosperity and better living standards. In bringing these dimensions together, I want to posit productivism as a horizon of value that justifies an understanding of 'the economy' as a public good (Bear & Mathur 2015), overshadowing the downsides of this commitment. Productivity, being first and foremost about producing *things*, conceals the evaluation and production of people that are actually leading economically labelled action.

Identifying productivism helps to understand the contradictions that emerged in Chiloé when the government tried to establish the boundaries of essential economic activity during the pandemic. The principle of continuously growing economic activity clashed with a general call to do *less,* implicit in the need of avoiding physical contact, that was advocated at the beginning of the pandemic. A few months into these measures, the headlines started focusing on how much this was affecting economic indicators, with the reduction of the income generated through the now prohibited 'non-essential' economic activity as the key concern. The rapid reorientation of public policy toward the goal of sustaining productivity was accompanied by a series of documents from public bodies, private corporations and collectives that came to support and advocate for the economy's 'reactivation'.

In June 2020, a diverse group of 16 Chilean economists presented a reactivation plan's draft, giving a key role to public investment in infrastructure, such as dams,

airports and hospitals[55]. They also stated the need of increasing the 'legal certainty' (*certeza jurídica*) of these investments, calling for a 'swift processing' of 'smaller projects' so that they could take the quicker route of an Environmental Impact Declaration, rather than an Environmental Impact Evaluation (Aldunate et al. 2020), with the first one not requiring participatory processes. The document was widely circulated and portrayed as an unprecedented consensus between economists – commentators on radio and TV shows would refer to it as 'the economists' proposal' (*la propuesta de los economistas*) – associated with a wide range of political parties and sensibilities. It was a successful display of technocratic expertise (Mitchell 2002). The level of exposure and public commentary that it gathered should come as no surprise: many of its authors participate in prominent Chilean think tanks that serve as effective spaces for the reproduction of neoliberal governmentality (Aedo 2016).

The issue of energy quickly became drawn into the productivist discourse. ACERA, the Chilean Trade Association of Renewable Energies and Storage, focused their public relations campaign on praising the generation capacity of the proposed renewable infrastructure projects, but warned that insufficient transmission infrastructure could halt the contribution of these projects to the national grid (El Observador 2020). Drawing on the growing public notoriety of decarbonisation as an urgent task for an ecologically conscious public good, the focus on electricity transmission became key in editorials, news, and interventions from the private sector, as well as in state planning itself (see Chapter 6). Like the language used to support the construction of Hydroaysén a decade earlier (see Chapter 4), the beneficial role of electric lines to 'untie the knot' of rapid decarbonisation (País Circular 2021) became an argument to accelerate projects of this sort of infrastructure. In essence, the narrative was that: 'without transmission there is no decarbonisation' (País Circular 2021).

In the Global South, infrastructure and energy have played a particular role as the basis of national prosperity. They are presented as situated at the heart of 'the economy' thus promising development, progress and freedom (Boyer 2018; Gupta 2015). In South America, the expansion of the connective and generative

[55] The document was available until November 2020 in this news website https://www.t13.cl/noticia/negocios/inedita-propuesta-transversal-economistas-fondo-covid-coronavirus-10-06-2020

capacity of mega infrastructures has played a significant political role, precisely due to this technical justification. Hydroelectric dams, for example, have been defended in the political arena as key for national sovereignty in Paraguay (Folch 2015; 2016), and the expansion of road networks in previously unopened spaces, conjuring images of state integration, has taken centre stage of political agendas in Perú (Harvey & Knox 2015). As Hetherington and Campbell (2014) suggest, the language of infrastructure capturing the imagination of developmentalist Latin American governments has expanded into describing other aspects, such as the building of human capital and regulations. Yet, as Harvey (2014:282) points out, 'large-scale material structures (transport, energy, and communications infrastructures (…) remain central to state practice' as they 'support particular modes of productivity in frontier zones' (280). Therefore, I suggest that the productivist discourse finds a particularly strong match in energy infrastructure: it is the starting point that makes all other productive activities possible.

Pressure from different sides to resume official evaluation procedures under pandemic conditions could be observed not only in Chile. In Mexico, for instance, highly controversial projects like the so-called 'Mayan Train' (a new train line in the Yucatán peninsula) were defended by president López Obrador as it would supposedly 'reactivate the economy' by creating new jobs (Hofmann 2020). This case shows a similar confluence of clashing concerns and priorities. As Hoffman (2020) suggests, the Mexican government 'is taking advantage of the COVID-19 pandemic, as it can more easily impede injunctions issued against megaprojects with the argument that the works cannot be stopped because they are now a "national priority"' (49). The central role played by renewable energy generation had also previously been used for wind farms in non-Covid times (see Chapter 2) – a narrative relying on their 'ecoauthority' (Howe 2014).

In January 2020, the Sustainable Projects Management Office (*Oficina Gestión de Proyectos Sustentables* - GPS) signed an agreement with SEA, which provided SEA with monetary resources, so that it could work on 'becoming more efficient'. The GPS office (today known as the 'Big Projects Office', *Oficina de Grandes Proyectos*) was one of the main creations of Piñera's second government. It was established to face what was pejoratively referred to in the media as 'permit-ology', *permisología,* which can be loosely translated as the science of dealing with permits or 'red tape'. It was created in 2018 as part of the

government's pro-investment agenda. GPS was meant to offer support and guidance to investors dealing with permit procedures, including those of environmental nature, helping them understand and navigate through the required paperwork. It has also suggested 'anti-bureaucracy' measures and advice to other public bodies on how to be more efficient in their work.

All these elements can be understood as integrating the existence of 'the economy', and the Chilean national economy as a discursive field (Appel 2017; Mitchell 2002). During the first months of the Covid-19 crisis, the monitoring and expert debating of economic indicators gained prominence, on par with reports on the state of health services. At a time of unprecedented instant means of communication, such as social media, and with most of the people in my field being exposed to TV more than ever, the impact of these announcements in shaping conversation was palpable.

President Sebastian Piñera, whilst addressing the nation during his annual speech in July 2020, contributed to this narrative when declaring a Special Plan for the Simplification of Procedures and Expediting Permits in the name of 'boosting and accelerating' the 'recovery of our economy'. Simultaneously, the first official post pandemic reactivation plan (*Plan Paso a Paso Chile se Recupera*) was also announced, which included a package of employment subsidies, as well as larger public investments in infrastructure projects. This final element of direct public involvement, however, was eclipsed by the need of removing obstacles to private investment. In continuation with the pre-pandemic programme of economic reforms, the private sector was once again positioned as the one full of potential and 'the motor of development' (Appel 2017:310).

Unaware of the GPS and SEA agreement until it was disclosed in the news, this action was denounced publicly by FENATRAMA (the National Federation of Environment Workers, *Federación Nacional de Trabajadores del Medio Ambiente*) and ANFUSEA (the smaller union of SEA, *Asociación Nacional de Funcionarios del Servicio de Evaluación Ambiental*), describing it as a threat to their autonomy. 'It is particularly worrisome' says the declaration:

> That the intervention proposed in the agreement is made to speed up the processing and not the quality of the environmental assessment; and it is particularly worrying, since this intervention would demonstrate that, for some authorities, the environmental assessment of projects would be a

> mere formality or an obstacle that must be quickly overcome for immediate economic gain (FENATRAMA 2020:3).

The union declared their opposition to the very existence of an office like GPS. In doing so, they articulated a different public good to be defended, namely, a 'technical, professional and pressure-less' (as put in the same declaration) environmental evaluation. As defended by the union, the existence of this mode of work was part of their rights as workers. Yet, the union failed in undoing the agreement, and much less in deleting the existence of the GPS office (which still existed in 2023, under a new name).

This was the setting in which, slowly, under the direction of SEA, the pause to the evaluation of projects was lifted in the second half of 2020. As a public body, SEA is particularly well positioned to consider the contradictions of prioritising productivity, as the idea of an efficient environmental evaluation contains the modern promise of balancing environmental and economic goals. It works on the supposition that taking care of the economy does not mean neglecting care for the environment. However, the contradictions of these assumptions had to be actively and continuously maintained by the SEA workers themselves.

In and against the state: the activist bureaucrat

Mechanisms like EIAs were contested in Chile long before the pandemic. Still, in the context of Covid-19, the SEA's role in taking care of the 'human environment' (*medio humano*) – the way in which people are incorporated into projects environmental evaluations – disclosed new tensions between caring for people and caring for the economy. In this section I suggest that the serious consideration of people's social and emotional circumstances is an extension of SEA workers' long-standing concerns for improving relations with communities participating in environmental impact assessments through citizens' participation processes.

The anthropology of bureaucracy has explored how the often contradictory and ambiguous requirements of policy must be balanced at the 'street level' of everyday encounters between civil servants and those that interact with them (Lipsky 1980; Gupta 2006; Best 2012). This often includes important emotional labour and use of personal judgement in the definition of the moral quality of potential recipients of state action (Graham 2002, Fassin 2011). Sometimes, as in the case I describe here, workers can vocally speak in favour of more caring

approaches to their work and take an openly activist stance (Hetherington 2019) against official political positions.

In the second half of 2020, workers from SEA and other related public institutions that also compose FENATRAMA made clear their intention of keeping the suspensions first introduced at the beginning of the pandemic. In the context of a vibrant scene of online workshops dedicated to re-thinking environmental institutions, which took place as part of the ongoing constitutional process, the SEA's position received huge interest among my activist interlocutors. SCAC, the Civil Society for Climate Action platform, had organised a campaign against the translation of citizens' participation into online means (Figure 20). In an event coordinated with SCAC, which I attended in September 2020[56], the president of ANEF in Magallanes, and member of FENATRAMA, Doris Sandoval, summed up this debate as follows:

> The organisations we are supposed to call upon, *juntas de vecinos*, [local organisations that represent the communities and are key contact point for participatory processes], are organising solidarity community work. This is what grassroots leaders are doing (…) they are organising soup kitchens *(ollas comunes)*, collecting food, organising solidarity campaigns. Families are living moments of tension, sadness. People are mourning. There is distance from family members that are infected. There is overcrowding and increase of violence within the family.

Doris voiced their resistance to push for participatory processes that they thought could not take place in any significant way. She rejected these emotional (*estado emocional y anímico*) and territorial circumstances[57] to be considered as 'a fact of the matter' ('*un hecho de la causa*', something that could not be discussed and cannot be changed) or background information, as they were being pushed from their superiors, in an aim to resume participatory processes as soon as possible. For Doris, their opposition transcended the mere health risk of Covid-19 infections during in-person meetings and appealed to ethical standards. With grassroots communities taking on so many additional tasks for sustaining life

[56] The video is available in the FENATRAMA webpage https://www.fenatrama.cl/conversatorio-scac-anef-participacion-ciudadana-1/ quotes here are edited for easier reading.

[57] At the moment of the webinar, Magallanes was a hotspot of Covid-19 infections.

during the pandemic, adding the evaluation of projects seemed inappropriate and not attuned to the emotional atmosphere.

Figure 20: part of SCAC's campaign to stop the use of online meetings for participatory processes in environmental evaluation. It says 'No to telematic participation! Citizen's participation is a right of people, being essential to environmental decisions. Doing it online does not guarantee this right nor fulfills minimum standards'.

Doris' discourse rejects the imposition of the productivist priorities explained in the previous section. It also embodies a form of affect and care that is not completely new to Chilean forms of neoliberal governmentality. Rojas Lasch (2018, 2019) explains this in her ethnographic examination of the programme 'Bridges' (*Puentes*), which sought to 'integrate' those living in extreme poverty into state services. This was done through direct work with individual families that were visited and advised for a period of two years. According to Rojas Lasch, the intimate interaction of the social worker and the beneficiary inside the house is key in the practice of social assistance, which includes the targeting of 'the poorer' in society. By visiting the house, workers participate in the intimate families' lives, recognising their emotional suffering and dire material conditions that justify discretionary beneficial actions from their position in the state. While in this case of SEA workers the state did not physically enter the house, the references to the family point at a similar responsibility to recognise the domestic setting of suffering and disruption.

At the National Union of Public Workers (ANEF) summit, Doris recounted, the union members had created a protocol with three 'filter' questions that would help them assess whether to go ahead with any participatory process. Those

questions encompassed pertinence, context and empathy. They helped public workers formalise their ethical concerns regarding the wellbeing of potential participants in face-to-face meetings, thus take seriously the public emergency triggered by the pandemic. There was an overwhelming sense that these standards, which had emerged from their own 'street-level' professional experience, could not be satisfied. It was also clear that carrying out evaluative processes under the circumstances would reinforce already existing social inequalities. However, as Doris noted, the union's proposal for evaluating the appropriateness of a return to in-person participatory processes was never considered by the authorities of SEA.

As 2020 came to an end, the participatory period for the Surelec line was extended twice, and the deadline for submitting comments was prolonged by two months, until April 2021. The legal decrees that announced these extensions provided the reasoning behind the decision to temporarily suspend the in-person participatory events, incorporating the input of the workers carrying out the participatory meetings. One of the documents explained in detail how, when the council of Ancud moved into the strictest level of lockdown in December 2020[58], and after phone conversations with representatives from the *juntas de vecinos*, SEA workers had decided to suspend the meetings. The participatory element of the evaluation, they concluded from this attempt, could not be fulfilled without the key in-person encounters.

The use of discretionary bureaucratic capacities was a recognition of the agency that those interacting with the state via environmental evaluation processes enact when trying to be 'seen by the state' (Street 2012). By refusing to accept the terms of participation in the context of strict lockdowns and being open about the distress of the members of their communities, *dirigentes* like presidents of *juntas de vecinos* sought to elicit a *caring* response from the state, even when mandates to proceed as usual seemed inescapable. As an ethical intervention (Pia 2017; Bear 2015) it was also a way for SEA workers to exert their limited, but effective,

[58] For example, one part of the decree extending the suspension explains: 'Sector San Antonio de Huelden, Junta Vecinal San Antonio de Huelden: Meeting held by telephone with the president of the JJVV San Antonio Huelden on meeting held with the president of the JJVV San Antonio Huelden on 16- 11-20, it was agreed to call him to establish a date to go door to door to his locality. to his locality, it could be the week of November 23rd to do the activity. (week that Ancud entered quarantine)'

power of stalling the resuming of activities. Following Pia (2017) and Bear (2015), these unofficial and temporal solutions keep the contradictory goals of the state's work under austerity regimes in tension. Postponing a participatory meeting, as in the case at hand, works as the harnessing of a 'minor bureaucratic ambiguity' (Hetherington 2020:139) to achieve a momentary and fragile triumph of what SEA workers perceived to be the common sense of the people potentially affected by the new transmission line.

SEA responded to the concerns expressed by Chiloé Libre and other organisations – which converged with those expressed by Doris and the public workers' union – with new protocols for ensuring the safety of in-person meetings. Furthermore, SEA confirmed its commitment to using more inclusive, digital means of communication whenever possible. This declaration – shared in the institution's internal news bulletin – ostensibly acknowledged the ethical conflicts expressed by public workers, such as Doris, who were in charge of implementing the participatory processes. However, it urged to resume evaluation processes more. 'We must be versatile enough to progress as society', said the direction of SEA, when the decision to resume in-person, as well as online, participation was announced (SEA 2020:12). The hybrid modality relied heavily on digital media, including online meetings. However, this did not address the matter's essence: the highly stressful situation, requiring all the people's energy and the attention of local organisations. Online participation, as recalled earlier by Doris, 'does not fulfill methodological or ethical standards'.

In Pia's (2017) description of ethical fixes among water bureaucrats in China, their actions seem to be complicit with the Chinese State's project of 'perpetuation of a regime of divestment from and dispossession of poor rural communities' (132). In contrast, FENATRAMA interventions in this case must be situated in continuation of their wider defence for a different approach to bureaucratic environmental evaluations. In 2015, FENATRAMA had been key part of the creation of a paraofficial document – as described in Chapter 4 – on the reformation of the Environmental Impact Assessment System, SEIA. The drafting of the alternative document had followed a process similar to the case of energy plans. As in the case of CADE (Energy Presidential Commission) in 2011, in 2015 the government assembled a group of experts called Presidential Advisory Committee, *Comisión Asesora Presidencial*, CAP. It was asked to address what

was perceived as an increasing state of crisis and loss of legitimacy of the evaluation process done by SEA. Not being invited to the process, ANFUSEA created a Citizens-Union-Parliamentary Commission (*Comisión Sindical Ciudadano-Parlamentaria*, CSCP) as an alternative space*,* gathering other social actors also excluded from the official commission.

The official CAP committee consisted of representatives of major trade associations and enterprises related to issues like construction, energy and salmon farming, several ministries' representatives, private consultants, and academic experts. According to Aedo Zúñiga and Parker Gumucio (2020), their proposal reduced the role of citizens' participation in the evaluation process to a setting for collecting information. This made participants in the process an 'other' that 'can be heard to reduce or prevent conflict, but without involving them in policy design and decision making' (Aedo Zúñiga & Parker Gumucio 2020:387). In contrast, CSCP's final document presented a much more radical take on what was needed to reform SEIA, tackling most of the blind spots and issues that have long been known to cause trouble in the engagement of workers with the communities affected by projects. Certain proposals of the final document included, for example, an incorporation of intangible and social impacts, whilst giving both the communities participating in Citizens' Participation processes and workers at SEA, the ability of fully rejecting projects (CSCP, 2016). These reforms, it is worth mentioning, provided an important discussion ground on environmental issues during the 2020-2022 constitutional process.

In their intervention as part of CSCP, the bureaucratic elite of SEA openly took side against the political authority of the state, instead aligning 'with actors that challenge the State, defending their territories and questioning directly the political and economic model in place' (Aedo Zúñiga and Parker Gumucio 2020:380). The figure of the activist bureaucrat proposed by Hetherington (2020) that he uses to understand the governance of soybeans, becomes relevant to realise the dual character of the intra-state action. In Paraguay, the Citizen Participation Unit workers can enact a 'tactical sovereignty' when, for instance, they define a road as a *camino vecinal,* a demarcation that has consequences for the regulations that the soybean producers must abide by. In the case of energy developments in Chiloé, activism could take the form of either a more circumstantial, tactical form of bureaucratic authority – such as when deciding to

extend participatory processes – or of an official challenge to governmental decisions implied in the making of paraofficial documents. The final CSCP report was delivered to the authorities, with the group having an opportunity to present their suggestions to the official CAP. Yet, the final reform to SEIA did not include any of its differing points.

The case of the Citizens-Union-Parliamentary Commission shows that the multiple layers of bureaucracy and policy are not monolithic. Those who direct policy rely on convincing those who are responsible for enforcing their orders that there are reasonable grounds for their methods. Exceptional circumstances, such as Covid-19, accentuated tensions that had long been problematised in politicised spaces like SEA unions. Even though the proposal of CSPC did not displace CAP's recommendations, the work of producing their paraofficial document made the tensions of the state's actions tangible and explicit. The alliances that created the CSPC's proposal continued in time and were, among other things, behind the online event in which Doris defended the suspension of the participatory processes.

By interviewing one of the CSPC's participants I learned that making their ethical disposition as workers of the state explicit came not just from their concern for the potential environmental impacts of the projects that were being evaluated. It also reflected their discomfort at having to confront community leaders and organisers in the context of participatory events, making them the direct, embodied link between citizens and the state. This position exposed to both expressions of anger and disillusionment and, in the context of the pandemic, risks to their physical well-being.

These contradictions navigated by SEA bureaucrats during Covid-19, were grounded in much longer disputes that crystallise the contradictions of embracing different priorities in public action. The tensions I saw in Chiloé, are to some extent a component of a wider national arrangement, not unique to the insular territory. By highlighting their concern for the people they encounter in their work, SEA workers – at least those represented by the union – continued their ethical project of expanding the boundaries of what needs to be considered in their work as civil servants. And while at the institutional level they did not win, nonetheless they found a way of pushing for what they believed was right to do.

Conclusions

In her study of purity and contradictions' rules, Mary Douglas (2002) suggests that 'perhaps all social systems are built on contradiction, in some sense at war with themselves' (141). In this chapter, I have suggested that the contradictory mandates that made suspending and resuming participatory processes in environmental evaluation in Chile so contested were an acute manifestation of a longer conflict of two principles: taking care of people and taking care of the economy. In the Covid-19 pandemic context, taking care of people mainly took the shape of physical isolation and the suspension of productive, in-person, activities. The care of the economy was formulated as a need of increasing productivity, with a central focus on infrastructural investments such as electricity transmission lines.

The conflict comes from the fact that these two routes are, in most cases, not presented as divergent. Indeed, for those advocating for the primacy of productivity, the provision of work and the generative capacity of energy infrastructures are necessary steps for delivering basic services, such as home electricity (Smith 2019). The appeal to the need of 'providing', as stated at the beginning of this chapter, naturalizes the commodified arrangements that link access to money and employment with access to basic livelihood sustenance. Such tensions become tangible in everyday interactions: when Surelec finally reached Carla's community in 2021 and stablished a dialogue to gather their opinion as a Huilliche community for the evaluation of the new transmission line, their conversation started by reminding them that they had been the ones delivering the food parcels months before. While this was intended as a token of good will, it only provoked a cold reaction from the community members, that reminded the company's representatives that no one had asked them for the food.

Still, I am also certain that other communities felt much less conflicted about this gesture. Considering these nuances, I suggest that the form of productivism and construction of 'the national economy' I have developed so far is not the patrimony of certain institutions – a monolithic 'state' or a uniform 'private sector'. Rather, it permeates conflicts and tensions at all points where decisions must be made, and positions defended. SEA workers, I have described, create ethical

fixes to navigate these contradictions ‘as part of this complicit and affective rapport with their service recipients’ (Pia 2017:126).

There was a similarity between the Chiloé Libre campaign efforts to expand understanding of what area was affected by the new electricity transmission line and SEA workers pushing for the consideration of the distress caused by the pandemic to postpone participatory processes. Both question the bureaucratic containment and rendering technical of energy and infrastructural projects more widely, thus opening spaces for awareness raising.

I have approached the early times of the Covid-19 pandemic as a moment of intense politicisation. The stringent focus on direct life protection was rapidly exhausted after the first four months of the pandemic. The ultimate prevalence of productivity as a defining criterion for decision was the outcome of a conflict of spheres of value (Graeber 2001). However, this outcome was far from inevitable. The pandemic opened a space of serious dispute and reignited previous contradictions in the organisation of work, such as those at the heart of environmental evaluation processes. Such value struggles continued in 2021 and 2022, as the new Chilean constitution was being written.

Among the many issues that received additional attention in 2020 and 2021 due to the pandemic in Chile, accelerating the energy transition was presented as more urgent than ever. The constellation of meanings around work and economic activity that were revealed during the early days of Covid-19 set the ground for unprecedented and ambitious energy policies and energy planning processes. Both the creation of a national Green Hydrogen Strategy and the 2023-2027 Long Term Energy Plan participatory process took place during this period, with both being further examined and evaluated in Chapter 6.

CHAPTER 6: THE FUTURE OF ENERGY ABUNDANCE

> ‘Green hydrogen is not just a business. It is about exporting well-being for humanity’.
>
> —Dr. Erwin Plett, engineer, in an online conference ‘Congress of the Future’, May 2021.

In March 2022, the Energy Ministry of Chile published a memoir of the incipient efforts to make green hydrogen ‘a country project’ (*un proyecto país*). The document explained the moment in which ‘the penny dropped’ for Energy and Mining minister, Juan Carlos Jobet. It happened at the time when the 2019 Long-Term Energy Planning (PELP) estimated the national potential of producing electricity with renewable energies as 70 times over the current energy matrix. Jobet explains:

> When I saw that figure, I realised the obvious: we were never going to use that much energy in Chile; and with the advance of technology, it was likely that capacity would continue to increase. Today, in fact, the figure is said to be 80 times. In other words, Chile could build renewable power plants for 80 times the capacity of the current electricity system. What do we do with that? (Ministerio de Energía 2022a:7).

In this chapter, I analyse the state-led visions of Chile’s future of energy through an examination of the green hydrogen policy and energy planning processes. These visions take their cue from a prevalent discourse on productivism, revitalising and adapting it to emergent political and ecological agendas. In doing so, I describe how instances of participatory energy policy constructed ambitious and optimistic notions of abundance and potentiality. This story of potential energy abundance compiled a re-reading of the present as an unrealised – or ‘wasted’ – opportunity and created a sense of urgency around resources waiting to be exploited (Li 2014; Gidwani 2013). Through the planning processes, my interlocutors and methodological guides both embraced the language of finance as a source of meritocratic order (Ho 2012), advocating for hydrogen and the rapid implementation of renewable energy infrastructure as a national moral imperative, and part of an imaginary of planetary improvement (Goldstein 2018).

Starting in mid-2020, in an effort led by the energy minister, Jobet, there was a sudden surge in calls to create a green hydrogen industry as a shared, national priority. The initial disruption brought by Covid-19 had slowly given way to

optimistic conversations about the 'reactivation' of the economy (Chapter 5). Simultaneously, the prospect of having 'cheap energy', thus strengthening the national economy, replacing fossil fuels, and becoming a world leader in renewable energy production, made hydrogen an irresistible focus for all energy debates in Chile. The quote at the beginning of this chapter is a statement from one of the many online public events, that gave green hydrogen central stage. It reveals the deeper sense of moral duty that this potential abundance presented for Chile as a single, unified political community; with this moral agenda being developed in tandem with a wider participatory process for national energy planning. To unpack the rapid irruption of hydrogen as a story of (yet to happen) success, therefore, requires moving beyond the technical details of its convenience and feasibility. Here I incorporate the role of internal divisions and aspirations of both people and territories inside the national boundaries. At its core, as argued in this chapter, the promise of abundance of this new industry required the re-writing of social difference.

I first examine the launch and initial debates around green hydrogen production, inaugurated in Chile in 2020. The promotion of hydrogen relied on a 'no time to waste' discourse that presented a wider need to accelerate an energy transition. In the discursive field that I explore in this chapter, green hydrogen was both a technology and a 'resource', with utopian, yet conservative, possibilities (High 2022), often also referred to as a 'source of energy'. This label of energy 'source' must be qualified early on: hydrogen does not occur naturally in deposits available for extraction and use. Rather, it is a carrier of energy that can be obtained in multiple forms, including the 'green'[59] variation relevant for my analysis. The colour labelling comes from a climate-centred concern: of all the varieties of hydrogen, green is the one that is produced and consumed with no greenhouse gas emissions.

In elaborating this topic further, I engage with the anthropological literature on resource-making, as an open-ended, fragile and contested process (Ferry & Limbert 2008; Richardson & Weszkalnys, 2014; Fent & Kojola, 2020). As such,

[59] The 'green' of green hydrogen comes from the process of synthesis: the application of electricity to water (hydrolysis) creates hydrogen and oxygen. When the electricity comes from NCRE it is considered 'green'. Hydrogen can also be extracted from fossil fuels like gas, and most of the hydrogen produced today comes from those 'gray' sources as they are much cheaper.

the framing of something as a resource, is in itself a dialectical process of value definition and appropriation (Franquesa, 2019), which in this case is reflected in the wider nature gaze – the 'force of the wind and the sun' – that is called in to sustain the creation of hydrogen. I focus on the affective dimension of resource extraction, and the unstable senses of hope and duty that the expectation of extraction provides (Weszkalnys, 2016). By exploring 'the apparently excessive affective responses generated by resource extraction', I approach affect 'as one force among many that give economies their specific shape, while also being shaped by them' (Weszkalnys 2016:128).

In the second section of this chapter, I show how financial language, partially detached from the particularities of energy as a service, merged effortlessly with expectations of economic growth in the context of the participatory element of the PELP process. By using storytelling in planning (Leins 2018; Beckert & Bronk 2022), different sorts of people and places, together with their 'natural disposition', were reduced and subjected to their 'productive vocation' by a mix of public, international and private actors, and institutions. Simultaneously, the definition of uneven geographies through planning and mapping – particularly under the land planning figure of 'energy development nodes' (*polos de desarrollo energético*) – made the expectations of scalability, that sustain the viability of capitalism into the natural world, explicit (Tsing 2012). It also underpinned the re-drawing of energy potentiality boundaries and zones in new maps that, by circulating widely, worked as a technology of the imagination in the labour of speculating about the future of energy (Bear 2020; Weszkalnys 2015). The notions of abundance, potentiality, and cheapness that surround both the development of renewable energies and green hydrogen in particular, came to be increasingly entangled with financial language to ground ecomodernist and aestheticised visions of the future (Ulloa 2023).

Throughout this chapter, and in energy and hydrogen policies more generally, finance appears as a language and an approach to the world, however with very little actual allocation of resources. As described in Annex 1, the role of the state in energy generation, transmission and distribution in Chile is minimal. The only notable involvement related to the topics of this chapter was at end of 2021, when the Chilean Economic Development Agency CORFO (*Corporación de Fomento de la Producción)* destined 50 million dollars to 'finance and leverage green

hydrogen projects in Chile' (CORFO 2021), even though the money was provided by the private company, SQM S.A. This timidity in public investments explains this chapter's relevance of strategies (as explored in Chapter 5) to *attract* private money to realise the imagined future of energy abundance.

'The Saudi Arabia of renewables '

Green hydrogen was a disrupter of the energy agenda in Chile. When I directly asked the Energy Foresight and Policy Division (*División de Prospectiva y Política Energética*) workers about hydrogen during an interview in early 2020, they explained that this versatile synthetic fuel could be used as replacement of gas and oil. However, its synthesizing through renewable energies – that is, *green* hydrogen – was still regarded irrelevant due to its high production cost. It was being considered, I was told only for niche industries, such as mining trucks, as mining companies could conveniently produce their own hydrogen on site. The launch of the first National Green Hydrogen Strategy draft in June that same year, was therefore surprising. It gave a staggering projection to the production of this fuel across the country. From the start, green hydrogen was presented as an opportunity for a new export-oriented productive sector. This 'fuel of the future' (Diario Financiero 2021) was highlighted in energy-related outlets for its chances of decarbonising energy-intensive industrial processes that cannot be electrified and needed fuels similar to the familiar fossil propellants. Initial viability studies were carried out in close collaboration with the German agency, GIZ, and based on an exploratory assessment made by the global management consultancy firm, McKinsey & Company. Their work identified Europe as the key potential market for Chilean green hydrogen.

The technical estimates of potential production made at this early stage of the strategy's promotion were subsequently disseminated in a myriad of topical forums, panels and summits aimed at accelerating and securing the desired private investment needed to realise these projections. The Strategy projected that, by 2050, Chile could have renewable infrastructures capable of producing 300 GW of electricity for hydrogen synthesis, of which the majority would be exported in transatlantic ships (Ministerio de Energía 2020). To understand the scale of this projection: in 2023, Chile's non-conventional renewable energy generation capacity was around 12 GW, with the other 20 GW coming from either hydroelectricity (8 GW) or fossil sources (12 GW). This grandiose visualization of

future infrastructure was based on the assemblage of different renewable energy potentials scattered across the country yet concentrated in the desert in the north (more than 1,600 GW of solar energy) and in Patagonia in the south (191 GW of wind energy). These large estimates are the bedrock of green hydrogen's economic viability: an industry smaller in size would simply not achieve the economies of scale that are necessary for green hydrogen to out-price its 'dirtier' (and cheaper) fossil fuel equivalents. The viability also relates to the 'green hydrogen incurring [in] significant energy losses at each stage of the value chain' (IRENA 2021:24) that some calculate as being as high as 75% from production to consumption (Turiel 2020).

Following the initial launch of the hydrogen policy, two characteristics became regular talking points: first, a sense of what Svampa (2012, 2018), drawing from Bolivian intellectual René Zavaleta, calls '*eldoradismo',* which crafted a similarity between hydrogen and oil; second, the creation of a moral duty narrative for Chile, to help decarbonise not just itself, but other countries, in the shared, global challenge of climate change.

In one of the most watched and attended hybrid hydrogen events of 2021, which was held by the prestigious think tank *Centro de Estudios Públicos* (CEP), Energy and Mining (two separate offices) minister – Jobet, presented the current Strategy in the way it exists as an official document: as a power point presentation*.* He invoked novelist Jules Verne's vision of a fictional future world in which energy would come from water (green hydrogen is synthesised from water), when presenting viewers with projections of production and demand for hydrogen in the future Chile. This reference was often used in the press to comment that, seemingly, such future was already here. Similarly, Clara Bowman, CEO of HIF – a global e-fuel company – ended her contribution to the event with an optimistic perspective of hydrogen development, voicing that when it comes to abundant energy resources, such as wind in Patagonia, 'we are sitting on gold'.

These statements echoed a *eldoradista* narrative, that is, the belief that Latin America is a place of exceptional natural resource abundance where new resource discoveries will inevitably lead to sudden wealth (Svampa 2018). Svampa's example of the emergence of a *eldoradista* narrative is the Argentinian frenzy of natural gas extraction through fracking, showing how national energy policy became single-mindedly focused on its realisation, before addressing any

safety concerns of exploiting this suboptimal hydrocarbon. As explained by Svampa (2018), the images of *El Dorado* have been used in other places in South America to refer to an abundance yet to be found, for example, in the (undiscovered) mineral richness in Ecuador (Kneas 2018). In Perú, the phrase of the country being 'a beggar sitting on a bench of gold' is an aphorism that invokes a similar imaginary, used to place 'the blame on Peruvians who seemed unwilling or unable to make effective use of the country's bountiful resources' (Li 2015:13). More recently, others have seen a similar approach to the exploitation of increasingly sought-after elements, such as lithium (Argento, Puente & Slipak 2017).

Following the *eldoradista* approach, the success of hydrogen is directly linked to the immense abundance of renewable energy generation, and so it becomes the cornerstone of expectations of spectacular technological change. The promotion of Chile's green hydrogen potential must be situated in a global wave of policy reports that gave overall optimistic perspectives for that industry in 2020/21. Renewable energy associations, such as IRENA (International Renewable Energy Association), have been pushing the narrative that 'the technical potential to produce green electricity – and, in turn, large amounts of green hydrogen – exceeds estimated global demand by several orders of magnitude' (IRENA 2022:13), thus the promise of abundance being at hand.

Unlike fossil fuel reserves, hydrogen is not really discovered, but rather predicted or foreseen (the word used the most in Spanish was this last one, *preveer*). Green hydrogen is an industrial product, a synthetic fuel, and not a natural and exhaustible resource, such as oil or gas. It must be manufactured, rather than extracted. To understand why I am making a parallel between hydrogen and oil, I go back to the issue of resource-making and the material, and temporal, dimensions that have guided anthropological literature on hydrocarbons. In the literature on resource-making the figures of mineral mining and fossil fuels exploitation have been dominant, both for their key geopolitical role (Hughes 2017; Mitchell 2009; Rival 2010) and for their protagonism in environmental justice struggles (Ballard & Banks 2003; De la Cadena 2010; Babidge et al. 2019 2019; Verweijen & Dunlap 2021). While oil, gas, copper or gold are often presented and discussed publicly as being 'always already' or 'objectively' available for extraction as 'resource reserves', ethnographic accounts of what

goes into the making of such certainty and measurements show how uncertainty and indeterminacy are central to the establishment of technical and financial viability (Weszkalnys 2015; Olofsson 2020).

In other words, although green hydrogen might not be 'directly' extracted as fossil fuels are, the emergence of both as resources relies on infrastructural, social and financial networks that are always contested and in the making. In this view, it is impossible to detach measurements and estimates of oil availability, for example, from the complex regulatory, political and affective network of actors and institutions that legitimise – at times temporarily – claims of having an exploitable resource. Nevertheless, the 'magical' quality of oil relies precisely in this reification, that circulates as a promise of an already existing, irresistible source of wealth, capable of transforming social reality on its own (Coronil 1997; Bovensiepen 2021).

The circulation of this discourse of oil as richness was an important reference point for my interlocutors and key actors in the green hydrogen scene. The sentence of Chile being 'The Saudi Arabia of renewables' appeared often in newspapers' headlines as a straightforward metaphor and explanation of the potential of hydrogen. I suggest that this mimetic move was an explicit attempt to position hydrogen as something 'nature-given', and therefore, easily available for use, in a way that reproduced many of oil's opacities (Coronil 1997). Initial attempts to frame hydrogen as an energy source were later amended. For example, the initial Strategy included the phrasing '*una fuente de energía'* to describe hydrogen and was corrected by comments submitted in the first round of citizen's participation. In that instance, a trade union federation's comments suggested the more precise term of energy vector. Despite that, the idea of an oil-like materiality of hydrogen, and the treatment of green hydrogen as a resource, was pervasive. Crucially, its abundance was sustained not in the form of proven reserves (such as oil) but of renewable energy potentiality. In the anticipation of such materialisation, the creation of new institutional bodies and figures such as the Chilean 'hydrogen ambassadors,' – that is, facilitators and educators of and for an industry that does not exist – functions as gestures (Weszkalnys 2015) to sustain this absence not as absolute and definitive but rather as a 'not *yet'.*

Paradoxically, while being presented as a climate solution, hydrogen's main strength came from its similarity with, and not its difference from, crude oil and its refined products such as diesel. The key similarity was a presumption of abundance, based on the imaginary of countries rich in oil, such as Saudi Arabia. The potential abundance of hydrogen comes from the wide availability 'of the wind and sun', that would make Chile able to export 'the cheapest green hydrogen on the planet' (Jara in La Tercera 2021). In this view, the economic viability of hydrogen derives from the territories that serve as its infrastructure. They are conceived as territories of cheap nature (Moore 2015, Franquesa 2019), which can be seized to strengthen the Chilean economy, while compensating for the country's lack of fossil fuels reserves. In the National Strategy, green hydrogen promises to replace the materials that made possible our 'high energy modernity' (Love & Isenhour, 2016) – that is: fossil fuels – not only in their caloric potential, but also their industrial use and logistical management.

The assumed abundance of green hydrogen also underpinned what the state agencies and hydrogen promoters portrayed as a moral duty to export it to other parts of the world. Hydrogen, it was argued, would help promote a new, greener, national productive identity. In this regard, the variety of *eldoradismo* transcends national enrichment, thus becoming an abundance that overflows to the whole of humanity. The exaggerated potential available in Chilean territory grounds generosity and responsibility towards the whole world for making a much-desired energy transition possible. In this case, resource nationalism – the state's pursuit of resource exploitation for the financing of social programmes – (Gudynas 2016, Marston 2019; Gledhill 2008) is, to some extent, surpassed, when the country's wealth is framed as humanity's patrimony.

Indeed, the imagined consumers of hydrogen were not the traditional targets of social policy – the marginalised or 'the poor' of the nation – but rather an imagined sophisticated overseas industry (very often explicitly German) that was 'in need' of green solutions. For example, in March 2021 a Memorandum of Understanding was signed between the Chilean government and the Rotterdam port, which was explained as reaching 'the door into European countries' that 'have the same ambition of being Carbon Neutral but lack Chile's strategic and natural conditions to achieve it' (Ministerio de Energía 2021a).

This affective focus on ‘saving the world’ as the impact of an emergent product – beyond profit-seeking – is at the core of so-called cleantech entrepreneurship, of which the quest for ‘virtually unlimited’ fuels, such as green hydrogen, can be considered an example (Goldstein 2018). Hydrogen was portrayed to offer (global) opportunities beyond the additional revenues it might generate for Chile. ‘We have a lot of Chile to spare. Let’s do something with it’, said engineer Erwin Plett at the 2021 version of *Congreso Futuro* – ‘Congress of the Future’, a government-sponsored event, organised by the senatorial commission on Challenges of the Future – as he presented a table comparing the potential of oil in Saudi Arabia to solar potential in Chile (Figure 21).

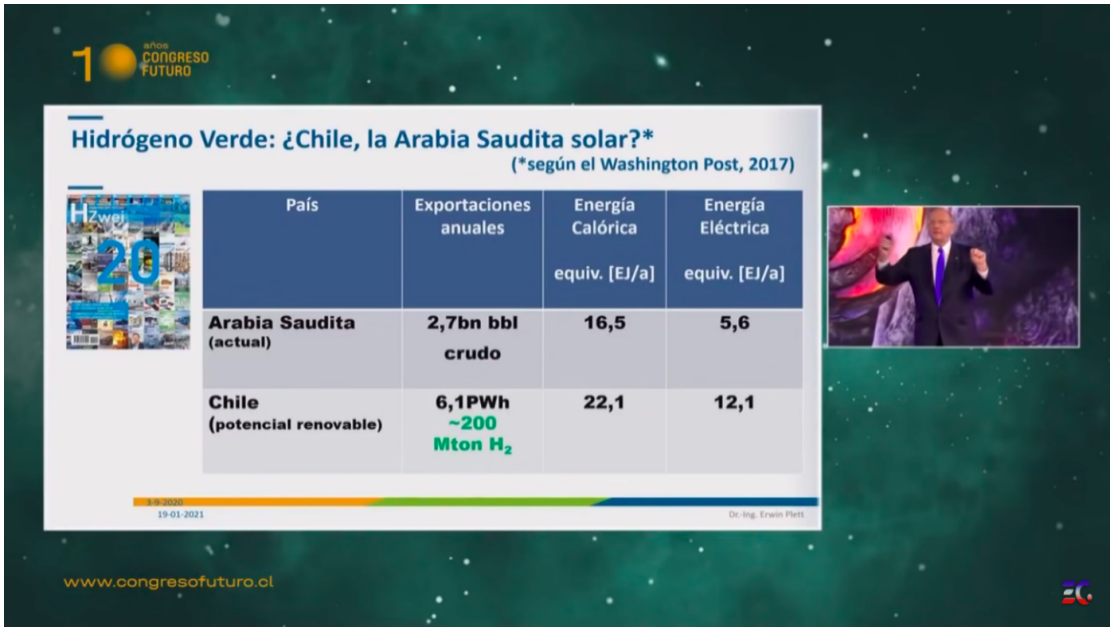


Figure 21: screenshot of presentation of Erwin Plett at Congreso Futuro 2021, one of the many instances in which green hydrogen was promoted in comparison to Saudi Arabia’s oil. The title of the slide reads ‘Green Hydrogen: Chile, the solar Saudi Arabia?’ and the table compares the current export of crude oil of Saudi Arabia with Chile’s renewable potential.

Dr Plett was drawing on his expertise as an engineer, however, he is also the Chilean H_2 Association’s director, as well as a former president of the Engineering Trade Association, *Colegio de Ingenieros.* In his presentation, Dr Plett repeated the forecasts of a plunge in green hydrogen’s price, which were carried out by financial analysis agencies such as BloombergNEF and the previously mentioned McKinsey, among others. His speech was representative of many others I witnessed in 2020 and 2021 and followed a similar script: green hydrogen would make Chile not only a world leader in exporting clean energy, but it would also enable the global greening of the economy, thus bringing a

‘potentially revolutionary shift’ to hard-to-abate sectors, such as transportation. This was often located in the urgency of facing climate change as ‘the biggest challenge of humanity’. In another event organised by *Diario Fianciero* in 2021, Alberto Precht – president of the Chilean chapter of Transparency International, said that ‘green hydrogen can be the copper of the future’ (Diario Fianciero 2021). While becoming *like* copper, hydrogen could also aid the making of ‘green’ copper. Concretely, green hydrogen could help reduce the carbon footprint of copper by replacing the fuel used by heavy-duty mining trucks, thus enabling the de-fossilization of the extractive process.

This potential, positive role of green hydrogen built a narrative of a self-reinforcing ‘green loop’: copper can be green (by making mining ‘greener’ or less polluting), however, copper is also necessary for a ‘green transition’. This imperative was articulated more explicitly in the constitutional convention that took place in early 2022. ‘Chile’s copper has a mission’, stated one of the convention representatives, concerned about potential new barriers to mining that the new constitution might impose. He referred precisely to the indisputable role of copper as part of renewable energy infrastructures, something that provoked displeased responses from the representatives of the regions affected by the consequences of mining. This reference to copper was intended to connect with a historical memory of national identity – Chile as a 'mining country' – that conjured up familiar images of prosperity and productivity. (Larraín et al. 2014; Szolucha 2018).

Neither the past-oriented connection to oil nor the future-oriented relation to copper are accidental. Both refer to an imaginary of productivism that connects technical and professional expertise with a duty of care towards others, now in the shape of an expected demand-led, rapid transition into ‘clean’ infrastructures, such as battery-powered cars (Kneas 2020). Green hydrogen is introduced into the service of ‘a world that needs copper’ (Kneas 2020:271). The assemblage of prognosis around hydrogen was an attempt to present an inescapable future, based on a specific possibility of care for both the economy and the planet, enabled by unprecedented energy abundance. This enclosure of the future (Jaramillo & Carmona 2020) is built on the use of ‘narratives and practices that claim control over processes that are essential for the continuation and generativity of life, which, therefore, claim control over the future’ (Jaramillo &

Carmona 2020:14). Such temporal enclosure, as I present below, is intimately related to a spatial re-drawing of the landscape in productive terms.

With the role of people like Dr Plett the developments of green hydrogen in Chile also reinforce the relevance of the 'rule of experts' (Mitchell 2002) in neoliberal governance, as explored in Chapter 5. In the case of hydrogen, there was a convergence between private energy associations and public figures, such as senator Guido Girardi, an outspoken supporter of green hydrogen and the intellectual father of both *Congreso Futuro* and the senatorial commission Challenges of the Future. The way green hydrogen was promoted by the state, international development agencies, public intellectuals, and potential investors in 2020 and 2021, make it an exemplar of a cosmology of unbounded supply and the dream of the economy's dematerialisation. This is, at the same time, in continuation with the promise of eternal expansion of 'the economy', inaugurated by the global ascend of oil (Mitchell 2011). Paradoxically, this also makes green hydrogen a quintessential unimaginative technology[60], as it can only aspire to sustaining everything as it is today, with no substantial change, and with no need to adapt significantly to the end of an era of oil[61]. In this perspective, the future can only be the reproduction of the present.

Most of the affective work around hydrogen focused on enabling a possible imagining of the energy transition as one where familiar and convenient fossil arrangements could be maintained, while still avoiding climate breakdown. Copper, one of Chile's most important mineral resources, would play a key role in this process. The reassurance of the processes not needing to change was the only path for reaching consensus. This expected conservative revolution holds 'the promise of a perpetual present, extended indefinitely into the future' (Goldstein 2018:54) and can be understood in similar terms to what Hong (2020) asserts in regard to the emergence of a 'data-driven society' – 'the depoliticization of technology combines recycled ambitions of a brilliant future with a certain

[60] Following the idea of technology of the imagination, it is possible to find other kind of collective projects around hydrogen, but not in Chile. An interesting case is community-led hydrogen in the Orkney archipelago in Scotland https://www.surfnturf.org.uk/

[61] While the technicality of this assertions of a logistical affinity between oil and hydrogen is often exaggerated, it was repeated among the supporters of hydrogen.

political and social conservatism: everything can and should stay the same, just faster, cheaper, and easier. No surprises, only upgrades.' (Hong 2020:195). In the case of the hypothetical success of green hydrogen, the promise adds: with no carbon emissions.

Overall, the 'resourceness' (Gilbert 2020) of hydrogen resembles the expansion of the 'conventionality' of hydrocarbons into other carbon-rich materialities, that are anticipated as replacement of traditional fossil fuel sources (Kama 2020). In the assemblage of political, technical, and economic expertise, hydrogen is assessed in its '*potential* to be converted into liquid hydrocarbons upon technological manipulation' (Kama 2020:227, emphasis in original), just like the heterogeneous materials labelled as 'unconventional fossil fuels'. In its versatility, hydrogen can be transformed into 'clean' fuels that can use the same – or slightly altered – infrastructure as gas and oil, such as pipelines and hydrogen-fuelled cars.

The promotion of green hydrogen that I have described so far, introduced a new temporal and affective landscape of urgency. Statements such as 'if we want to seize this opportunity, we are already late' and 'this is what is coming', were often the opening sentences before answering any questions from the audience that might shed doubt on overly optimistic forecasts, including, for instance, the serious concern over hydrogen loses over long distant transportation[62]. In these calls to action, a significant amount of the political work promoting hydrogen went into sustaining a left-to-right, upwards moving arrow of progress, to create a convincing case for hydrogen and similar technologies (Figure 22), thus making future demand cognitively accessible (Leins 2018). Such curves are typical of financial predictions and work as a 'simultaneously epistemic and affective object' (Zaloom 2009). Affectively, they are co-constitutive of what might be perceived – and has indeed been named as such by political activists – an *exaggerated* hope, much in contrast with other understandings of potential abundance that acknowledge the dangers of excessive enthusiasm and unfulfilled previous rounds of expectation (Weszkalnys 2016).

[62] Hydrogen is extremely fleeting, so it escapes from even the tightest container faster than any other element.

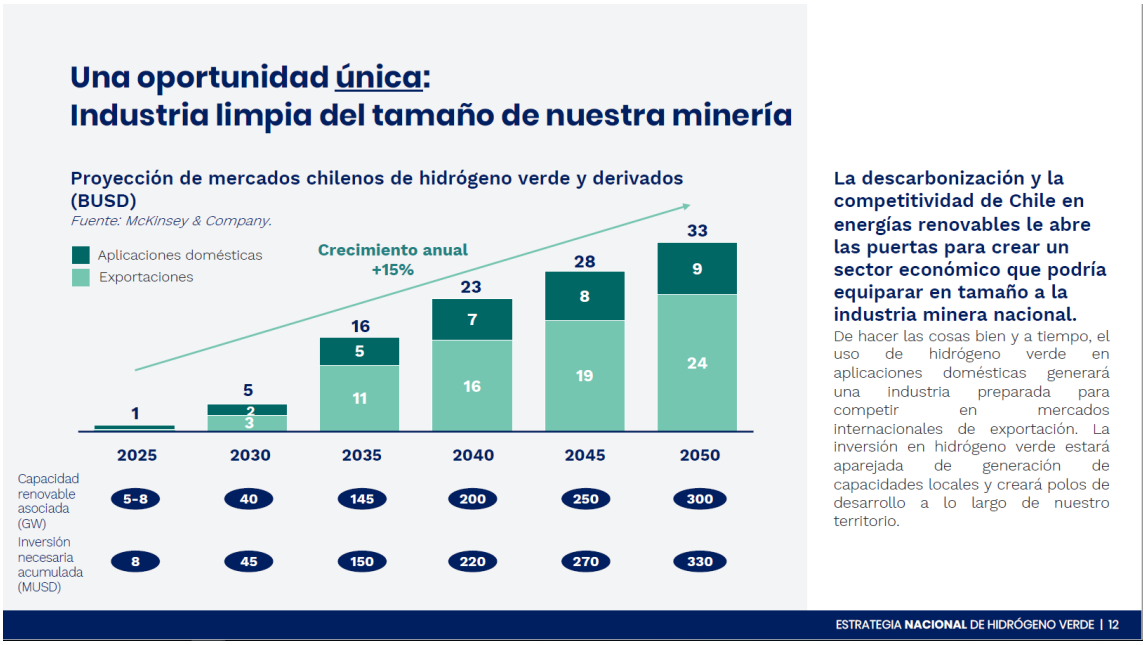


Figure 22: one of the pages of the Green Hydrogen Strategy that projects a rapid installation and expansion of a green hydrogen market. The title reads 'a unique opportunity: a clean industry the size of our mining'.

To understand what green hydrogen has achieved, even though at the time of writing there were virtually no large-scale projects committed, it is important to situate this energy carrier within the perspective of change in the wider national energy infrastructure. In the following section I describe how the energy ministry's planning process was not just a forecast of the future, but an active entanglement of past, present, and future for the creation of a specific, accelerated temporality of extraction (D'Angelo & Pijpers 2018).

'What are you willing to sacrifice?' modelling the future of energy

In this section, I approach the PELP participatory process that I took part in as an educational experience. I argue that it aimed both at transmitting a particular future history of energy as a relatable story and persuading Chilean citizens of their role as subjects in it. This process of planning can be seen as further cultivating a 'culture of energy' in Chile (Chapter 4) – a dimension that overshadows the quality of our inputs as participants, which was restricted to comments and reinforcements of an already narrowed-down set of possibilities. Drawing on anthropological approaches to financial markets, which see the success of forecasting grounded in its ability to tell persuasive stories (Leins 2018; Beckert & Bronk 2022), I will focus on the construction of specific narratives of future energy availability in Chile. Through this approach, 'imaginaries of the future become a central tool of resource allocation' (Leins 2018:12). This form of

futurework (Olofsson 2020) implies a mix of techniques, modelling, quantification and prediction, done by different professionals employed at a wide range of public (ministries, universities) and private (trade associations, consultancies, energy companies) institutions, whose boundaries are often blurred.

As explained in Chapter 4, participatory processes in Chile have been a recent innovation for addressing a perceived democratic deficit in energy planning. While the last round of PELP planning used a backcasting methodology (Alvial-Palavicino & Opazo-Bunster 2018), the 2021 version focused on the building of different energy scenarios and the determination of provinces (the administrative level between the larger region and the smaller councils) as energy development nodes. The overall objective of PELP is 'to project the country's energy demand and supply for different future scenarios, over a horizon of at least 30 years, so that they are considered in the electricity transmission system planning process, carried out by the National Energy Commission' (Ministerio de Energía 2021b:5). The participatory process was done mainly through quantitative methodologies that aimed to reveal, and later compose and summarise participants' preferences. Through the different stages of the process, I noted that the narrative of renewable energies potential closely resembled the scenario set in hydrogen promotion, and certain epistemic tools, such as particular maps, appeared in both spaces. In the three following subsections, I develop the role of (1) future scenarios, (2) mapping, and (3) the characterisation of energy development nodes, played in terms of creating a sense of potential future abundance. The realisation of such abundance needed the reification of 'the economy', the externalisation of the social and, overall, the rewriting of the colonial legacies of social and geographical difference, to make sense of a shared national project of progress.

Future scenarios

In early 2021, I joined the fully online participatory process[63] of the 2023-27 PELP, led by the Energy Ministry and a private consultancy firm *Gestión Social*, which

[63] The process was advertised online, through academic, and industry-related networks and mailing lists. There was no limit to the inscription, and the official number of participants was 706 (593 persons and 113 institutions). The individualised list of participants was not shared, but all people I heard introducing themselves in the breakout rooms were either researchers, or representatives of energy NGOs, or cooperatives.

was in charge of guiding us through it. The first Zoom session consisted of approximately 70 participants, gender balanced, professional-looking people in generic offices, virtual wallpaper or real. As stated in the online registration for the PELP 2023-27 process, we had been divided between 'academia', 'public sector', 'private sector', 'civil society' and 'consultancy', so that there could be 'shared language' for the debate. My perception of gender balance and, later, the affinity in language and topics I experienced, had been carefully crafted as part of the participatory setting. This highly segmented and controlled approach to our interactions set the tone to what kind of participation we would be asked to enact in the following sessions. Furthermore, it created a closed group (no new participants were allowed once inscriptions were closed) that would progress together in becoming participants of the planning process. As argued by Abram (2014:142), those joining participatory planning processes go through a procedure 'which involves initiation into both governmental technologies (how to be a participant) and project aims (learning to share the plan's ambitions)'. As the instances of participation were very compressed in time – covering only a couple of months – the decision of moving forward with a fixed set of participants was key for achieving the cohesion desired by the PELP team.

The first and largest part of the process's objectives, was to come up with four different future scenarios describing certain key energy parameters in Chile, such as, for example, gas substitution, closing of coal power plants, decentralisation, and climate change mitigation. The heterogeneity of topics and areas of work was used throughout the different sessions to force us to prioritise which topics we were to give our input on directly.

I want to focus on two characteristics of the process. The first, is that political decisions were presented as economic, and particularly, as *familiar* ones. The team illustrated what energy modelling was about through the idea of buying a house, which was presented as an experience known to many of the participants: 'Imagine you want to buy a house. What are you willing to sacrifice'? changing your kids' school? holidays with your in-laws?'. The appeal to a supposedly already available individual economic rationality in each of us was intended to serve as a vehicle for scaling-up from our individual household choices to the national economy (Mellor 2019). By providing examples of different saving strategies that would shape our decision of how much to borrow, or how long to

be in debt, the consultancy facilitators aimed at showing how different scenarios, expected and unexpected circumstances, as well as our personal preferences and priorities shape the way we make financial decisions – and how energy planning involved a similar kind of decisions. For example, when explaining the different trade-offs, we were told that 'moving to a more sustainable electric system will increase the price of energy'. This meant that preferring one goal meant worsening another variable, as much as we would like to privilege both.

This meant that the political element was both incorporated and externalised as an apolitical, external given. This was how an energy ministry worker explained the element of 'social acceptance of infrastructure', that could exist in their forecasting in 'low' or 'high' levels, but never disappear: 'it is like going to Amsterdam and not bringing a raincoat. I do not want it to rain, but it will most likely happen, so I must be prepared'. As it was explained to us in the first session, their forecasting of conflict around energy infrastructure in their modelling should not be read as a desire for it.

Participation relied on a methodology of 'casino' planning, that created a trivial and circular manner of making comments. Most of our participation consisted of the use of exercises of translating our preferences into numerical scales of urgency, likelihood or desirability of a given measure, or change, in the energy system. It was casino-like in the sense that it prompted our rationality through a limited pool of 'points' available to allocate – or 'bet' – to each subject, per round. For instance, in one round, divided in breakout rooms, we had to choose between different goals, such as 'technological innovation', 'regional integration' and 'climate mitigation'. The limited number of points available forced us to leave some of the goals outside the discussion. This use of prioritising, similar to choosing where to invest, first incited a self-quantification and objectification that was then extended to a societal scale.

Nevertheless, the work of quantification itself was not the planners' single interest. As we moved from the 'optimistic' to the 'pessimistic' scenarios, our facilitators were equally eager to listen to our justifications – our narratives – of why we had decided to choose the numbers we had chosen. We would often be reassured that both consensus and dissent from the majoritarian trends that emerged were valid. This shaped my own participation in the breakout rooms: I was often invited to share my allocation decisions, as they would often go against

the majority. When answering, I limited myself to the questions and tried to justify some apparently counter-intuitive decisions. For instance, I proposed the same closing date for all coal-based power plants, regardless of the economic situation. This was listened to politely, however, the Zoom chat later revealed how people thought this was an economically nonsensical idea.

Most questions were framed as truisms. For example, a better economic situation allows us to do better things; slower economic growth would make the transition out of fossil fuels slower, and so on. Figure 23 shows an example of these exercises, in which we were asked when it would be 'reasonable' to achieve the goal of having 40% of private cars being electric cars, considering the four scenarios we were building. Predictably perhaps, regardless of the people in the room, the aggregated forecasts showed that slowing down of the economy (the 'pessimist' scenario) would slow down desirable change, while an optimistic scenario would accelerate it. In this cognitive dimension, imagination as prognostics politics aims to stabilise particular facts about the world (Mathews & Barnes 2016:17). In this case, the framing of the questions empties infrastructural energy decisions of political meaning: a goal – 40% of private electric vehicles – can be moved back and forth, but not challenged.

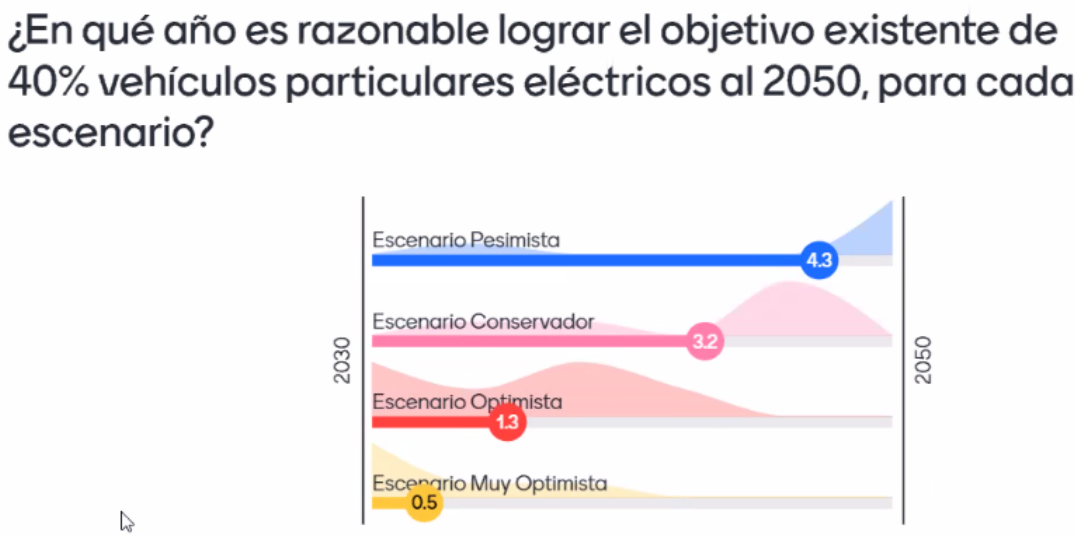


Figure 23: Slide shared in one of the PELP participatory sessions on scenario building, May 2021.

Listening to the debate and discussing the graphs that we were collectively generating was a key element to transform the future of 'the economy' into a manageable set of indicators. This reflected not only the joint vision of private and public institutions in having citizens imagining themselves as investors predicting

the future investment moods. It also further entrenched energy as an external flow, fully under our individual control[64].

Overall, the process of envisioning future scenarios, which lasted a total of 5 hours, did not only recruit us participants as supporters of an 'optimistic' scenario as a desirable outcome. It also naturalised the content of such optimism. In the final report, prepared by the Energy Foresight and Policy Division, the different possible scenarios of future national energy demand (now reduced to three) differed very little (see Figure 24). Similar to the visions of hydrogen potential, this appeared to reinforce both the desirability and inevitability of a foreseen technological change. A critical parameter – the demand for energy – that under a different methodology might have been up for debate, was presented as 'naturally growing' into the future, thus endorsing an ecomodernist gaze for the decades to come. This portray of a restricted set of trajectories as the only possible ones, makes future growth inescapable, effectively 'enclosing the future' into a future of economic growth, intimately tied to the energy growth.

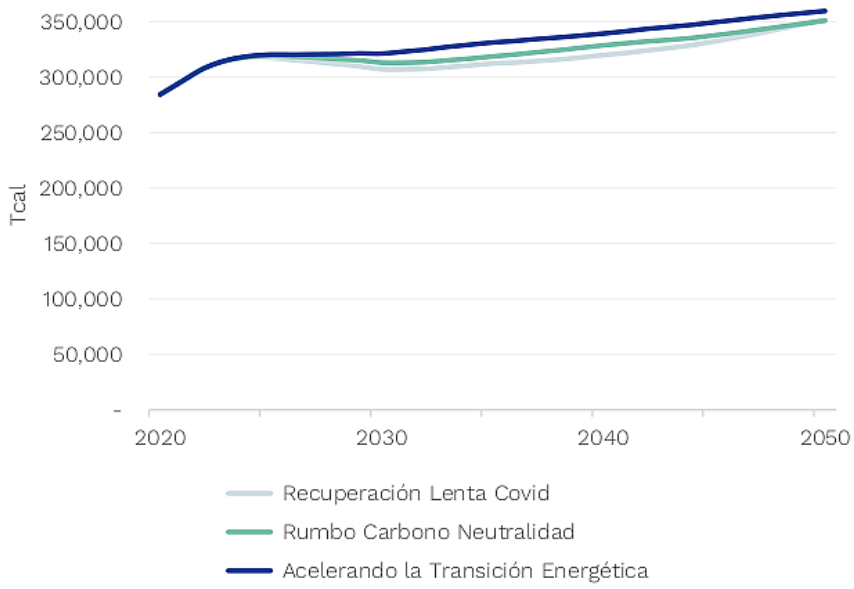


Figure 24: projection of energy demand in 3 different scenarios, preliminary report of PELP 2023-27 (Ministerio de Energía 2021b, p.70).

64 A trend similarly found in different energy policy intervention such as the implementation of smart meters in the United Kingdom (Johnson 2020).

Mapping potential, redrawing limits

Another example of epistemic tools used to imagine a future of ecomodernist abundance were maps. In this section I draw insights from anthropology and critical cartography (Li 2014; Avila et al. 2021; McCarthy & Thatcher 2019) to illuminate how maps were used to tell a credible story of Chile's renewable potentiality, thus significantly re-drawing the limits of what might integrate the national economy as areas contributing to a cohesive whole. I draw inspiration from the 'flattening of spatialized differences' (Kingsbury 2022:13) and trivialisation of localised dissent through the encompassing primacy of the nation. Similar approaches have been studied in other transition-related elements, such as lithium. Lithium has also been subjected to growing mapping attempts in the so-called lithium triangle of Chile, Argentina and Bolivia (Kingsbury 2022; Soto Hernandez & Newell 2022).

The role of maps as storytelling devices played a significant role both in participatory planning and other instances of green hydrogen's debate and promotion. In June 2020, the first draft of the Green Hydrogen Strategy mentioned that Chile's potential for producing electricity from renewable sources was 70 times over the current electric installed capacity in the country. By the end of 2021, it was already '80 times over' (Ministerio de Energía 2022c:5) and the mention of this multiplication was repeatedly accompanied by a map showing the distribution of that potential (Figure 25). The large gap between realised and potential infrastructure was frequently repeated in public seminars on green hydrogen and decarbonisation – mostly organised by universities, think tanks, trade associations and certain environmental NGO's, such as the case I describe below. The mention of the difference between present and potential was a way of pushing for the rapid development of renewable energy infrastructure. At the same time, this potentials map was, in itself, a re-drawing and expansion of a

previous map, present in the 2018-2022 PELP document, that excluded the extreme southern areas of Patagonia.

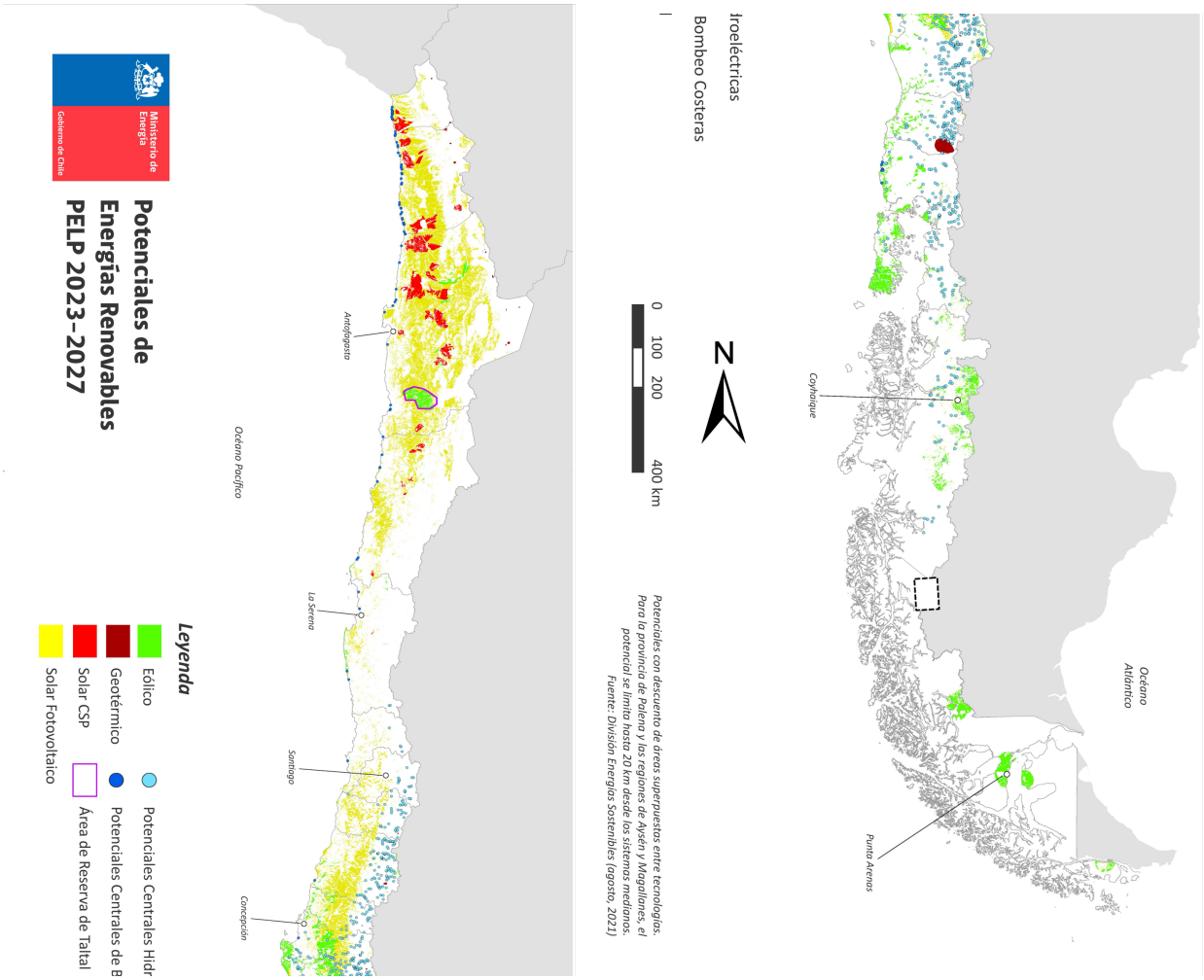


Figure 25: *a map summarising the GW potential per technology of renewable energy (divided in two for better visualisation).*

Up until 2020, in the state's planning gaze, the limit of the country had been where the generated energy could have been connected to the centralised National Energy System (SEN). The prospect of green hydrogen production required for those limits to be re-drawn. The incorporation of this previously 'unseen' potential was justified, as explained by the leaders of the participatory workshops I attended, mostly for the central role the production of green hydrogen was given in the next round of planning. Wind made up most of that newly incorporated renewable potential, particularly in the most extreme southern region of Magallanes. Previous reports presented estimated renewable energy potential in extensive disaggregated tables for each region, without providing an overall, national estimate. By contrast, while the new map made abundance directly understandable and salient without the mediation of numbers, a table summarising the potential was presented as well (Figure 26). The new document

made that number clear: 2,375 GW of total, national energy potential. The integrative modelling that underpinned the potentials map was an innovative technology designed to convey an accessible sense of opportunity.

Tecnología	Potencial (GW)
Solar FV	2,086
Eólica	81
Solar CSP	152
Geotermia	4
Hidroeléctrica	10
Bombeo Hidráulico	42
Total	**2,375**

Figure 26: table of renewable energy potential as published in the 2023-2027 PELP preliminary document.

In this case (Figure 25), the geo-referenced, coloured areas on the map had been determined to be available and amenable for energy generation under a specific connecting infrastructure. In an interview, an energy ministry's planning unit worker explained that part of their zoning and visualisation tools aimed at identifying where energy infrastructure would inflict 'too much damage', thus helping optimise decisions by avoiding those places and pointing to 'more suitable' alternatives. He also explained that one of the criteria they had incorporated into their models was the identification of less-populated areas as future project sites, such as deserts, to avoid intervention in densely populated urban areas. Their use of social impact indicators, he argued emphatically, meant that their modelling was not exclusively based on 'technical' criteria, such as 'pure' average wind speed or levels of solar radiation. Therefore, in the effort to offer a more complex determination of exploitable zones, modellers made visible also the 'emptiness' of places such as Magallanes or Antofagasta, or some zones of Chiloé, seen through the eyes of capital and the state, 'as landscapes of "natural abundance [and] social emptiness" (Bridge, 2001: 2156), that are inviting of resource discovery' (Kneas 2020:271).

The Renewable Energy Potential map was a way of 'rendering land investible' (Li 2014). This particular future of spectacular abundance and potentiality relied on a double devalorisation. As explained in Chapter 4, plans for increasing the

productivity of a given territory, imply the devalorisation of what already exists (Franquesa 2018) – counting certain places as 'empty'. The map predicted where such critical cheapness of renewable energy would be found. The second devalorisation is that of all other possibilities for those territories – including scenarios in which renewable energy infrastructure remains unrealised. Those non-energy producing futures, become wasted opportunities; wasted territories that are 'discrete, empty, available, and full of resources that are currently unused or underused, but that could be rendered highly productive with the right investment' (McCarthy & Thatcher 2019:243). In these places, the construction of infrastructure such as wind parks is seen as 'displacing nothing of value, conjuring prosperity from the air' (Boyer 2019:70).

The new centrality in the potential productive value of land, also speaks of a new desired geopolitical circulation of energy. The form of mapping that was undertaken by the energy ministry of Chile coincides with a broader, global trend of quantification and measurement of renewable energy potential, promoted by institutions such as the World Bank (McCarthy & Tatcher 2019). As McCarthy & Thatcher point out, the call to map potentials is part of a wider, geopolitical concern from the Global North, in order to secure places for investment outside their national boundaries. This is consistent with the explicit orientation towards transatlantic energy export that hydrogen represents which was detailed in the first section of this chapter. The historic prioritisation of Europe in Chilean commercial strategies serves as a springboard for new senses of 'nearness'. The previous remoteness in relation to the centre and north of the country (that concentrates industrial activity and hence the demand of energy) of places such as Magallanes is reinscribed now as closeness to Europe as a potential client. The southern end of the country is geographically closer, becoming more convenient for the installation of the transatlantic trade exporting ports. Thus, the financial power of demand reshapes the encompassment of the national territory for the realisation of potential value.

A question that later emerged was how serious the expectations of the full realisation of the potential 2,375 GW of energy generation from renewable sources were. In 2021, together with SCAC, we organised an event on green hydrogen to ask some of the questions that we felt were not being answered in the official government and pro-renewable gatherings. The abovementioned

event was facilitated by myself[65]'. In it, Rodrigo, the manager of one of the pioneer e-fuel manufacturing project in Magallanes, Haru Oni, recognised the disproportionate mapping of energy potential and that it would be nonsensical to try to realise it all: 'We would have to cover the entire country with panels'. Rodrigo's uncomfortable recognition of the ultimate 'unseriousness' of the staggering goals mapped out in the Hydrogen Strategy, reveals the contradictions of scale as a key tenet of the renewable energy revolution. Rodrigo's uneasy answer to my question was indeed interesting, because it accounts for the only time in which a promoter of hydrogen directly recognised the need to limit the harnessing of the apparently newly found potential of Chile to produce 'clean' electricity.

Besides serving to highlight potential economic value, the references to and use of maps in the different contexts in which energy was debated crystallise a geographically distributed meritocratic logic, similar to the one upheld by Wall Street finance workers (Ho 2012). For the gaze of financial institutions, Ho suggests, the creation of prosperity through efficiency requires precise tools, such as mapping. 'Wall Street morality is about hierarchy and classification, making value judgments about the worth of groups of people, industries, and nations' (Ho 2012: 420). Under this paradigm, while hierarchisation acknowledges a 'winners and losers' outcome, the overall market's virtuosity means that the society as a whole is, ultimately, better off. Likewise, through the use of financial language in energy planning, and cognitive tools such as maps, planners like those directing the PELP 'use(s) moral discourses to uphold powerful interests and redirect dissent' (Ho 2012: 427), all while presenting a coherent story of overall societal improvement.

As I mentioned at the beginning of this chapter, the economic viability of hydrogen depends on its large scale and rapid expansion. 'Scalability', as Tsing (2012:505) argues, 'allows us to see only uniform blocks, ready for further expansion' and outside the transformative relationships. The form of mapping that supported the projects of abundant renewable energy and a hydrogen industry, provided an 'aesthetics of scalability' (Tsing 2012:510). In integrating that scalability, maps are

[65] As a member of CASA, I was invited to chair this event, organised by the SCAC working group 'Social-ecological reactivation'. The panelists were chosen by that working group.

crucial for showing the coherent unity of the nation in a spatialised form. For this story of abundance to come together maps determine the limits of the national 'whole', whilst serving as a visual tool that helps to establish the role of each of the parts – that is, different regions and places within the country – in keeping the whole integrated. The nation's 'natural body' that hosts transformative power (Coronil 1997:392), and that can be tapped to serve the achievement of progress, is expanded through scalability.

Maps present a useful cognitive instrument to imagine energy as disembodied potentiality. However, maps do not act on their own. Instead, they circulate as valid currency in a wider debate, in which they are mobilised by 'institutions, laws, and actors that are part of the map-making process, [and that] are what make the map powerful' (Fogelman and Basset 2017: 257). The maps of renewable energy potential in Chile represent future landscapes of value – an abundance of opportunities that can be seized.

The 'more is less' of energy infrastructure

The 'energy development node' is the third emergent figure in the efforts of generating hydrogen as resource of the future. Throughout the multiple sessions of the PELP, Cecilia Dastes – the person in charge of 'participation and dialogue' across all workshops – had emphasised her openness to critique, and her interest in addressing, what all her team called 'the social acceptability of energy infrastructure'. The issue of energy development nodes was a particularly delicate one, which required much diplomacy and negotiation skills from Cecilia. In 2017, organisations such as CESCH, already in the previous planning round, had voiced their concern about defining Chiloé as an energy development node. In their campaigning, members of CESCH and Chiloé Libre, together with other activists of social-environmental movements, equated the concept of energy development node with that of the 'electric highway' – the concept invoked by President Piñera, to refer to publicly-funded high transmission line in Patagonia, which had since become decried by activists with negative connotations, as a crude and potentially harmful descriptor of energy infrastructure.

Conscious of these precedents, Cecilia carefully explained how the nodes were supposed to work to reduce environmental impact and increase the efficiency of energy distribution (see Figure 27). A node, she explained, would feed the output from several energy-generating projects (the 'ERN' smaller circles) into the

central national electric grid (the blue, larger circles), in a way that avoids redundant transmission infrastructure. Without such nodes, Cecilia asserted, many places from which energy could be extracted would not attract the necessary private investment, as constructing additional transmitting infrastructure could add a prohibitive cost.

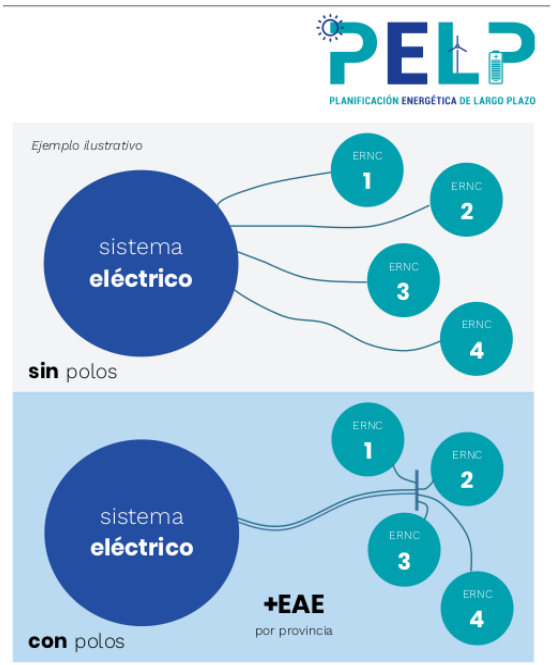


Figure 27: explanation of energy development nodes in one of the participatory sessions. The superior section shows a situation without nodes, the second, one with a node.

The focus on correctly identifying the most efficient places to turn into energy nodes confirms that the identification of cheap territories is not enough to guarantee the fulfilment of renewable energy abundance, with the connecting infrastructure being just as crucial. As territories of extraction are defined as peripheral – comparatively 'emptier' and less populated than places that should not host energy infrastructure – the designation of 'energy nodes' was presented as a key tool for adequate land planning. In trying to make sense of the need for infrastructure for distribution, the image presented by Cecilia illustrated an apparent paradox at the core of the planning process as a whole: building *more* is the only way of building *less*, just like improving the efficiency of an inevitably increased demand is the only way of 'reducing' demand – in this case, of privately financed infrastructure.

The perceived need to improve distribution, is part of the challenges of an infrastructure less spatially concentrated than energy systems based on fossil

fuels. Renewable energy production, such as wind and solar, tends to be more spread out and situated at a distance from the large urban and industrial centres of consumption. Simultaneously, the task of decarbonisation is not simply about replacing but about sustaining energy growth into the future. In this view, common among my interlocutors in the ministry, *not* increasing overall energy generation is not possible. However, it is possible to re-arrange some of the impacts of its expanding infrastructure. Thus, the gaze of the state becomes instrumental to the realization of this potential in the best possible terms, with the full and most efficient realisation of productive capacity being the best scenario.

During the workshop, after having learnt about the benefits of the nodes, we were invited to write down our comments, which mainly consisted of suggesting legal, technical, economic, social and environmental criteria for selecting a province as a development node. Through the questions, we participants were asked about the items we should consider for determining the provinces that would become the nodes. Modelling the environmental damage became a form of semiotic work of 'signalling' to a hypothetical 'project developer' – that is, a potential investor. This is a case in which planning itself works as an instance 'through which participants can learn to share the planners' aims' (Abram 2014: 142), thus forcing us to enact a productivist gaze into the abstraction of a national map, which demanded the detachment from our particular dwelling circumstances. Indeed, in dissent with this proposal, in other forums organised to problematise upcoming changes in energy infrastructure, such as the expected hydrogen boom, participants from the public would often open their comments by stating 'I am from this place…'. In doing so, they would then offer very concrete observations about the problems caused by current transmission lines in specific locations, or the need they perceived for protecting particularly vulnerable ecosystems such as wetlands. PELP moderators sought to deflect such complaints by translating the lack of 'social acceptance' they implied to a need to give communities economic compensation, be it in the form of jobs or other 'incentives'. Moreover, opposition was downplayed by some participants to the level of even suggesting that 'the communities' should be made to 'compete' over the prospective energy projects to become settings of development.

The sense conveyed around transmission infrastructure was of an easily manageable and adaptable materiality that could, if rightly designed, have a

negligible effect on the environment, whilst having a beneficial impact on economic activity. The implicit diagnosis of the need for nodes was that the problems of the 'social acceptance of infrastructure' were disorder and lack of efficiency, rather than the political decision of pushing for an unprecedented expansion of land-intensive energy infrastructure. This pairing of abundance with benign infrastructures plays a central role in ecomodernist imaginaries, thus creating its own aesthetics (Larkin 2013). See, for example, the images of floating 'H_2' that has come to symbolise green hydrogen in an iconic way (Figure 28). The lightweight and generic conjunction of 'green' elements such as leaves and blue skies conjures a pleasant aesthetic space that 'the material' – in this case, of hydrogen – 'can bring into being' (Larkin 2013:337). This resembles the visualisation of a future with more wind energy development in La Guajira, Colombia, which is presented by corporations and government campaigns as innocuous and harmonious, using similar images of blue skies and lack of other living beings around the big turbines (Ulloa 2023). This aesthetic of green dispossession, as Ulloa names it, 'depoliticizes local demands, and renders invisible environmental or territorial effects by presenting an aesthetic version of the future' (Ulloa 2023:10). In the case of hydrogen, elements amenable and easily relatable to 'greenness' such as leaves are key to emphasise the smooth transition into post-fossil forms of capitalism:

> The assumption— and promise— is that with the steady and potentially accelerating growth in smart, green, or clean technologies, people and places enabled by petrocapitalism can gradually move away from the most environmentally damaging aspects of their lives, by replacing— or improving— their industrial infrastructure with more benign alternatives (Goldstein 2018:157).

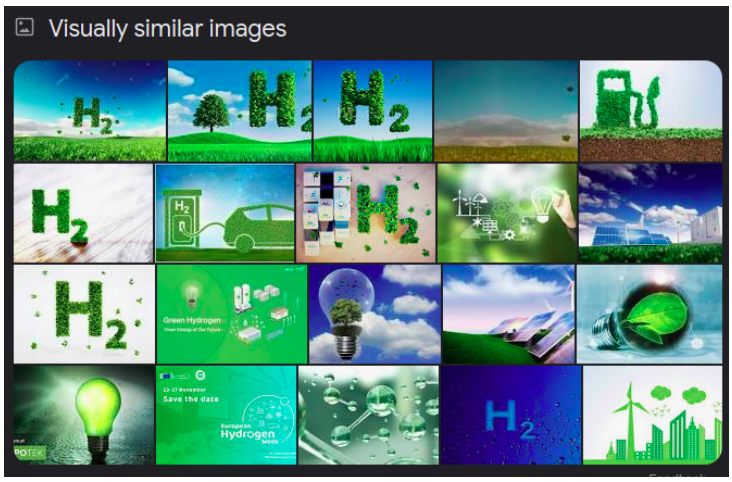


Figure 28: Set of images suggested by google similar to the first image (February 2022).

Even though such optimistic expectations existed in the workshops and participatory events in which I took part, one could also sense recognition of the increasing conflict that the renewable energy infrastructure generates. Cecilia Dastes, for example, brought up the topic herself and spoke to us about an alarming increase in news coverage of local conflicts regarding wind farms in the BioBio region (Figure 29). Conflicts there resemble those anticipated in Chiloé: poor mitigation measures, lack of local economic benefit, and lack of consideration of the synergic ecological impacts of multiple parks. Both these conflicts and the objections of those appealing to their situated experience to reject the notion of 'development node', remind us that 'scalability is always incomplete' (Tsing 2012:515). Nonetheless, Dastes' conclusion was that the establishment of a node could actually *solve* the problem. The argument presented was that determining energy nodes decreases conflictivity. However, this is only true when compared to the counterfactual of increasing energy generation, *without* the centralising distributive infrastructure. This discursive approach of 'more is less' – more efficiently organised increment in energy generation and transmission results in less impacts – establishes an implicit alternative as a single possibility, following the same subjunctive logic explored in Chapter 2 (Ahmann 2019). Thus, this devalorises and makes the futures in which the land remains with its 'unused' potential, invisible.

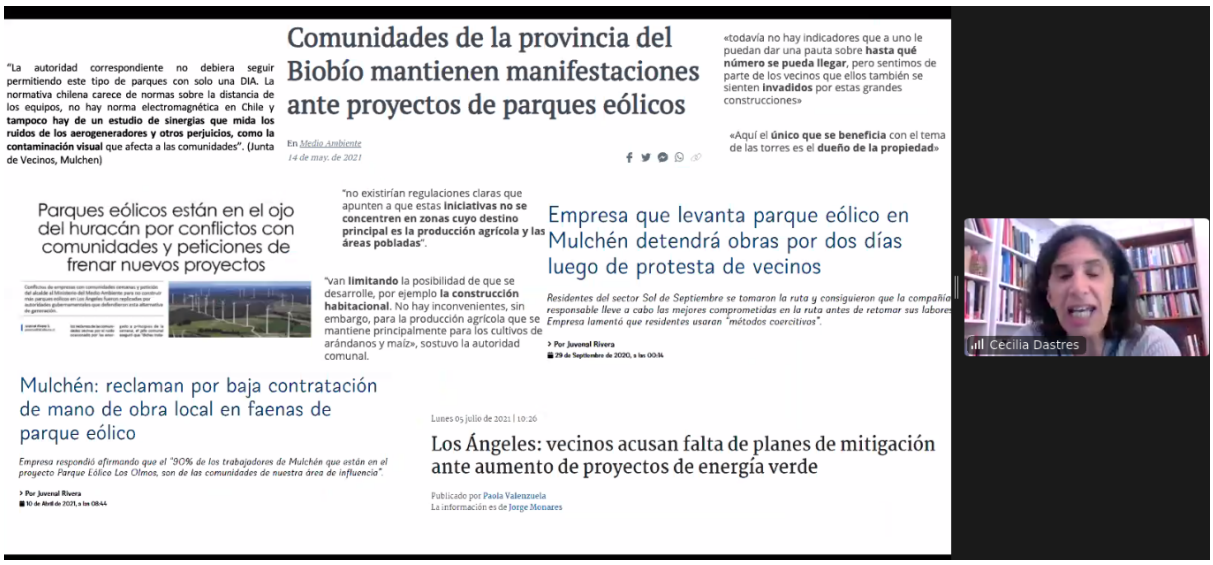


Figure 29: Energy ministry worker explains the relevance of energy nodes, using the conflictivity of a province (Biobío) currently without a node that has seen a rapid increase in wind farms.

As noted by Appel (2012) in her study of oil extraction, the disentanglement of a commodity from its wider operational, social and material context is an active process that requires the denial of certain social relations, as well as the naturalisation of already existing relations of exploitation (see also Kesselring 2018). In Chile, too, despite Dastes' open engagement with conflict, the future transmission infrastructure was being designed and discussed from the energy ministry as a modular, coherent solution, detached from the places to be chosen as nodes.

All in all, by bringing these different forms of futurework (Olofsson 2020) together, the planning team leading the participatory planning process externalised and objectified dissent as an inevitable outcome of progress – the 'rain in Amsterdam' – while simultaneously foregrounding a post-conflict future that would remedy that same conflict. As a key consequence, the creative spaces that this understanding of energy allowed – expressed in the participatory planning spaces – were designed to reproduce a conservative take on the substantive need for energy. Through the expectation of abundance, energy experts proposed participants with ultimately trivial conversations that did not question, but actually entrenched and expanded existing energy infrastructures, as well as the expectations of energy growth into the future.

Conclusions

In the energy planning and forecasting that I witnessed in Chile the history and the stories of capitalism came together as a promise of abundance. Both the green hydrogen policies and the PELP participatory planning process are efforts that aim to build a narrative of how the 'revolution of renewable energy' took place as seen from a future standpoint: a process that subsumes and trivialises future and ongoing conflict. The moral concerns that mobilise this future are both directed towards the prosperity and 'development' of the country and the provision of endless energy for humanity as a geographically distributed whole. Overall, I suggest that the projected energy future of green hydrogen, channelled and narrowed down into replacing the materiality of oil, more so reflects the political grip of the current fossil-based wider geopolitical order than the actual disrupting qualities of an element such as hydrogen.

The planning of the future of energy in Chile that I have described in this chapter can be interpreted as an attempt to flatten out the contradictions of extraction through a widely accepted principle: increasing the productive capacities, whether of nature or of people, is always unquestionably good. This reveals a parallel between the scalability of renewable energy plants and the scalability of labour; just like the epistemic outlook that underpinned the initial capitalist scalability of the plantation (Tsing 2012). Additionally, the case of recent energy policy in Chile shows how the creation of new energy networks and infrastructure – in this case, for green hydrogen – means inevitably disrupting existing networks. Aspirations, such as becoming a world-leader in energy export, do not simply build on or overturn existing strategies. Rather, they actively shape – and in some cases, enclose – the future emergence of possible alternatives. In teleological terms, a future of ever-increasing energy supplies becomes both desirable and inevitable; the only reasonable future worth striving for.

If the hopeful expectations of succeeding in materialising the national potential for renewable energy generation seem untamed, it might be as a result of Chile having a history of successful harnessing of productive potentials. As Weszkalnys (2016) recounts, ongoing expectations of oil exploitation in São Tomé and Príncipe, are attenuated by previous cycles of unfulfilled promises of prosperity and development. In Chile, on the contrary, the optimism about a successful transition into renewable energies excludes doubt from official accounts, thus

relying on a narrative of a ‘capable’ country, that has already proven its capacity in other productive enterprises such as, notably, mining. The story of copper mining being somehow the backbone of the national economy was ever-present and repeated among all my interlocutors, thus confirming the important role that mining has in the imagination of the policy-shaping elites.

Reflecting on the political processes that were unfolding during my fieldwork in Chile, in the conclusion of this thesis I will return to the larger political question of energy and work. In this dispute, ‘what is at stake is not the nature of knowledge or changing techne but ethical questions about what the world, society and capital should be for’ (Bear 2020:10). In embracing a particular promise of abundance, many actors involved in the advancement of green hydrogen and related projects, sustained an idea of sacrifice that dispensed them from the political implications and environmental concerns about this technology. This, I argue, relates to previously explored ideas of the sacrificed lives and territories of the inhabitants of Chiloé.

CONCLUSION: THE TYRANNY OF PRODUCTIVITY

Sacrifice for a utopia of work.

> The neighbours must look at this problem with patriotic spirit and accept some sacrifices; otherwise the foundry will not be installed anywhere in the country. The nations that have industrialised have accepted these sacrifices. It is the price of progress (Rodríguez-Giralt & Tironi 2020:6).

In 1957, this is how *El Mercurio* newspaper talked about the installation of an industrial complex in the now infamously polluted and emblematic sacrifice zone of Quintero-Puchuncaví, in the centre of the country. The editorial gives testimony of how, since the earlier stages of the developmentalist state in the mid twentieth century, sacrifice has been paired with a patriotic disposition and a consideration of the wider good, especially in relation to boosting economic industrial activity.

In political debates, the urgency of decarbonising existing sacrifice zones (like Quintero-Puchuncaví, polluted by decades of carbon use and copper refinement) would be framed as a debt that needed to be repaid with green jobs. Sacrifice was then referred to as a regrettable historical pattern that needed to be broken. Another recurrent use was the idea of sacrificing some comforts in our everyday lives for the sake of climate mitigation. For instance, variations of the sentence 'solving climate change will require sacrifices' were recurrent in activist circles both, in the scenes of the 2019 COP counter-summits and in the context of the constitutional convention. The concept then took a more personal note of compromising around the convenience of modern life, insisting on understanding sacrifice as an unevenly distributed duty towards the future.

At a first glance, all these notions of sacrifice can refer to very different things. For the conclusion of this thesis I want to flesh out some final thoughts on sacrifice as a form of sacrificial citizenship (Brown 2016), and how it connects with the more classical understandings of sacrifice 'as a matrix of possibilities surrounding the central idea that something (or someone) new can be created through the irreversible giving up of something else, most prominently, a life' (Mayblin & Course 2014:309). Throughout this thesis, I have described sacrifice in a variety of contexts. In the case of Chiloé, I have argued, the demand for sacrifice is sustained in a promise of integration through work (Mayblin & Course 2014; Povinelli 2002). The different uses of sacrifice I have developed illustrate the main quandaries at the core of ideas and promises of productivity and work: becoming

productive comes entwined with a promise of care, but that process often affects elements of the web of life in a way that cannot be subsumed or repaired by the new caring capacities. This produces forms of displacement of that promise.

For instance, my interlocutors would use the word ‘sacrificed lives’ to explain the suffering and hard work of women staying at home in Chiloé while their husbands migrated, especially during the boom of seasonal migration to cities like Punta Arenas in the early twentieth century. Escaping past sacrifices was also a shorthand to make sense of intergenerational mobility. ‘One has to be a professional so one’s life won’t be too sacrificed’, as Miriam frequently told me, referring to the strenuous *Chilote* lives of the past, often dedicated to hard manual work, and how many older people wanted their children to avoid their luck. Still, for Miriam and many others, it was clear that signs of sacrifice were also signs of personal integrity, that could be retributed with trust and care. In the case of working people, a life dedicated to work becomes wellbeing for others; and when a territory is put to work, its damage can be justified by hierarchical valuations of acceptable destruction. The creation of ‘something else’, in the first case, is a freer person. Miriam herself, her sisters and nieces were to some extent the living proof of this promise, as they could see themselves living a life easier than the one of their parents. In the second displacement, when places are destroyed, the products are livable places — notably, cities nurtured by the work of nature and isolated from its impacts.

As I have shown across the chapters, the very use of the concept of sacrifice becomes polemic, especially when it is applied more broadly as ‘sacrifice zones’. In chapter 2, I referred to the rejection of the existing wind park of San Pedro based on its unacknowledged impacts and unfair distribution of its benefits. A similar argument has been created, from Chiloé Libre, to stop the infrastructural integration of the main island to the continent. Their dispute for ending what they perceive as colonial relations is inextricably linked to the visibilisation and rejection of sacrifice zones, a process that for them is semantically grounded in experiences like the loss of marine life due to salmon farming. This narrative was crafted being aware that, paradoxically, being employed in salmon farming was lived by a generation — as it was for Daniel — as accessing a ‘less sacrificed’ life. This experience was very real for Daniel, even though, as explained in Chapter 2, this industry has caused significant ecological damage that has

ultimately affected the possibilities for autonomous living throughout the archipelago.

How, then, is sacrificial productivism sustained? Having already laid out some key dimensions of energy planning, now I can elaborate on why it is the completing piece of a concept that explains the – partial and unfinished – success of productivity as a moral project: the utopia of work. The concept of 'utopia of work' (Kussy & Talego Vázquez 2017) refers to the ideologically broad spectrum of utopian visions that value the full realisation and unleashing of productive powers as key to humanity's emancipation, or – more modestly – the improvement of human experience. Such utopia can take more communistic tones as the individual mastery 'of the totality of the productive forces' (Gorz 1989:26), present in the Marxian tradition; or the liberal utopia of the free market as the setting of perfect economic exchange and ultimate overcoming of scarcity (Charbonnier 2021). Ecomodernism, from this point of view, can also be seen as a utopian project. As developed in the introduction, ecomodernism describes an understanding of the climate and ecological crisis grounded in a desirable decoupling of humans and nature, which would allow for a 'greening' of sustained economic growth.

As explained in Chapter 1, the initial harnessing of productive forces required the violent imposition of 'work' over the indigenous population of Chiloé. The subsequent productivist reading of the landscape and its energy potential in contemporary forms of energy planning I have described can be framed in continuity with the same project to illuminating ends. As shown in the expectations of both hydrogen and future energy provision, the utopian dimension of a post-scarcity future is reflected in the expectations of fully harnessing the forces 'of nature'. This reduction of all creative forces – both human and more-than-human – to 'work' is based on a logic of sacrifice central to the ecomodernist imperative of unbounded productivity.

By carefully crafting an environmentally minded project, figures like Dr Pett, the energy and mining minister Jobet, and the senator Girardi spread a narrative that reinforced the hierarchies of value already in place between territories inhabited by wealthy urban elites and semi-peripheries like Chiloé. In this uneven geography of value, the generative powers come from outside the insular territory in the meritocratic form of finance – as the investment capacity of foreign

corporations that choose the right places. Meanwhile, the land is desirable in its potential, fertile but empty of any current value. Discourses of responsibility, here used both publicly and in the more intimate space of the participatory workshops, become ‘an extension of future thinking in terms of investment’ (Laurent & Merlin 2021) that excludes explicitly political problematisations of the question of energy. This discourse of finding the best route to an inevitable exploitation works compellingly as an enclosure of the future (Jaramillo & Carmona 2022). The earmarking of land for ‘work’ (as energy) goes together with a positive expectation of an abundance of work, projected in the indefinite future sustainment of economic growth.

Such sacrifice is part of a wider aspiration to a utopia of work. It embodies not just a preservation of the present but a particular future to aspire to. The vision of a successful energy transition is utopian in the sense that it imagines an ideal end point of social change that guides actions in the present, in terms that break fundamentally with current social reality. Following Vike (2013), when it comes to planning, this utopian time offers a set of goals that ‘provide hope, and consequently tend to make people willing to sacrifice something on the way’ (36). In Kussy and Talego Vásquez’s account on the ‘communist utopia’ of Marinaleda in Spain, they suggest that their institutions and practices labelled as radical by scholars and activists do not question the central relevance of work in society. Similarly, the desired outcome of change in the optimistic accounts of the energy ministry is one of finally overcoming scarcity and having abundant energy to sustain economic growth, with work as a key element. The adequate and efficient harnessing of nature’s potentiality is what comes to make a better society possible. Together with ‘putting nature to work’, people, through economic growth, are also put to work.

Crucially, what ‘work’ means is different for different peoples and territories. Just as cities are not expected to bear the intrusion of renewable energy generation, people working in white collar jobs are expected to suffer and sacrifice less than those working in manual labour. This is very clear among my interlocutors. The sort of work one does not only establishes moral expectations of virtue from those in a given role (Marston 2021; Bear 2011, 2007; Pandian 2009). In re-writing social difference, work also delineates a biography, and what sorts of good lives are available when one imagines one’s own future. Under the existing hegemony

of work as an ineludible human condition, sacrifice might be ameliorated, but not escaped. At least, following the meritocratic logic explored so far, not by everyone or everywhere. Work is to some extent inextricably related to discipline and self-sacrifice, even if it is hard to even admit this to ourselves (Graeber 2018).

A utopia of work is the guiding principle of the conservative revolution of renewable energy in Chile. Just like oil industry entrepreneurs in Colorado trying to 'do oil differently' (High 2022), the utopian principle to 'appreciate the natural abundance that already surrounds us' (High 2022:754) is operationalised 'without seeking to create alternatives to capitalism' (High 2022:743). Note how different this understanding of abundance is from the engagement with all living things, beyond a sense of productiveness that my interlocutors create when learning from and defending the *itrofil mongen* cosmovision. In the case of Chile, the desired order is utopian in the sense of a perfect sociality organised around the predominant value of work that fully encompasses both people and the rest of the living ecosystems. A second reading of the predicted overcoming of scarcity is that such abundance of exportable energy would allow the state to finally fulfill their duties of care towards its citizens, without challenging current arrangements of welfare policy of social integration through work (Cabaña 2019). Sacrifice would finally overcome its own quandaries. Approaching the state as, in part, a utopian project (Graeber 2004; Scott 1998) is important to understand the underpinnings of the fantasy of total control that imprints the expectations of future energy use in Chile.

In this thesis, I have described how the morality of work has been crucial to shape the subjectivity of the Chiloé archipelago inhabitants, in their process of becoming members of a larger political body. The first actions of the Spanish settlement there configured an initial 'colonial resource imaginary' (Gilbert 2020:99); from the beginning a demand to make 'idle' people and territories contributors to a central political power. For both people and land, the practical use and actual content of the 'work' remained unquestionable and extraction was enforced both through violence and imposed forms of care. I have also described how more recent struggles around connectivity and infrastructure are additional settings to this tension between the need and appreciation of productivity and provision, and the risks that come with becoming dependant of larger circuits of materials and relations of care.

Similarly, when it comes to renewable energy, the ecomodernist discourses that are leading its advance in Chiloé cast it as a 'distinctively benign and desirable form of energy production' foreclosing the possibility 'to ask whom renewables' "useful work" is useful for, and to what ends this work is being put' (Guðmundsdóttir et al. 2018:582). This resonates with what happens at the national level: the stories told around planning, as explained in chapter six, carefully avoid opening that black box. The wider issue of what is energy for (Shove and Walker 2014; Guðmundsdóttir et al. 2018) is not included, as it would be equivalent to question the intrinsic value of work and the underlying anthropological assumptions on the human condition embedded in the scarcity/abundance tension.

***

The very idea of work

'I don't care about who wins, on Monday I still must go to work'

—Often heard in times of political campaign when asking people about their vote.

In his essay 'The very idea of consumption' Graeber (2007) critiqued the expansion of the use of the term 'consumption' in social theory. The term had broadened, he argued, from the description of something being destroyed to virtually any activity that includes the use of commodities. In doing that, he asserts that '"Consumption," then, refers to *an* image of human existence' (2007:58, emphasis mine) that can be historically and intellectually situated. This thesis has aimed at doing a similar critique to the concept of 'work'.

I have addressed the role of work in sustaining hierarchies that can be read as oppressive, but also desired, subjectivities and forms of ethical relations, linked to changing modalities of sacrifice. A first leg of this argument tracked the historical roots of *a* work ethic as it emerged in Chiloé, a component in a wider regional, national and global collage in which this ethics has taken a central role. I have described work in Chiloé as a an internally differentiated but shared value that entangles people and territory in their productive capacity in a way that is salient in renewable energy projects. The second leg of my argument looked into plans and future expectations of energy infrastructure and systems of provision in Chile, analysing the disjuncture and tensions between the national and the

island realities. In doing this, I argued that an incrementalist future of endless economic growth harnesses and reinforces the moral value of work and the need for sacrifice, giving new life to moral national and international hierarchies in which Chiloé is inserted. And I have also suggested that such aspirations and language of productivity have been appropriated and incorporated into sustaining relations of care.

The relevance of consumption as a site of political freedom can only be understood in tandem with the (often more unexamined) relevance of work as an unquestionable good. I have aimed at shifting the focus from consumption and the management of consumption as a political project (pushed by the state and other corporate actors) to the politicization of work and the refusal of work. This opens new possibilities on the re-signification of political freedom as based in a different sense of affluence. I have also argued that such projects of political freedom can be found in Chiloé's own history, in forms of relation and action based in shared abundance, like the *minga*. Under the paradigm that embraces the already described utopia of work, political dispute becomes a dispute over the *product* of work, without questioning the boundaries of the concept of work itself, or its role at the instrumental level. Scanlan, in his critical analysis of the end of slavery, makes explicit how current is this to our contemporary life, and how deeply we have come to relate freedom with work: 'the idea that to be free is to work, accumulate and joylessly consume is still with us' (Scanlan 2020:20).

In this thesis I have expanded the original use of the term 'sacrifice zone' in the field of environmental justice as places subjected to pollution and toxicity to a wider experience of erosion of life in a place and the deterioration of particular forms of human and more-than-human relatedness. A place can be destroyed in what makes it valuable for the people inhabiting it, while remaining out of the radars of toxicity. I have explained this as part of the non-spectacular dimension of non-ritual sacrifice (Mayblin 2014). In life and in land, sacrifice is sedimented, a slow adding of multiple events. In Chiloé and Chile, what really gives sacrifice meaning is a sense of unfulfilled relations of care, and the eternal displacement into the future of the restoration of the damage the effort of production has caused.

I have also suggested that, to understand the longer history of the morality of work in Chiloé it is fundamental to track processes of devalorisation. A thread can

be followed from Spanish colonial settlers to contemporary conservative catholic elites that see in persisting poverty a deficiency of willingness to sacrifice and be laborious (Bowen Silva 2013). My analysis of the need to impose a sacrificial work logic in the Chiloé archipelago points at the possibility that 'work' as such did not exist among some of the inhabitants of southern Chile at the arrival of the Spanish. Through the *minga*, I have suggested that activities of livelihood were not pre-eminently understood under the concepts that Western philosophical traditions, following colonial and productivist principles, put at the centre of human activity. My approach to the more epistemic dimension of the coloniality of power follows a logic similar to Lugones (2007) proposal of the non-existence of gender as such in pre-invasion America, and the imposition of the heterosexual system of gender domination as part of the colonial matrix of power.

Answering the question I posited in the Foreword of this thesis: energy remains a-political because, while the frontiers of the imagination have been expanding in Chile in the last 10 or 15 years, the value and meaning of work remain heavily guarded. We can imagine changing everything but our relationship with energy, which means also our relationship with work. Improving, augmenting and redistributing work appeals across the political spectrum. Because work has been put at the centre of the cosmology that describes how value is created and circulates in society, the role many of us can play is reduced to working. All other things have to emerge from there in a subordinated, and therefore hierarchical, manner.

Going back to the wider questions that inspired this thesis: what would it mean to reject the imposition of work, going beyond the recognition and repayment of sacrifice? Indeed, while demanding the acknowledgement of worth through work can mobilise contestations and demands for inclusion, it also has limitations. A position more oriented to questioning work can open new avenues of thought: 'instead of taking the position that nature is not mere capital—that it works—the more truly liberatory position might be that nature does not work, it should not work, and neither should we' (Besky & Blanchette 2019:217). In this thesis I have explored the refusal of deservingness and sacrifice in places targeted for production in Chiloé, in an attempt to understand why this critique is so consistently deflected. The analysis of other, possibly new, practices of escaping the apparently 'new' forms of work of renewable energy infrastructure remains to

be studied. What reconfigurations of social action would allow to reject the tyrannies of productivity and the logic of sacrifice in the new context of the climate and ecological crisis?

What has also been beyond the scope of this thesis are the more specific and subjective experiences of different forms of work in the Chiloé archipelago. A variety of employment and work modalities certainly shape different understandings of the value of work. A more ethnographic account of, for instance, the persistence of agricultural work and the more emergent professional employment in the archipelago could further illuminate the questions of this thesis. I have also not looked into the more religious and ceremonial side of sacrifice, which is relevant specially as Catholicism plays a significant role in Chiloé's social life.

Notions of labour, need, and freedom that we often take for granted have been, and continue to be, historically constructed and disputed. Alternative cosmologies of freedom and more playful forms of relations persist, often camouflaged and overlooked as reminiscences of the past. I have suggested the *minga* as an alternative modality of action, a more playful and therefore freer approach to relations, that keeps its political potential alive in Chiloé today. I have also explored the subversive understanding of the value of life *itrofil mongen* offers. In addition to what was explored in this thesis, the idea of dignity, that played such an important role in the 2019-2020 mobilisations, can offer a fertile alternative conceptual ground for further investigation. See for instance the role of dignity in social movements for housing in Santiago (Pérez 2023). Dignity can be seen as a claim for the recognition of intrinsic value and unconditional care, potentially capable of challenging the tyranny of productivity. Whether it will continue to open possibilities of political action in Chile, expanding avenues for anthropological thinking, remains to be seen.

ANNEX 1: ENERGY POLICY IN CHILE

A short summary of the historical development of energy in Chile is crucial for understanding the country's wider political economy that is at the centre of this thesis. The "General Law of Electrical Services" (LGSE), that was introduced during the dictatorship in 1982, separated the generation, transmission and distribution of electricity, and privatised the previously state-owned utility companies. Electricity generation, today, functions in a system of 'open competition', and tariffs are fixed for most consumers[66], thus making transmission and distribution to work under a system of natural monopoly. This has resulted in a highly concentrated electricity sector (Flores-Fernández 2020) in which private investors make decisions following their own assessment of future returns, where the role of the state is reduced to 'general monitoring and indicative investment planning' (CCTP 2011:11). And while recent reforms have sought to break the oligopolistic composition of the electricity sector, in early 2023, only four companies – ENEL, AES, Colbun and Engie – represented almost 70% of the total generation in the National Electricity System (Generadoras de Chile 2023) – a slight decrease from the 84% they encompassed in 2010 (CCTP 2011:14).

Chile's electrical infrastructure is centralised in the National Electricity System (*Sistema Eléctrico Nacional,* SEN) which covers 99% of the supply and most of the national territory, except for the regions of Aysén and Magallanes in the south. Approximately a third of electricity fed into the national grid comes from renewable sources – primarily wind and solar energy (see Figure 30). The grid remains, however, overwhelmingly dependent on fossil sources, such as natural gas and coal. Roughly 60% of the electricity supply goes towards industrial use, a big proportion of it being mining, concentrated in the north of the country (Simsek et al. 2019). Regarding overall energy consumption, oil derivates cover the majority with 55%, while electricity represents only 24%. Another important source of energy is biomass (mainly wood), which represents 13% of the total energy consumption, and plays a significant role in the country's more temperate zones, including places like Chiloé (Ministerio de Energía 2022b).

[66] Only consumers large enough can negotiate fares separately with the same private providers.

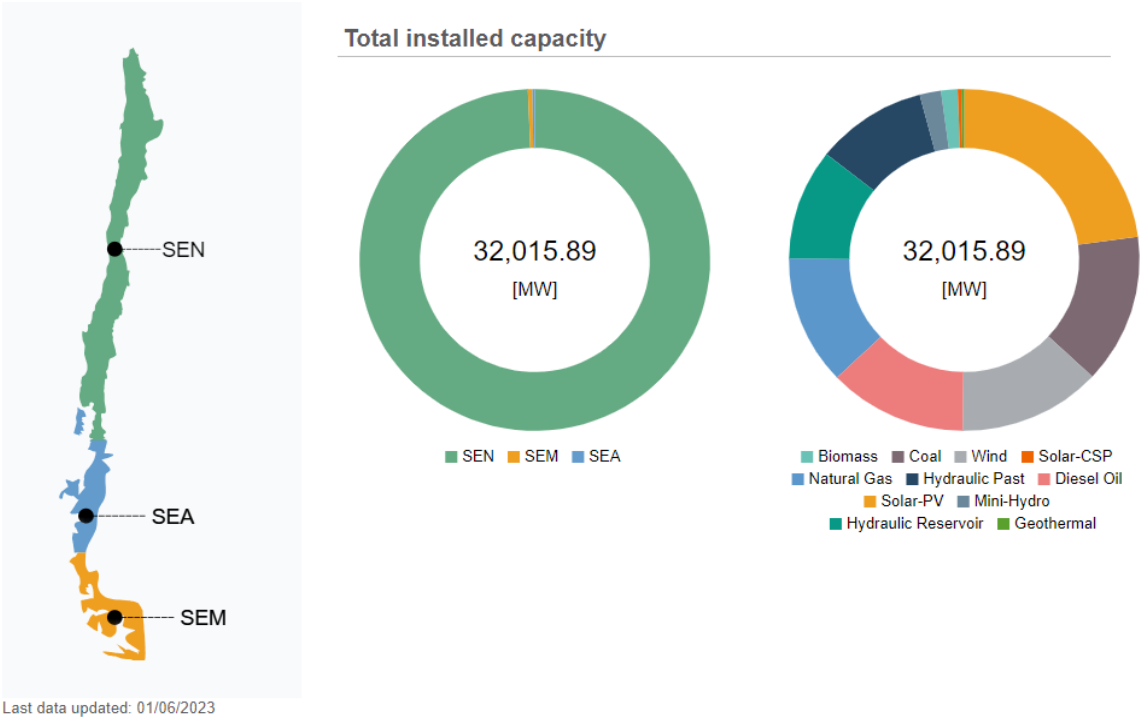


Figure 30: summary of the composition of the electric system in Chile. Images and information retrieved on June 2023 from energiaabierta.cl

Although most of the country has access to electricity, a minority of rural areas remain detached from the main system, thus having access to energy only through local generators – Chiloé being one of these areas. Except for these isolated places, electricity services are usually reliable and work uninterrupted. While recent debates on energy have been marked by a 'participatory turn' and environmental conflicts, as explored in Chapter 4, the infrastructural requirements that come with transitioning out of fossil fuels have been an additional concern, particularly in regard to their interaction with the agendas of climate change and the Nationally Determined Contributions. A detailed timeline of the processes related to energy planning and policy that I analyse can be found in Annex 2. Finally, an agenda of energy poverty has also generated information and diagnosis around that topic (Red de Pobreza Energética 2022), with a focus on the inclusion of marginalised households and better access to cleaner and cheaper energy.

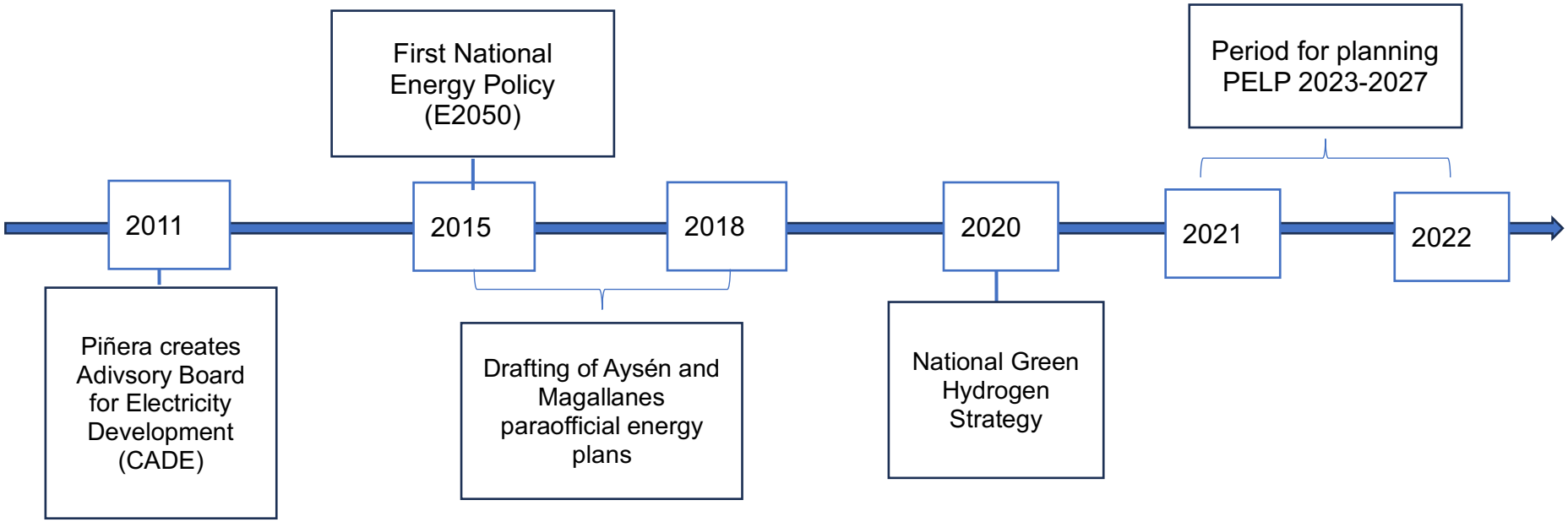
Summary of policy processes followed during fieldwork

Process	**Documents reviewed**	**Online seminars and workshops**
Energy policies at the national level	1. Energía 2050 (2015) 2. Hoja de Ruta Energía 2050 (2015) 2. Ruta Energética (2018-2022) 3. PELP 2018-2022. 4. Background Update Reports (*Informe de Actualización de Antecedentes*) for years 2019-2020-2021	1. Event Coordinador Eléctrico Nacional on their work during the pandemic.
PELP 2023-2027 participatory process (March 2020 to August 2020)	1. Minutes in preparation of each workshop and surveys of evaluation, including scenario-making and development nodes definitions 2. Preliminary version of the PELP 2023-2027 (August 2021)	1. 2 Public audiences (streamed on Youtube) 2. 4 online workshops on scenario building 3. 2 online workshops on the identification of energy development nodes

Surelec transmission line (September 2020 to June 2021) and Chiloé Libre campaign	1. Environmental Impact Assessment presented by Surelec 2. Suspension of evaluation activities due to Covid-19 pandemic (several SEA documents) 3. Comments introduced by public bodies, individuals, and NGOs in the initial evaluation period. 4. Reports of citizen's participation uploaded to SEIA	1. Event on anniversary of *Mayo Chilote* 2. Event 'alternatives to energy extractivism'
Chiloé-related projects and plans	1. Plan Chiloé (drafted in 2008) and follow up document. 2. DIA Parque Eólico San Pedro (approved in 2008) and EIA Parque Eólico Chiloé. 3. *Local Energy Strategy* (*Estrategia Energética Local*) of Castro and Dalcahue councils (developed in 2019). 4. PROT Los Lagos (preliminar, never sanctioned). 5. Strategic Plan 'The Chiloé we want' (*El Chiloé que queremos)* *6.* Regional Development Strategy Los Lagos 2009-2020 (*Estrategia Regional de Desarrollo Los Lagos* 2009-2020).	

Green Hydrogen Estrategy and related initiatives	1. Version of June 2020 of Green Hydrogen Strategy. 2. Version of November 2020. 3. Comments and responses to comments from the Energy Ministry to the November 2020 version (citizen's participation). 4. Report from Senate commission '*Iniciativa Hidrógeno Verde'*. 5.McKinsey report 'Chilean Hydrogen pathway. Final report' released January 2021.	1. Lecture in *Congreso Futuro.* 2. Lecture in CEP event on green hydrogen. 3. Mision Cavendish online seminars. 4. Event SCAC on green hydrogen in the region.
Others	1. Long-Term Climate Strategy (*Estrategia Climática de Largo Plazo*) 2. Citizen's proposal of energy for Aysén (*Aysén, Reserva de Vida*) 3. Citizen's proposal of energy for Magallanes (*Propuesta ciudadana de energía para Magallanes).* 4. Proposal of SEIA reforms by Citizen's-Union Committee (*Comisión Sindical Ciudadana Parlamentaria*). 5. Reports from National Commission for Productivity (*Comisión Nacional de Productividad*). 6. ANFUSEA and FENATRAMA public declarations. 7. Application documents for 'Energetic council' (*Comuna energética*) and 'Social Innovation' (*Innovación Social*) programmes of 2020.	1. Event on FENATRAMA and suspending citizens participation during the pandemic. 2. Participatory workshop on Long Term Climate Strategy.

ANNEX 2: TIMELINE OF POLICIES, WORKING GROUPS AND DOCUMENTS



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R3i82GhjnVkv8dovOto5GyWUVMRuTcU~Ilug-FHElXt~CyxxvaTy9laJWBm9aZ-rRaHmwKctLQlfJISKMGovoxt2no~ARJ86YcdQ~v8~Jx6Xf9IOPJBu2kVu-fRYYpEYuRVALsnQAktgFZUo9bg~q1VJ37nXlpNKkJyeB9U91PAe-Plf0ykcrfN8ikX~llD0Ncc6BO4QufCDJAgybMJoFA8VAoyA4-HZzuATQCLJA-ZehmFzMuqjjpIPChRQCX-e1wkRcqJoio2WFhA__&Key-Pair-Id=APKAJ-LOHF5GGSLRBV4ZA#page=404, accessed 5 May 2022).

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