

Searching for an Antarctic identity
at the Antarctic Gateway Cities of Cape Town
(South Africa), Christchurch (New Zealand),
Hobart (Australia), Punta Arenas (Chile),
and Ushuaia (Argentina)

by Gabriela Roldan

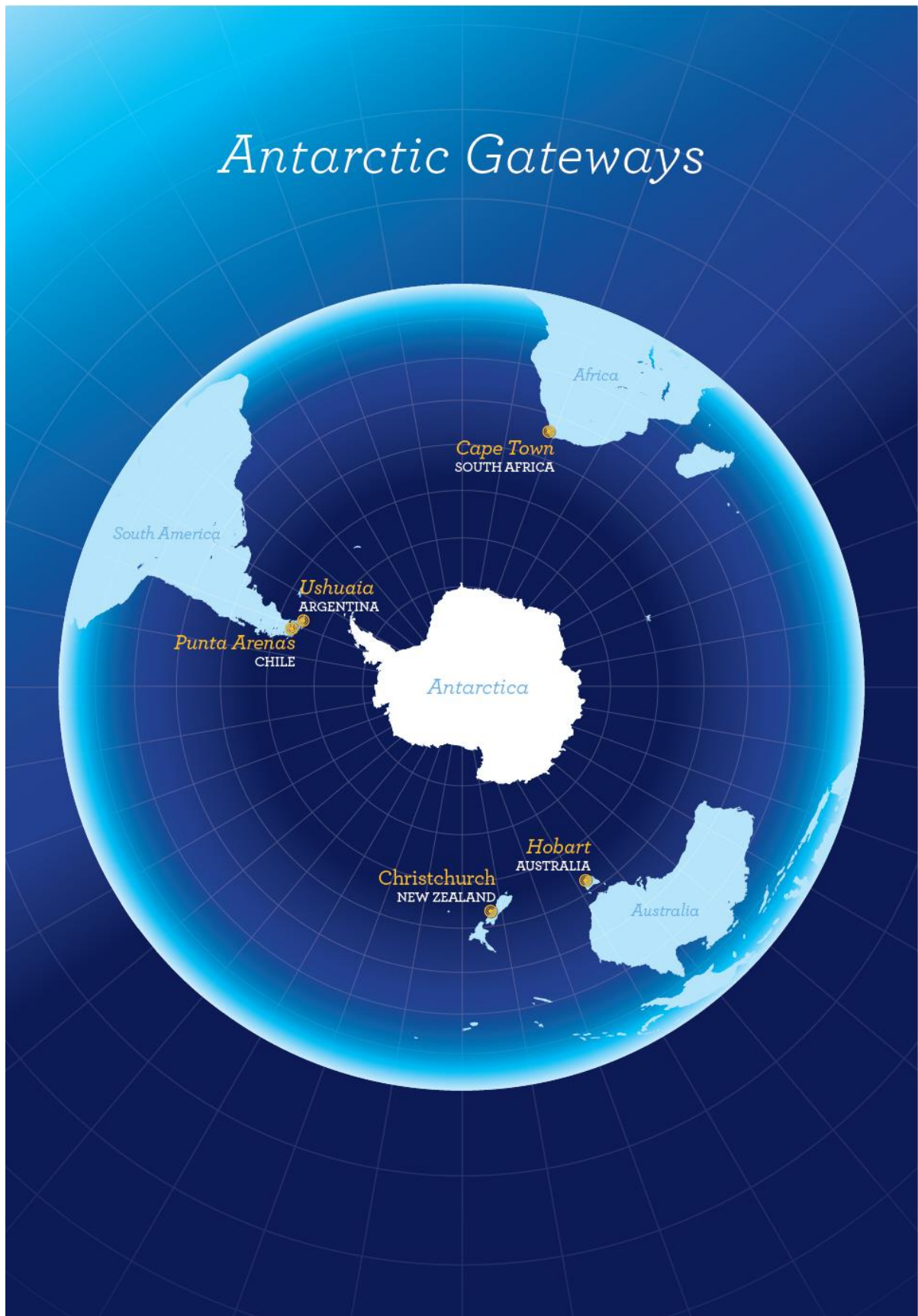
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Antarctic Gateways



Map by Bronwyn Gay and Gabriela Roldan, 2020.

Abstract

The Antarctic gateway cities occupy a central role in providing access to Antarctica for people and goods. Located in the periphery of the Antarctic region, the gateways have developed many connections with the Southern Continent and, in general, they concentrate the polar political, economic and cultural associations of their host countries. This thesis seeks to explore the connections between people, ideas and knowledge in the cities of Cape Town (South Africa), Christchurch (New Zealand), Hobart (Australia), Punta Arenas (Chile) and Ushuaia (Argentina) and the Antarctic region, and to understand how these polar associations may influence gateway citizens in the construction of their identity. Central to these discussions is the influence Antarctic geopolitical agendas of the countries hosting the gateway cities have on their, and their citizens', connections with Antarctica.

Four of the five gateways are regional cities within Antarctic claimant countries. Due largely to coincidence of geography and politics, these cities occupy the role of Antarctic gateways, and receive national and international recognition of hosting associated polar agencies, as well as the economic benefits from the business generated by movement to and from Antarctica. Conversely, the South African gateway presents a distinctive case from the others; based in a non-claimant country and with historic internal power struggles, the largest of all gateways relates differently to Antarctica.

This research employed qualitative methods and followed the principles of Constructivist Grounded Theory. Thirty-six semi-structured interviews were conducted in the Antarctic gateways, supported by non-participant observation, extant texts, and photographs obtained in each city. Data analysis was assisted by scholarly literature on identity, nationalism, place attachment, values, and cultural representations of Antarctica.

The findings of this thesis indicate that Antarctica is a powerful place that inspires significant and long-lasting connections with people, to the extent of influencing personal and social identities. Antarctica appeals to individuals from a socio-cultural perspective, which inspires emotional responses for conservation advocacy and protection. Yet, the values ascribed to Antarctica and actions taken for its protection reflect nationalistic discourses and geopolitical influences.

This research found that gateway communities do not have a common identity with Antarctica. However, some individuals in these communities have strong personal connections to Antarctica, although these have not been formed as a result of them residing in an Antarctic gateway city. The many and varied connections that the gateways maintain with Antarctica are

not sufficient to support the construction of an identity with the Antarctic. In fact, gateway community members are often unaware of these connections, or actively contest or resist them. Moreover, this research identified that geopolitical influence, socio-economic inequalities, race politics, and colonialist cultural representations of Antarctica affect how people from the gateways perceive, and connect, with Antarctica.

This thesis attempts to address the gaps of knowledge in Antarctic gateways and human engagements with Antarctica. It explores the impacts of socio-cultural representations and popular geopolitics of the southern polar region in the gateways communities. In addition, it examines the influence of policy, economic interests, territorial claims, entrenched nationalism, and place attachment in and with Antarctica. This thesis revisits the historical, contemporary, economic, and cultural perspectives of each gateway city, and argues that without the geopolitical interests and territorial assertions in Antarctica of their host countries, the gateways themselves have little influence and power in Antarctic matters. However, this research argues that the role of the gateways within the international polar community goes beyond the transport logistics function and generator of local revenue, and suggests that a council of Antarctic gateways could have a place within the Antarctic Treaty System in an Expert Group capacity.

This thesis also reveals that the common use of the concept of Antarctic gateway is unclear and limited to transportational facilities and services only, and proposes a new definition grounded on the multifaceted associations that the cities maintain with Antarctica. The Antarctic gateway is (re)defined here as the following:

A city located within close proximity to the Antarctic region, culturally connected with the South, host to a dynamic community where knowledge of Antarctic science, policy, management, technology, and logistics is manifested in everyday activities, and having the necessary transport network and infrastructure to offer comprehensive access to Antarctica, and, in return, to benefit from its polar linkages.

Finally, findings from this thesis indicate that Antarctica is an unattainable place for some members of the communities at the gateways. Antarctic is seen as a region reserved only for the privileged. This work discusses the value of popularizing Antarctic education at the gateways, and proposes rethinking the approach to Antarctic experiences and knowledge (e.g. academic, scientific, and policy) beyond the traditional boundaries on wealth, language and geopolitics, to include the communities of the cities closely connected with Antarctica.

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Acronyms and abbreviations

AAAD: Australian Antarctic Division	CSIRO: Commonwealth Scientific and industrial Research Organization [Australia]
AAF: Australian Antarctic Festival	DEA: Department of Environmental Affairs [South Africa]
AAP: Australian Antarctic Programme	DNA: Argentine National Antarctic Board
AGC: Antarctic Gateways Council	DSIR: Department of Scientific and Industrial Research
ALCI: Antarctic Logistics Centre International	DST: Department of Science and Technology [South Africa]
ALE: Antarctic Logistics & Expeditions	FACH: Chilean Air Force
ALSA: Antarctic Legacy of South Africa	FAE: Antarctic School Fair [Chile]
ANARE: Australian National Antarctic Research Expedition	FID: Falkland Islands Dependency
ANI: Adventure Network International	FPT: Frente Para Todos [Argentina]
ANTANZ: Antarctica New Zealand	GA: Gateway Antarctica
AntTas: Antarctic Tasmania	GT: Grounded Theory
AO: Antarctic Office [Christchurch]	IAA: Argentine Antarctic Institute
APAL: Antarctic Punta Arenas Logistics	IAC: International Antarctic Centre [Christchurch]
APC: Antarctic Policy Council [Chile]	ICPA: Institute of Polar Sciences, Environment and Natural Resources [Argentina]
ARC: Antarctic Roadmap Challenges	IGN: National Geographic Institute [Argentina]
ASO: Antarctic Season Opening [Christchurch]	IGY: International Geophysical Year
AT: Antarctic Treaty	IMAS: Institute for Marine and Antarctic Studies [Hobart]
ATCM: Antarctic Treaty Consultative Meeting	InFueTur: Tourism Board of Tierra del Fuego [Argentina]
ATS: Antarctic Treaty System	IPEV: L'Institut polaire français Paul-Emile Victor [France]
BACH: Boletín Antártico Chileno	IPY: International Polar Year
BANZARE: British-Australian-New Zealand Antarctic Research Expedition	KGI: King George Island [Antarctica]
CADIC: Austral Centre for Scientific Research [Argentina]	MBIE: Ministry of Business, Innovation and Employment [New Zealand]
CAI: International Antarctic Centre [Chile]	MFAT: Ministry of Foreign Affairs and Trade [New Zealand]
Cancilleria: Ministry of Foreign Affairs and Worship [Argentina]	MONA: Museum of Old and New Art [Hobart]
CAT: Chilean Antarctic Territory	MPA: Marine Protected Area
CBD: Central Business District	NAP: National Antarctic Programme
CCAMLR: Convention on the Conservation of Antarctic Marine Living Resources	NZARI: New Zealand Antarctic Research Institute
CCC: Christchurch City Council	
CCID: Central City Improvement District [Cape Town]	
CGT: Constructivist Grounded Theory	
CIAL: Christchurch International Airport Ltd	
COMNAP: Council of Managers of National Antarctic Programs	

NZAS: New Zealand Antarctic Society
OAA: Office of Antarctic Affairs [Australia]
ODF: Operation Deep Freeze [USA]
PANC: Joint Naval Antarctic Patrol [Argentina,
Chile]
PCAS: Postgraduate Certificate in Antarctic
Studies
PEDZE: National Plan for Development of
Extreme Zones [Chile]
PEI: Prince Edward Islands
PEO: Polar education and outreach
RAAF: Royal Australian Air Force
RAPAL: Meetings of Latin American National
Antarctic programmes
SANAE: South African National Antarctic
Expedition
SANAP: South African National Antarctic
Programme
SAR: search and rescue
SCAR: Scientific Committee on Antarctic
Research
SIT: Social Identity Theory
TAE: Trans-Antarctic Expedition (1955-58)
TdF: Province of Tierra del Fuego, Antarctica
and the South Atlantic Is [Argentina]
TPA: Tasmanian Polar Network
UN: United Nations
UNTDF: National University of Tierra del
Fuego [Argentina]
USAP: United States Antarctic Program
USSR: Union of Soviet Socialist Republics
UTasS: University of Tasmania
VLE: Villa Las Estrellas
WESGRO: Western Cape Investment and
Trade Promotion

1 Introduction

*Keeper of the Southern Gateway, grim, rugged, gloomy and grand;
Warden of these wastes uncharted, as the years sweep on, you stand . . .*
(Ernest Shackleton, 'Erebus', as quoted in Simpson-Housley, 1992, p. 110)

In his poem "Erebus", explorer Ernest Shackleton describes the iconic mountain as the guard to the pathway of Antarctica's interior; he romanticizes the route to the South Pole, naming it "the Southern Gateway". However, neither Shackleton, nor any of his contemporary explorers (or precursors), referred to the port towns that marked the pathway to the Antarctic as "gateways" (Elzinga, 2013). For a long time, Antarctica was imagined in a different dimension than the known world, and pathways were needed to conquer it. But the starting points, the gateways to Antarctica, were also necessary - to prepare the men and supply their expeditions, to farewell them and to be the first to hear their news of conquest or defeat. However, the designation of *Antarctic gateway* would not be customary for describing these cities until the end of the 20th century.

In 2007, Bertram et al. offered a definition of an *Antarctic gateway port*¹, which was central to the study of marine-based human activities in Antarctica. However, the study of Antarctic gateways ought to go beyond the primary means of transport offered from a city. Despite of the critical role these cities play to provide access to Antarctica, little attention has been paid to the meaning of *Antarctic gateway*, what characteristics these have, and what influence the gateways' have (if any) in the international Antarctic community. This thesis sets to examine these questions.

Nowadays, access to and return from Antarctica generally occur from the five cities recognized worldwide as Antarctic gateways. These are Christchurch (New Zealand), Hobart (Australia), Cape Town (South Africa), Punta Arenas (Chile), and Ushuaia (Argentina). Every year, thousands of scientists, programme managers, base personnel, politicians, tourists, fishing fleets, and others will likely pass through one of these gateways during their Antarctic activities. These are platforms to launch travels to the South; these cities are the means to access that *other* world, Antarctica.

The support that modern Antarctic gateways offer to the international polar community goes beyond the transport capabilities and resupplying services of yesteryear. These cities are not

¹ Antarctic gateway port is "a coastal or island port, able due to its proximity to the Antarctic to benefit from, and control access to, Antarctic and Southern Ocean resources, including fishing, tourism and scientific support" (Bertram, Muir, & Stonehouse, 2007, p. 124)

simple thoroughfares to Antarctica. Instead, they concentrate the Antarctic knowledge, management, polar expertise, policy influencers, art, education, and entertainment that forge strong connections with Antarctica. Moreover, the gateways embody the geopolitical significance that their host countries give to Antarctica. These cities are strongholds for national Antarctic ambitions, whether these are represented in pretended territorial sovereignty, potential future access to resources, Southern Ocean governance and environmental stewardship, science leadership, or the concentration of Antarctic-related commercial activities.

National and local governments of the Antarctic gateways claim that the connection with Antarctica influences the political, social, cultural, economic, and environmental aspects of the cities, to the extent of assisting with the construction of an Antarctic identity in their communities. This research thesis explores the extent of the Antarctic connections in each of the gateway cities, and discusses the existence of an Antarctic identity within these southern communities. This research attempts to contribute to the limited scholarship work on the topic of identity construction with the Far South, and seeks to identify the elements that shape this social construct.

1.1 Research rationale and its contribution to knowledge

The Antarctic gateway cities sit on the periphery of the geographical, political, and environmental boundaries² of Antarctica. Thus, their role and participation in Antarctic matters have been largely under-researched, especially concerning the part these cities play in promoting human connections with Antarctica. Antarctic politics and geography have prevented the gateways from been considered an integral part of Antarctic studies. This thesis intends to initiate discussions on this matter.

Much of the scholarly literature dedicated to the history and development of Antarctic tourism has included references to the gateway cities in support of the commercial activity (Bertram et al., 2007). Concerns over the rapid growth of the Antarctic tourism industry have sparked scholarly literature regarding the need for management and potential interventions of the gateway ports in controlling access to Antarctica (Haase, 2008; Swanson, Liggett, & Roldan, 2015). The diversification of the Antarctic tourism industry has been another focus of study, which has involved the participation of gateways as enablers of these recent developments

² The Antarctic Treaty dictates the political boundaries of Antarctica: “. . . the area south of 60° South Latitude, including ice shelves . . .” (1959, art VI.). I refer to the environmental boundaries marked by the Polar Front (see Dodds, Hemmings, Roberts, & (Eds.), 2017).

(Lamers, 2009). In addition, scholars have focused on the economic significance of the Antarctic activities developed at the gateway cities (Daverio, Jensen, Obreque, & Vereda, 2008; Hall, 2000; Saunders, Guenther, & Dalziel, 2016); and they have identified key issues and challenges for attracting further and more profitable Antarctic-related business (Boekstein, 2014; Daverio et al., 2008; Muir, Jabour, & Carlsen, 2007). The historic connections with polar expeditions of an Antarctic gateway have attracted the attention of local researchers resident in the city of study (Jensen & Vereda, 2016; Kriwoken, 1993). In addition, scholarly literature looks at the Antarctic gateways from the geopolitical significance these cities provide to their host countries (Dodds, 1997; Guyot, 2013), particularly as they support claims of Antarctic territoriality embedded in nationalism (Benwell, 2014, 2017; Mericq, 1987).

Although the aforementioned literature has contributed to the awareness of the role of Antarctic gateway cities, little attention has been paid to their communities and how they engage and interact with Antarctica. Dodds (2005) studied the impact of New Zealand's first Antarctic expedition in the production of cultural narratives of home-grown heroes. Salazar (2013a) demonstrated the efforts of Chile to create effective Antarctic place-making within regional students through educational practices and nationwide science competitions. Elzinga (2013) discussed the narratives of early 20th century explorers in Punta Arenas and Ushuaia, and the geopolitical rivalries of these two regions that warranted their promotion as South American gateways. Neufeld (2013) studied the sense of place developed by New Zealanders towards Antarctica, examining their narratives and sense of identity. Herbert (2014) studied Ushuaia as an Antarctic gateway for the tourism industry and contrasted the image of the city as an international tourism destination with the socio-political realities of its inhabitants. Leane (2016) examined the representations of Hobart as a southern gateway that inspired narratives of connectedness with the familiar world of the polar traveller, sparking geographic-related social imaginaries of the sub-polar and the world's end. Finally, Nielsen et al. (2019) explored the shifting dual identities of Tasmanians as residents of a state that is torn between being isolated and peripheral to Australia, and its central position at the heart of the country's Antarctic activities.

Concerning the conceptualization of the term *Antarctic gateway*, only Bertram (2007) has offered a definition for *gateway port*, in connection with her studies in Antarctic tourism development. Later, Hall (2015) examined the different approaches to conceptualize the polar gateways, making distinctions between the role of these versus transport hubs and entrepôts, revealing a vagueness in the different usages.

This thesis pays particular attention to the perceptions of the residents of the Antarctic gateway cities; their experiences living on the edge of Antarctica elucidates the significance of the polar

association and how this influences their everyday lives. This research is interested in answering questions regarding the strength of the Antarctic connections from the viewpoints of a city's residents; how identities are constructed and influenced by Antarctica, and how much the association with Antarctica matters to gateway locals.

The thesis attempts to expand the current knowledge on human connections with Antarctica. Presenting the perspectives of gateway cities' residents reveals the social constructions generated to make sense of the Antarctic world that occurs at their doorstep. In addition, this thesis evaluates the influence of national politics in the development and maintenance of the gateways.

1.2 Aims of this thesis and research questions

This research aims to examine how Antarctica influences the construction of an identity that is assumed to be unique to the residents of the Antarctic gateway cities. Personal identity and other social constructions that connect people with Antarctica are presumed to be stronger in the urban centres that concentrate the hype of Antarctic activities. Throughout this thesis, I examine the socio-political and economic perspectives of the Antarctic connection, and the place geopolitics play in the decisions made to support the making of an Antarctic gateway city, which includes enhancing a city's polar linkages. Nationalism is present in the policies of all five of the Antarctic states that host gateway cities, and these political ideologies influence and shape the engagement people at the gateways connect with Antarctica.

The overarching research question that guides this research is two-fold:

To what extent does Antarctica generate a special connection with the communities of the Antarctic gateway cities, and how does this connection influence the construction of an Antarctic identity in members of these communities?

This central question is supported by these subsidiary questions:

- (a) What is the basis for the connections between Antarctica and the gateway cities?
- (b) To what extent are these connections encouraged and facilitated by political agendas?
- (c) Do these connections result in a unique *Antarctic identity* (that might transcend national boundaries), and, if so, what are the characteristics of this Antarctic identity?

To answer subsidiary question (a), I explore the set of policies, actions, events, and partnerships celebrated in the Antarctic gateway cities between international, national, and local stakeholders, in order to establish and further develop the polar connection. Attention is paid to conflicts arising from the role of the gateway, and to contrasting views regarding the presence of Antarctica in the lives of the residents in these cities.

Question (b) concentrates on the history of the gateway country's engagement with Antarctica and its current position within Antarctica's international regime. Consideration is given to the analysis of national policies that guide the country's Antarctic programmes and stimulate the activities that take place at the gateway in relation to Antarctica.

The answer to question (c) will be revealed by the responses of the local interviewees, who reside in the gateway cities. Their viewpoint is valuable. It will inform critical aspects in the process of identification with the place (Antarctica), and which characteristics hold more, or less, value for these stakeholders.

1.3 Structure of the thesis

The thesis is divided into eight chapters, described below. Each chapter includes a literature review of the relevant topics and a discussion of the findings.

Chapter 2 outlines the qualitative methods chosen to undertake this research. It describes the paradigmatic position of this thesis, the methods chosen and the selection of semi-structured interviews to capture the experiences of research participants that reside at the Antarctic gateways.

Chapter 3 presents the conceptualizations of recurrent topics in the research that constitute a building block for the development of this research. Attention is paid to the concept identity and its social constructs, and to the influence of nationalism in identity construction. In addition, this chapter includes an extensive analysis of the concept of a gateway city to understand the role these urban spaces play in the Antarctic context.

Chapter 4 discusses aspects of Antarctic geopolitical thinking, with a focus on the gateway countries. It broadly explores the political regime that manages Antarctica, including the basis for territorial claims, and it introduces the Antarctic ambitions of the gateway countries.

Chapter 5 analyses Antarctic nationalism and the geopolitical representations of Antarctica reproduced in everyday life. Particular attention is given to forms of Antarctic nationalism that are embedded in the national identities of the gateway countries.

Chapter 6 provides a comprehensive analysis of each of the Antarctic gateway cities and their connections to the polar region. This chapter is a significant building block to understand the influence of the Antarctic connections at the gateway cities.

Chapter 7 analyses the results of the interviews conducted with participants who live in the gateways. The examination of the core categories and concepts that resulted from the data analysis reveal what are the basis for human connections with Antarctica and how these connections are motivated and influenced by life at the Antarctic gateways.

Chapter 8 discusses the central concepts explored throughout this thesis and concludes with a summary of the findings and main ideas that emerged from this research. It also provides suggestions for future research directions.

2 Research methods

To explore and understand the human connections with Antarctica from the perspective of the communities of the Antarctic gateways, this research employed a qualitative approach to capture the content-rich perceptions and experiences of the research participants. Their contributions are central to understanding the scope of influence of Antarctica in the local communities of the gateways.

As indicated in Chapter 1, this work aims to determine the existence of an Antarctic identity in the gateway cities. The leading question for this research is:

To what extent does Antarctica generate a special connection with the communities of the Antarctic gateway cities, and how does this connection influence the construction of an Antarctic identity in members of these communities?

The overarching question is supported by three subsidiary questions, which examine (a) the foundation for the connections to Antarctica at the gateways, (b) how these connections are assisted by the political interests of the cities' host countries, and (c) the characteristics of an *Antarctic identity*. Subsidiary question (a) warrants a comprehensive analysis of the Antarctic links that each city has cultivated over time, including historical and contemporary perspectives. Subsidiary question (b) is addressed by examining the gateway countries' politics and involvement in Antarctic affairs; attention is paid to the extent to which these countries have encouraged the gateways to develop a relationship with Antarctica. Finally, subsidiary question (c), the examination of the existence of an Antarctic identity in the gateway cities, is approached by incorporating the analysis of narratives and perceptions obtained from semi-structured interviews conducted with representatives of the communities in each of the Antarctic gateways.

This chapter also discusses the paradigmatic position of this thesis and the research approach. Grounded Theory (GT) was chosen as the method to guide this research. Its principles, the data collection process, and data analysis are explored later in this chapter. In addition, the chapter discusses the challenges encountered during the fieldwork undertaken in the Antarctic gateway cities, and how these were overcome. It concludes with the limitations of this research.

2.1 Ontological, epistemological, and methodological considerations

Before undertaking research, the researcher must consider their own ontological and epistemological assumptions, as these are fundamental philosophical positions that will guide and shape the research, and that will influence the suitability of the chosen methodology.

According to Guba (1990), the researcher must respond to three basic questions that will determine what the inquiry paradigm is, and how it will be studied. Guba argues that paradigm is a complex concept, but he defined it broadly as “. . . a basic set of beliefs that guides action . . .” (1990, p. 17), whether the action is an everyday life occurrence or an action taken in connection with a research discipline. Therefore, inquiry paradigms are adopted based on the researcher’s responses to the following questions:

1. Ontological: Concerned with the fundamental nature of existence (*What is the nature of the “knowable”? or, What is the nature of “reality”?*)
2. Epistemological: Concerned with the theory of knowledge (*What is the nature of the relationship between the knower (the inquirer) and the known (or knowable)?*)
3. Methodological: Concerned with the path taken by the researcher to acquire knowledge (*How should the inquirer go about finding out knowledge?*) (Guba, 1990, p. 18).

Guba also reminds us that these paradigms are human constructions and are hence subject to errors and idiosyncrasies of the human condition (1990).

There are four widely accepted inquiry paradigms, or philosophical worldviews (Creswell, 2014; Denzin & Lincoln, 2018; Guba, 1990; Guba & Lincoln, 2005):

1. Positivism: Rooted in an ontological position of realism, the reality is driven by undisputable natural laws, which can be studied to predict and control natural phenomena.
2. Postpositivism: Challenges, as a modified positivism, claims of absolute truth of knowledge; ontologically driven by the assumption that the researcher is a critical realist of the sensory and intellectual limitations of the human condition.
3. Critical Theory: Emerges as a rejection of the claim of value freedom made by positivists and postpositivists: nature and reality are seen through a system of values; the ontological position is historical realism, constructed and shaped by socio-political, cultural, economic, gender, and ethnic values.

4. Constructivism, or interpretivism: Assumes an ontological position of relativism: there is not one but multiple realities, which do not exist independently but are socially constructed.

The qualitative research design for this thesis is situated within a Constructivist paradigm. Adopting this paradigm allowed me to understand the research questions from the points of view of the people involved; their perspectives on the social phenomena studied here do not exist independently but are socially constructed. Moreover, individuals develop subjective meanings of their experiences, which are varied, complex, and multiple. The researcher focuses on the complexity of views rather than being driven by a theory (Creswell, 2014; Guba, 1990). The ontological views of constructivism are manifested in a relativist assumption. Relativism is described as “the key to openness and the continuing search for ever more informed and sophisticated constructions” (Guba, 1990, p. 26). Relativism accepts there are many interpretations for any one situation, and that realities are multiple and not rigid or fixed. As the researcher, I believe my epistemological standpoint is subjectivist, and I consider the research participants’ beliefs and opinions of the Antarctic connections in their hometowns as the main data for this work. I have critically examined, interpreted, and conceptualized these data with regard to the current scholarly work on identity and human connections with Antarctica, intertwining knowledge from human geography, geopolitics, and social psychology.

Reflecting on the paradigmatic positions as a researcher was not a straightforward path for me. Many times throughout the years dedicated to this research I questioned my philosophical assumptions. From the standpoint of the researcher, I kept reflecting on Guba’s inquiry paradigms, and contemplated other paradigmatic positions, such as critical theory. However, as the research progressed, my assumptions continued to be aligned with constructivism.

Consequently, this research engages with a hermeneutic and dialectic methodology, aiming to accurately identify and capture the individuals’ constructions on the meaning of Antarctica and the participant’s connections with the place. The hermeneutic/dialectic process starts by constructing understanding of the social phenomena studied here from the literature, documents, observations, and the participants’ voices, later to deconstruct and reconstruct these social constructions free of assumptions (Guba, 1990). For such an endeavour, I chose a qualitative approach, including interviews as primary methods of inquiry, to capture the content-rich experiences and perceptions of the residents in the Antarctic gateways.

Another significant consideration in any research is the researchers’ bias that potentially influences the choices and decisions made throughout the research process. My personal experience in Antarctica and deep interest in Antarctic matters have driven this research already from its inception. I have a background in tourism management and strategic policy

development, with a strong focus on Antarctic and Southern Ocean issues, particularly from the South American perspectives. A further influence is my personal experience as a resident of Ushuaia and Christchurch, two of the gateways studied here. As an active member of the communities of these cities, I engage frequently in Antarctic-related activities, which have informed aspects of this research thesis. Hence, I recognize my own bias through the connection I have with the gateways and its people. Throughout the course of this research, I remained alert to avoid (and minimize) bias, for instance, in the selection of participants, my role as an interviewer, and during data analysis, to reflect only the participants' views.

2.1.1 Research methodologies and methods

This thesis followed the principles of the GT method, developed by Glaser and Strauss in the late 1960s, at the time considered a ground-breaking method to approach research on social phenomena from a qualitative perspective, surpassing the formerly dominant theory-testing and quantitative methods (Hennink, Hutter, & Bailey, 2011). The GT method is a systematic approach to research enquiry following a process for data collection and analysis, or guidelines, to construct theories grounded in the data (Hennink et al., 2011). GT is an inductive approach to research while using deductive strategies, but, rather than following a linear course, the analytic process has a flexible yet systematic and circular nature for ongoing validation, comparison, and repetition of the analysis of data and theory development (Charmaz, 2006; Hennink et al., 2011; Timonen, Foley, & Conlon, 2018). Data are generated by social phenomena from everyday life experiences and an individual's actions, and these data can be systematically collected, codified, categorized, and analysed to create knowledge.

The main method for data collection chosen was semi-structured interviews. This method is a popular qualitative approach to research when the study is focused on people's experiences on a particular issue. Hence, I considered it to be the appropriate tool to explore the Antarctic connections at the gateway cities from the views of the research participants. In-depth interviews involved an interviewer (the researcher) and a research participant discussing and exploring comprehensively a specific topic (Hennink et al., 2011). Interviews provide rich and detailed perspectives to understand social phenomena *seen* from the experiences of the participants.

In addition to the interviews, data collection with regard to the Antarctic gateway role was complemented by non-participant observation and comprehensive research of "extant texts" (Charmaz, 2006, p. 37), such as official documents from governmental organizations, mass media, social media discussions, literature, and photographic archives.

2.1.2 Constructivist Grounded Theory approach

The foundational work on the development of GT by Glaser and Strauss (1967), is today considered to constitute a classic approach to this popular research method (Nagel, Burns, Tilley, & Aubin, 2015). GT has subsequently evolved into different variations that contemplate diverse ontological and epistemological perspectives. From the various contributors to GT, I followed the work of Charmaz on Constructivist GT (CGT) (2006). To develop theory, CGT adheres to the strategies proposed by classic GT for data analysis, namely data gathering, coding and theoretical sampling, memo-writing, and constant comparison. However, CGT has important epistemological underpinnings: for instance, classic GT is based on a positivist approach and objectivist assumptions, whereas CGT is based on interpretivist views and subjectivist assumptions (O'Connor, Carpenter, & Coughlan, 2018).

An important point of distinction between GT and CGT is the role of the researcher in the process. Employing GT, the researcher builds theory from the data, maintaining a detached position over their preconceptions to avoid influencing the data analysis (Timonen et al., 2018). Conversely, CGT adopts an inductive, comparative, and open-ended approach that acknowledges the researcher's subjectivity in the social environment; Charmaz's constructivist approach places the researcher as a co-constructor of meaning along with the participants' voices (2006). In Charmaz's words:

. . . we are not passive receptacles into which data are poured . . . we are not scientific observers who can dismiss scrutiny of our values by claiming scientific neutrality and authority. Neither observer nor observed come to a scene untouched by the world . . . (2006, p. 15).

Another important difference between the two iterations of GT is the role of literature review in preparation for conducting research. Classic GT suggests researchers not engage with literature related to the topic of inquiry before data collection, in order to avoid influences of predetermined ideas, which could lead to forcing the data obtained into preconceived theories instead of constructing new theory from the data collected (Charmaz, 2006; Nagel et al., 2015). Conversely, CGT supports the literature review before and throughout data collection to establish what is known from the topic of enquiry and to become familiar with it, in order to later integrate the new theory with the existing literature (Charmaz, 2006). Researchers must remain open to the different interpretations of the world by research participants, and engage in formulating explanations that are grounded in the obtained data through emergence or construction of theory (Timonen et al., 2018).

CGT's inductive, open-ended, and constructivist approach aligned with my ontological and epistemological worldview. Also, CGT's appeal was the flexibility that allowed researchers the co-construction of knowledge alongside research participants, coupled with the acknowledgement (and acceptance) of the researchers' subjective world assumptions³. The flexible nature of the CGT method accepted that my a priori knowledge on the topic of Antarctic gateways would be a "point of departure" (Charmaz, 2006, p. 17) for undertaking this research, instead of hindering it. Similarly, CGT's support for literature review before and throughout the research process was important to consider, since this is an essential institutional requirement for a novice researcher embarking on a PhD thesis, and an obligation for obtaining ethics approval to conduct research.

2.2 Research ethics

This research is concerned with the exploration and understanding of social processes ascribed to individuals and groups. Qualitative research allows for the examination of human experiences and social phenomena where the meaning-making agents are individuals or groups. As Creswell (2014) indicates, qualitative research supports a largely inductive design, where the researcher generates meaning from the interpretation of the data collected and explicit theories are not imposed in order to test a specific hypothesis.

The scholarly literature identifies six main issues faced by qualitative researchers when conducting their inquiry: validity or trustworthiness, generalizability, access and consent, reflexivity, voice, and transparency (Butler-Kisber, 2010). Broadly speaking, validity can be assessed by including coherent and transparent research processes that illustrate the researcher's reflections and account for their biases and assumptions. Also, evidence that a considerable length of time has been spent in the field is advisable (Butler-Kisber, 2010). Authenticity and credibility are supported when the voices of the research participants are present and clear, including those discrepant cases and tensions that may arise during the course of the work (Butler-Kisber, 2010). Wary of these known issues in qualitative research, I stayed vigilant for the influence of my own bias and assumptions regarding the Antarctic gateways in the reflection of the voice of the participants of this study, and I gathered multiple

³ After receiving well-founded comments on this thesis, I questioned whether my research methods and my positionality as a researcher aligned better with the tenets of *Bricolage* rather than CGT. For Kincheloe, "... the bricolage views research methods actively rather than passively, meaning that we actively construct our research methods from the tools at hand rather than passively receiving the "correct", universally applicable methodologies" (2005, p. 324). Due to the flexibility that CGT offered me throughout this research, I did not perceive the need for a different methodological focus. However, in hindsight, and with the better understanding I now have of bricolage and bricoleurs, this is an innovative and tempting method that I will seek to apply in future research.

forms of information to help to understand the context of my findings (trustworthiness). I spent a similar amount of time conducting research on each city, and tried to reach as many research participants as possible, considering the limitations of time spent in the field and the way the participants became available to me (generalizability). Issues with access and consent were not present in this study, since all participants willingly agreed to participate and were aware they could leave this research at any time, as stated in the “Research participant information sheet” they obtained from me prior to interviews. A copy of this letter can be found in the Appendix, in English and Spanish respectively. Moreover, to address issues with the appropriation of participants’ ideas or voices (Butler-Kisber, 2010), the iterative process to data coding and data analysis suggested by CGT allowed me reflect on my finding in a reflexive manner. Lastly, to show transparency during this research, I kept notes of most of the steps taken, noting that the research journey has not always been a straight path.

This research received approval from the Human Ethics Committee at the University of Canterbury,⁴ and utmost care was taken to ensure that the proposed work was conducted with appropriate considerations for ethical standards, professionalism, and respect for the cultural values of the participants.

To ensure confidentiality, I assigned alphanumerical codes to the individual research participants, and throughout this thesis I refer to these codes rather than to any identifying characteristics. Also, the description of their occupation is intentionally relatively vague, to hinder identification of the participant. Table 2.1 shows the code names chosen per city and the date when the interviews were conducted. The alphanumerical codes are applied through this thesis.

Table 2.1: Summary of the interviews conducted in each Antarctic gateway city

Code name	Number of interviews	City	Dates
SA01 to SA06	6	Cape Town	December 2016
NZ01 to NZ08	8	Christchurch	July and October 2015
AU01 to AU07	7	Hobart	October to November 2015
CH01 to CH07	7	Punta Arenas	March to April 2014
AR01 to AR08	8	Ushuaia	January to March 2014

⁴ Approval for the research project was received under reference number HEC2012/14 (see Appendix 01).

2.3 Data collection

Following CGT's strategies for data collection, I selected in-depth interviews to elicit participants' perspectives on the Antarctic connections in their cities and their understanding of how these influence, or not, the construction of a local Antarctic identity. I complemented the data collection with non-participant field observation, and I collected extant texts and created a photographic archive from my visits to the Antarctic gateways. These data collection tools are analysed in the following subsections.

2.3.1 In-depth interviews

After identifying my research problem and formulating the main question, I prepared to collect data through in-depth interviews. Interviews were the appropriate tool to explore the Antarctic connections at the gateway cities from the experiences of the research participants; interviews provide rich and detailed perspectives for understanding social phenomena. In-depth interviews are said to be "conversations with a purpose" (Hennink et al., 2011, p. 109), where the interviewer (researcher) prepares a set of questions and probes to guide the *conversation*, but not to influence the content of the discussion (Seidman, 2013).

Following Charmaz's (2006) recommendations, I prepared a broad interview guide⁵ that contained open-ended questions to invite the participant to discuss the topic of interest to this research. The key questions were designed to be short, simple, and broad, inviting the participants to share their views of life in the Antarctic gateways. As time and data collection progressed, I reassessed these guiding questions to allow for exploration of the topic, and, when appropriate, to fit the participant's experience. An aspect I considered while preparing to conduct each interview was my position as an informed Antarctic researcher. I understood that my personal experience at the gateway and with Antarctica could have an influence over the research participant, and ultimately, over the data collection. With each interview, I assessed the situation regarding my positionality; there were instances where the research participant asked my viewpoint and about my personal Antarctic experience, and I responded truthfully but in brief to prevent subjective influencing; these instances have been noted as biases. I established rapport with the participants throughout most of the interviews, with some specific situations explored further in this chapter. Rapport may have benefited from speaking the native language of the participants and from my general understanding of the local culture.

During the course of my fieldwork, I conducted 36 interviews with residents of the five Antarctic gateway cities. Six interviews were conducted in Cape Town in December 2016, including one

⁵ The interview protocol and questions are included in the Appendix.

interview conducted online for the participant's⁶ convenience. In Hobart, seven interviews took place during October and November 2015. Another eight interviews were conducted in Christchurch in July and October 2015. In Punta Arenas, I conducted a total of seven interviews between March and April 2014. In Ushuaia, eight interviews took place from January to March 2014. The intended timeline for conducting interviews had to be adjusted due to funding opportunities that would allow me to travel and live in the Antarctic gateway cities. To conduct interviews and non-participant observations, I spent between three and five weeks in each of the cities studied here, with the exception of Christchurch where I live. Table 2.2 contains an overview of all interviews and details of the participants, including code names, city of residence, approximate age, gender, Antarctic experience, and occupation. Expertise and possible connections with Antarctica, rather than a gender balance among research participants, were sought for this research. 19 females and 17 males participated in this research and self-identified in a binary gender system. All participants were over the age of 18 years old, following the ethics approval obtained to conduct this research.

⁶ Participant SA06 was shifting homes and found it difficult to meet face-to-face.

Table 2.2: List of research participants in alphanumeric code names, by city

Code name	City of residence	Approximate age	Gender	Antarctic experience	Occupation/field
SA01	Cape Town	40s	Female	NO	Tour guide
SA02	Cape Town	40s	Female	NO	Hospitality entrepreneur
SA03	Cape Town	50s	Male	NO	Academic
SA04	Cape Town	60s	Male	NO	Academic
SA05	Cape Town	60s	Male	YES	Retired upper-level management
SA06	Cape Town	30s	Female	YES	Artist
NZ01	Christchurch	40s	Female	YES	Events manager
NZ02	Christchurch	50s	Female	YES	Communications
NZ03	Christchurch	60s	Female	YES	Retired - digital technologies
NZ04	Christchurch	20s	Female	NO	Nurse
NZ05	Christchurch	60s	Female	YES	Upper-level management
NZ06	Christchurch	50s	Male	YES	Entrepreneur
NZ07	Christchurch	50s	Male	YES	Logistic operations
NZ08	Christchurch	50s	Male	YES	Upper-level management
AU01	Hobart	40s	Female	YES	Scientist-artist
AU02	Hobart	60s	Male	YES	Upper-level management
AU03	Hobart	40s	Female	NO	Academic
AU04	Hobart	60s	Male	YES	Tour guide-retired academic
AU05	Hobart	20s	Female	NO	Nurse
AU06	Hobart	70s	Female	YES	Writer
AU07	Hobart	60s	Female	NO	Entrepreneur
CH01	Punta Arenas	60s	Male	YES	Upper-level management
CH02	Punta Arenas	40s	Female	NO	Academic
CH03	Punta Arenas	40s	Male	YES	Communications manager
CH04	Punta Arenas	30s	Male	NO	Artist
CH05	Punta Arenas	30s	Male	NO	Academic-travel writer
CH06	Punta Arenas	30s	Female	YES	Artist
CH07	Punta Arenas	30s	Male	YES	Graphic designer
AR01	Ushuaia	30s	Female	NO	Civil servant
AR02	Ushuaia	30s	Male	YES	Civil servant-musician
AR03	Ushuaia	40s	Female	YES	Middle-level management
AR04	Ushuaia	50s	Female	NO	Retired civil servant
AR05	Ushuaia	40s	Male	YES	Tour guide
AR06	Ushuaia	30s	Male	YES	Port agent-services supplier
AR07	Ushuaia	60s	Male	YES	Upper-level management
AR08	Ushuaia	50s	Female	YES	Academic

I consulted the extensive literature available regarding interviewing for qualitative research (Creswell, 2007; Hennink et al., 2011; Seidman, 2013) and designed the interview questions following a broad guide that included the following topic (and subtopic) areas:

The participant's interest in Antarctica

- The meaning of Antarctica
- Memories of Antarctica

This topic aims to identify what motivates the respondents to think about Antarctica; what emotions, feelings, behaviours, and cognitive process can be identified in the process of attachment to the place, or the idea of the place.

Engagement and participation with the local Antarctic community

- Continuous, occasional, or discontinuous engagement with Antarctica
- Interest in further learning about Antarctica or the gateway's role

This topic seeks to explore the level of interest and engagement with Antarctica, including the extent of participation of the respondent in Antarctic activities shared with the local community. This topic informs on group belonging and social interaction related to Antarctica, or interest in Antarctica, which is the binding element.

The participant's perception of their city's role as a gateway

- What is the significance of living in an Antarctic gateway?
- Does the Antarctic connection inspire action in the community, or personal actions?

This theme sheds light on the perception and understanding of the role of the city and its Antarctic linkages. The discussion involves local influences (i.e. political, economic, social, environmental perspectives) that may inspire action (individual or group action).

The participant's perception of their country's role in Antarctica

- Understanding of the politics of Antarctica and related national policies
- Emerging socio-political issues connected to Antarctic territoriality

This topic discusses the influence of Antarctic politics and socio-economic interests that mediate at a national and local level for the understanding of the country's activities in Antarctica.

The broad guide and interview questions were discussed with other researchers with ample experience conducting qualitative research, and with those studying Antarctic-related topics. Pilot interviews took place to test the intended semi-structured character of the interviews and for the purposes of training as an interviewer.

The flexible nature of semi-structured interviews with open-ended questions allowed the participants to expand in their responses when they wished to, which, at times, revealed emerging issues that were not initially considered. The broad interview guide was the starting point for a conversation with the participants and did not lead the coding and later categorization of the analysed data.

Research participants were identified through the literature on Antarctic-related activities in the gateways and through online searching. The selection process of participants was largely determined by the opportunity to access these potential contributors when I was visiting the gateway cities. Also, I attempted to recruit some participants who I presumed did not have Antarctic experience but were influenced by members of their social circle. In all cases, research participants recruited with experience in Antarctica had family members or friends of who have been to the Antarctic. I contacted potential research candidates via email with an invitation to participate and information regarding my work. This was followed by setting up a date to meet with those who accepted the invitation. Participants received an information letter detailing use of the data obtained, the confidentiality of their personal identity, and the non-binding character of their participation should they choose to withdraw from the research. I translated this letter for Spanish-speaking participants for better understanding of the conditions of their contribution to this study.

Participants were asked to sign a consent form to partake in this research, including the use of audio recording during the interview. No participant expressed discontent with the use of the voice recorder, and none showed evidence of feeling inhibited by the presence of the recorder during the interview. The South American participants were interested in the requirement for signed consent; some expressed that they had never been asked before for such a requisite, and others were slightly hesitant to sign the consent form. After reassuring them that I would procure total confidentiality, consent forms were signed. A verbatim transcription of the interviews was sent back to the study participants within two to five months of the interview date for their approval, clarification of ideas, and corrections.

Largely, the interviews took place in public spaces, but a few interviews were conducted at the homes or working offices for the participants' convenience, and, as stated above, one interview was done online. The length of the interviews varied depending on the level of interest of the participant in the research topic, with the average interview time being 45 minutes. Further interviews were not required, but in some cases post-interview clarification was sought from participants. All participants responded positively to my requests.

2.3.2 Extant data collection

As previously mentioned, during data collection I had the opportunity to settle in at the gateway cities, and take time to observe everyday activities with Antarctic connections. The intention was to register the public's interaction with Antarctic-related events and objects (i.e. street art, signs, public libraries, festivals, public museums⁷) available in the city. There were also occasions where spontaneous conversations emerged with passers-by in relation to the event observed. At times, comments from the public revealed valuable insights on people's perceptions of their city in relation to Antarctica. I wrote notes of the observations and references to comments from the public, and, when appropriate, I photographed these events. I did not seek consent from individuals to take their photographs. Hence, photographs with members of the public are employed as memo notes but were not be used to illustrate Antarctic-related events if individuals can be identified. The field notes were valuable reminders of significant events happening in the Antarctic gateways at the time of writing this thesis. In addition, observations and comments gathered in public spaces were used to compare with codes emerging from the data analysis and incorporated in this work.

As part of the collection of extant texts, I gathered documentation available in the public realm concerning the development of the Antarctic gateways, particularly from newspaper articles (printed and electronic forms). The purpose of this data gathering was to elucidate what were the recurrent themes of Antarctic information available to the public in the gateway cities. The information collected served to compare with the emergent core categories from the interviews. Much of the information obtained from news media served as complementary literature to inform Chapters 5 and 6 of this work.

Lastly, I photographed Antarctic-related sites, statues, buildings, information signs, and any other physical reference to the Antarctic connection that I encountered in the cities. Sometimes these findings were accidental; with others, I followed information brochures and guides available to the public. The photographic files are also organized in categories. Many of the photographs collected are included in this thesis to provide substantiations of what I observed in the gateways. These photographs were catalogued by city, and, as the core categories developed, the photographs were re-catalogued following the emerging categories.

2.3.3 Theoretical sampling

Theoretical sampling implies collecting more and selective data to gain better understanding of core categories, to refine these, to identify empirical interpretations, and to develop new

⁷ I consider in this category festivals and museums that contain Antarctic-related activities or exhibits and are free-entry to the public.

theory (Charmaz, 2006). This phase of the analytical process became more focused in the search for specific data to fill the gaps and understand possible variations of the new categories that emerged. As the search narrowed, it reached a saturation point “where no significant new insights [were] emerging” (Nagel et al., 2015, p. 8). The new data were coded and compared against the earlier codes and categories, until no new interpretations emerged, and the process reached the point of saturation.⁸

For instance, I conducted theoretical sampling to exhaust the understanding of the focused code “Antarctic education”. This was a recurrent code in my data, particularly from Punta Arenas and Ushuaia. I wanted to understand whether these education programmes exist or existed in the past (when the participants were children) and had been discontinued. If so, what were the reasons behind it? I accessed further literature on public education systems in Chile and Argentina, searching for the inclusion of education programmes with an Antarctic focus in the respective school curricula. I consulted (via email) with the director of the Board of Kindergartens in Punta Arenas (Junta Nacional de Jardines de Infantes - JUNJI), with the Director of the Regional Science Programme in Magallanes (PARExplora), and with the deputy Secretary of the Provincial Ministry of Education in Ushuaia. The search revealed that Antarctica education is not mandatory in the school curriculum of these two regions, besides geographic knowledge of the borders of Argentina and Chile. Instead, Antarctica is explored as a topic of inquiry in the classrooms when the opportunity arises, such as the celebration of national days. The code “Antarctic education” also appeared frequently in the responses from the other gateways, connected with the concern of ignorance on Antarctic matters at schools and in the local community in general. I examined this code again and inferred that “Antarctic education” referred to a desire for better understanding of Antarctica within the communities of the gateway cities.

Theoretical sampling refined my assumptions of what was happening with the social phenomena I was studying, and showed what was new and how to integrate it. At times, it was tempting to search further into the topic of Antarctic education as new leads appeared; I was concerned about missing important information. Following the literature (Charmaz, 2006), I returned to the core categories and sorted memos to redefine the theoretical links already made to advance with this research. I am expecting that the additional data gathered but not included in this work will be useful for future research beyond the scope of this thesis.

⁸ For Charmaz (2006), research categories reach a point of saturation when fresh data do not provide new insights, nor reveal new properties than the data already collected and analysed. Further data collection is then unnecessary.

2.3.4 Overcoming difficulties

Conducting research assumes overcoming certain challenges that were not always anticipated during the planning stages. The challenges encountered and the subsequent modifications to the research design have provided invaluable understandings of the social dynamics at the Antarctic gateways, which have shaped the outcome of this work and are explored below.

Participant recruitment

In Cape Town, data collection was hampered by ongoing student protests. Before arriving in the city, I had contacted early-career researchers undertaking studies in Antarctic-related topics at the local university, as these were considered potential research participants. However, the student demonstrations escalated to violent confrontations with the police, with groups blocking the entrance to the university and camping on site. For safety reasons, I was advised not to proceed with the meetings.

Instead, my South African landlord (a retired journalist) became the accidental gatekeeper,⁹ introducing me to her network to find prospective participants. She also assisted me with understanding some nuances of the city's socio-cultural aspects and the Afrikaans language.

Furthermore, in Cape Town, Christchurch, Punta Arenas, and Ushuaia, I contacted locally based Antarctic tour operators for potential research participants. They all responded to email communication, and I held face-to-face conversations with representatives of most of these tour companies. However, some companies apologized for declining the invitation to the interview. They argued it would be very difficult to maintain anonymity considering they were the only (or one of the few) Antarctic tour company in the city. Therefore, I consider the information exchanged with Antarctic tour companies as elicited texts and supplementary sources of data (Charmaz, 2006).

Language and cultural barriers

During the course of fieldwork, the interactions between researcher and research participants were (largely) very pleasant. Most participants showed interest in the topic of research and provided lengthy discussions and thorough insights that benefited my work. The dominant language in the five Antarctic gateway cities is either English or Spanish. I see myself as a confident researcher in both languages. To facilitate the interactions between researcher and research participants, I conducted interviews in whichever language the participant was more comfortable.

⁹ Gatekeepers are individuals who can provide entry to a specific community from an authoritative, knowledge-based, and/or leadership position in the group (Given, 2008).

My mother tongue is Spanish, and therefore I did not envisage any difficulties communicating with people in Punta Arenas and Ushuaia. Because of my background, I believe I have a good understanding of the socio-economic and political issues influencing these two communities. I lived in Ushuaia for much of my young adult years, and I frequently visit Punta Arenas. Hence, I feel comfortable and familiar with both cities. However, I detected a response bias when conducting the first two interviews in Punta Arenas. The participants, interviewed individually, expressed similar surprise that I spoke “such good Spanish”, notwithstanding that my first contact with them had been by an email written in Spanish. Moreover, the email contained an invitation to participate in this research and an information letter regarding my work, all written in Spanish, but my affiliation was to a research institute in New Zealand. During the course of the interview, I sometimes received hesitant reactions and responses such as, “We are not as advanced as you are in Argentina” and “in Argentina, you educate your people better than us; you do that very well.” None of the interview questions required direct comparisons between gateway cities or their host countries. Initially I was confused, but I then realized that the comparisons between *them* and *us* were initiated when I used Argentine-Spanish colloquialisms that may have activated negative representations of the ongoing rivalry and past tensions between Argentina and Chile. I did not foresee this situation before entering the field. To address this constraint, I listened to the recorded interview, seeking for instances where I might have unintentionally introduced unconscious bias, but I could not find any references. I then considered rephrasing the questions for future interviews in Punta Arenas to avoid influencing participants’ responses. However, shortly after, I had to conduct a previously scheduled interview that did not allow for time to redesign the interview protocol. Instead, I employed a neutral Castilian-Spanish vocabulary to conceal my background and allow for a relaxed interaction with the participant, steering away from regional colloquialisms. This resulted in a positive experience, to the extent that the participant asked where I was from originally, and when I responded he assumed I had been away from the country for too long, as my *Castellano* was not local. In that interview, no ambiguities were detected in the participants’ responses. I used the same approach for the remaining interviews in Punta Arenas, with satisfactory results.

Another challenge was related to language use and cultural barriers in Cape Town. Although I had done extensive research to understand the city’s Antarctic connections before conducting my interviews in Cape Town, and I believed I had a general understanding of the socio-political landscape of post-apartheid South Africa, I did not anticipate the relevance of racial and ethnic distinctions in everyday language in the African city. I had to overcome my resistance to using words that denote racial classifications, such as *black*, *coloured*, and *white* people, which are commonly employed in everyday language in Cape Town and are included in the scholarly literature. All Cape Town research participants expressed racialized

identifications to represent social inequality and politicized whiteness or blackness that influenced behaviours, and to distinguish Antarctic cultural narratives. In my efforts to understand the social fabric and identities of Cape Town's communities, and the relationship with Antarctica, I employed racial identifications when these were articulated in relation to Antarctica and were interpreted as social constructs rather than as unintentional racist remarks.

2.4 Data analysis

2.4.1 Coding

Coding is an essential strategy in the analytical phase of GT. Codes are markers that segment the data with a label created by the researcher that "simultaneously categorizes, summarizes and accounts for each piece of data" (Charmaz, 2006, p. 43). Codes refer to an idea, opinion, or issues that appear in the interviews. Codes are critical to a GT research project: they assisted me to organize the data and to stay engaged with the data.

To start with the data analysis, I produced a verbatim transcript of each interview, including expressions from the participants, such as silences and filler words, to help understand the meaning of what they said. I anonymized any information that could identify the participants (i.e. names, job roles, workplaces, etc.), and translated the Spanish-spoken interviews into English text, keeping the original slang and regional language expressions used. I was mindful of potential tensions arising from the translation of expressions and ideas between languages: "the characteristics of specific languages matter as do the characteristics of cultural traditions and norms" (Charmaz, 2014, p. 1078).

I transferred the interview transcripts into a spreadsheet for coding, as I felt this would facilitate the cataloguing of large amounts of text. I kept separate folders for each city and each folder had a worksheet tab for each interview conducted at the gateway. Then, I started coding the transcripts. Instead of adopting the word-by-word or line-by-line coding criteria, I used sentence-by-sentence, and, at times, I coded a whole paragraph when an idea or concept was commented on in multiple sentences. Table 2.3 contains an example of initial coding. I found this process time-consuming but rewarding as I relived the conversations maintained with the participants, I stayed close to the data and could reflect deeply into the meaning and nuances of the words said, while constructing detailed notes that turned into codes. Also, I kept *in vivo*

codes¹⁰ when appropriate, and at other times initial codes were written in Spanish to maintain the local meaning of the data. The latter were then translated into English. I tried to keep an open mind while coding and looked for gaps in the data, following the analytic process.

During the initial coding, I found it challenging to code and manage the increasing number of memos arising from the iterative and comparative method. Memos are an integral tool in CGT for building a theoretical framework (Charmaz, 2006), and they are described later in this chapter. I hand-wrote all codes on a large piece of paper, and manually sorted memos, grouping them under one or more of these codes. This exercise helped me to visualize the connections between the codes and to see emerging themes. I repeated this exercise five times, once for each city, and I did it twice again once I had selected focused codes.

The next phase, called *focused coding*, is where I scrutinized the data and the codes previously assigned, looking for the most salient topics and underlying concepts. During this stage, I looked for new leads and built on ideas that will explain the social phenomena studied. Although initially coding was a daunting task, the many pages of transcripts had been labelled with codes, and thus data were manageable and condensed. Some codes were renamed to describe better the concepts these were representing. As I read the transcripts and initial codes back and forth, I compared and refined these and identified conceptual groups, which became focused codes. From the latter, I could identify core categories emerging from the relationship of these codes. My prior knowledge and experiences at the gateway cities were fundamental to asking questions and to gaining a deeper understanding of the importance of these categories to starting theorizing. This process is known as *theoretical sensitivity*, which develops when the researcher is able to generate meaning from the emerging data by identifying, understanding, and separating nuances from complex thoughts from the participants' voices (Mills, Bonner, & Francis, 2006).

¹⁰ *In vivo codes* refers to codes of participants' special use of a word or expression that is assumed to be known by others; these can be shorthand terms that reflect an insider's perspective and meaning (Charmaz, 2006).

Table 2.3: “Nugget” transcript from participant NZ02, showing initial coding.

Transcript from participant NZ02	Initial codes		
It’s in my soul [Antarctica]. It is so pristine, the beauty, the vastness . . .	intimate connection	aesthetic value	size
I am an artist so I’m a details person. I like looking at the crystals of ice in the air, the mountains, everything. [Smiles]	descriptive	emotive	
It also means <i>home</i> . I have made many friends that are my family too. Antarctica created a social network, [so] that I can be connected with my Ice family in any part of the world.	sense of belonging	sociability	brood
People know that Christchurch is a gateway because they give you a pamphlet that says that.	stipulated role	function of gateway	
Christchurch is like a playground for those scientists that come back from The Ice. They have friends here; they visit . . . travel, and stay in New Zealand. If they have another contract [in Antarctica], they'll spend their money here until they go back South again.	entertainment	brood	closeness
Everybody must know the Antarctic Centre is there, right? But to find other things . . . like Lyttelton, or trees planted by explorers like Shackleton, or Warner's Bar. [Sigh]	symbols	polar heritage	
If you are visiting Christchurch and want to do something like that [Antarctic-related], you have to know where they are . . .	function of gateway	knowledge	
There are not tours or even a webpage to tell you where to find these Antarctic relics . . .	function of gateway	tourism	
I think the city is failing to attract people to the Antarctic connection.	function of gateway	city branding	education & outreach
People will pay money to see it [an Antarctic-related activity].	economic views	tourism	

2.4.2 Core categories

The core categories reveal a relationship between codes and the concepts these represent that were revealed during the data analysis. Core categories are central to the framework of research (Mills et al., 2006). I identified primary codes during data analysis stages; these were compared with one another, looking for similarities, repetition, and differences between them. Some of these codes were elevated to categories, others were merged, and some were relegated to initial codes. I identified five core categories for this research: conservation, otherworldly, imagined homeland, gateway role, and global connections. The analysis of codes continued until no further categories emerged. Table 2.4 contains the core categories and their respective focused codes.

Table 2.4: Focused codes and core categories

Focused codes	Core categories
Value of Antarctica	Conservation
Science leadership	
Human presence	
Capacity	
Sense of adventure	Otherworldly
Wilderness	
Uniqueness	
Community	Imagined homeland
National asset	
Boundaries	
Power relations	
Polar heritage	Gateway role
Community engagement	
State responsibility	
Regionalism	Global connections
Antarctic tourism	
Gateway dynamics	

2.4.3 Analysis of memos and photographs

Throughout the time spent at the gateways, I maintained a field notebook for each city to keep records of my visit (Figure 2.1). At each city, I carried the booklet everywhere I went, and thus I could record the spontaneous conversations I had with the public, such as with bus drivers, at grocery shops and bookstores, etc., which sparked comments related to the local Antarctic connections, or the lack of them. In addition, I noted ideas and questions about my research that occurred at the time; many of these turned into memos.

Also, I made notes related to the research participants and of situations that arose while I was conducting the interviews, such as participants' reactions to questions or comments, long hesitations in answering questions, and changes of attitudes once I started or stopped the voice recorder. These notes were fundamental to understanding silences in the recordings, and to relive and make interpretations of situations that may or may not have influenced the data (Figure 2.2). During the data analysis stage, I returned to the notebooks in search of leads and new concepts, concerned with omitting relevant material for this research. Finally, I employed annotations from these notebooks in Chapter 7 to describe the status quo occurring at the Antarctic gateways during interviews, which helped to clarify comments made by participants.

As indicated before, I used memos for documenting my thoughts and questions that arose, and for recording events occurring in relation to this research. Some memos originated from notes from the notebooks described above. Memo writing is another critical step in CGT's data analysis. These assist early in the analytical process with the examination of the interview transcripts and selection of codes (Charmaz, 2006). I wrote handwritten memos in colourful sticky notes to catch thoughts. These notes were free-form and spontaneous. Once I had transcribed the memos to my computer, I selected some that could be expanded with additions from participants' comments and/or significant events observed in the field. As I advanced in data coding, memos became more conceptual than factual. Memos were critical for my research; since this study was undertaken part-time over a number of years, memos assisted with maintaining focus, sparked theoretical ideas, and helped advance my thinking on certain issues. In addition, memo writing assisted in identifying codes that best represented my data, and in developing these into core categories. Figure 2.3 is an example of a memo from this research.



Figure 2.1 Research notebooks from each of the Antarctic gateways

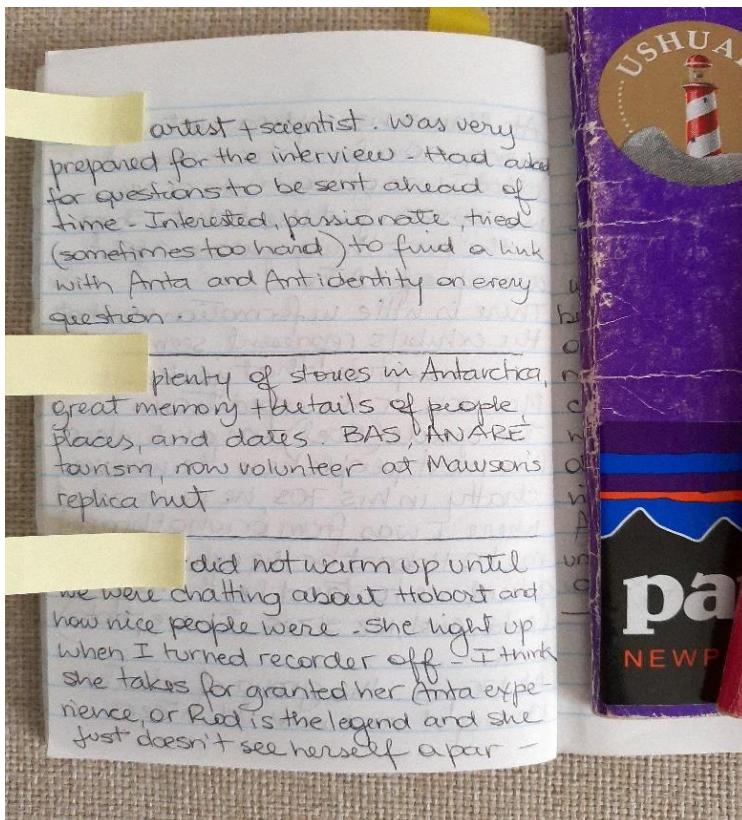


Figure 2.2: Close-up of note taking after interviewing

The information in notebooks was also critical to organizing my photographic collection. Photographs were collected to have a visual and richer record of spontaneous behaviours from research participants and from the public in an Antarctic-related context. Also, I recorded with photographs environmental and social contexts events such as the departure of the Antarctic research vessel *S.A. Agulhas II* from Cape Town in December 2016. The photographs showed the emotions associated with this event, from the expeditioners departing to the expressions of farewell from friends and family present at the time. Photographs containing persons that can be facially identified have not been included in this work, since I do not have permission from the people or the ethics committee to use these records. Also, photographs were used as visual prompts for the description of infrastructure and Antarctic-related buildings that were present at the gateways. Some of these photographs illustrate Chapter 6 of this thesis.

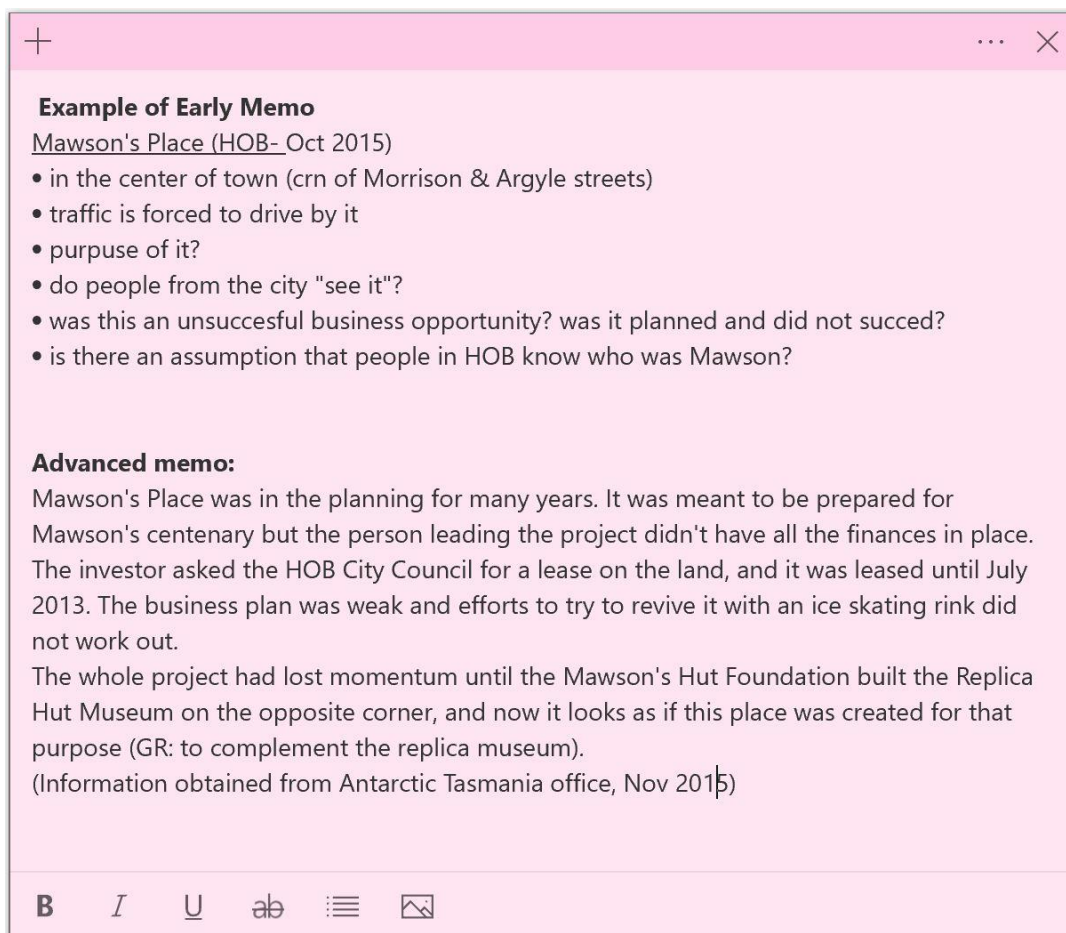


Figure 2.3: Example of a memo

2.5 Challenges and limitations

As with all research projects, there are limitations associated with this scholarly work. Qualitative research allows for detailed accounts of the social phenomena under study, but the quality of the research relies on the training and expertise of the researcher to remain unbiased and consistent. Before starting this research, I had spent many years working and building my *own connection* with Antarctica and the gateways. I believe the interest for this research topic was influenced by my exposure to this Antarctic linkage from an urban setting, and thus I am acutely aware of my personal perspectives on the subject and my biases. However, I have confronted my opinions with the data to deepen my understanding of the social constructions around Antarctic gateways, grounding the newly acquired knowledge to the data analysed here.

Regarding data collection, interviews provided a unique insight into the perceptions of individuals living in a gateway city, but the relatively small number of participants could not be considered representative of the urban population. The results of this research could be expanded, complemented, and contrasted by including other qualitative methods for data gathering, such as focus groups, or by selecting underrepresented social groups, such as the younger population (15 to 25 years old), which are often overlooked as research participants due to perceptions of immaturity, potential inexperience on the topic, and constraints in ethics authorization. Time constraints and restricted funding limited my possibilities of expanding and exploring these options. Considering that the CGT method is well suited for further developing and refinement of theories as new data are gathered, these opportunities are considered for future research.

Moreover, this research could have benefited from the use of qualitative analysis software, such as Coding Analysis Toolkit, FreeQDA, or NVivo. In the early stages of this research, I decided to do the data coding manually, as these computer software tools relied on an Internet connection for better functioning. The Internet connection was a limitation for me, as I worked developing much of the data preparation and data analysis stages in places with little Internet connectivity, such as Antarctica. On the other hand, the use of analysis software would have sped up the examination of data.

2.6 Concluding words

In this chapter, I made explicit my paradigmatic position as a researcher after much contemplation of the different perspectives of ontological and epistemological philosophies available for qualitative research.

The principles of the GT method became a valuable tool for the research design. As I explored the subtle differences of CGT, the inductive-abductive nature and constructivist approach of this method best supported my philosophical paradigm. Moreover, CGT seemed the appropriate tool to study people's understandings of the Antarctic connections in their respective cities. The flexibility prescribed by CGT in adapting the research tools to suit the needs of the research was fundamental for the analytical process and the building of a theoretical framework to reach theory building. I do not claim this research is free of bias, but I have attempted to reach a level of abstract interpretation to theorize from the exploration of the data.

A limitation associated with the CGT method is the large dataset for coding that the researcher encounters. Coding is a time-consuming process and requires one to be focused throughout the method. The analytical process of this research was done manually. However, the use of a coding program could have reduced the amount of time taken during coding. It could be said that another limitation of the CGT method is the inherent subjectivity that relies on the researcher to make decisions over data saturation, identifying core categories and relationships between these to construct theory. In my case, such subjectivity kept me asking questions and making assumptions, which allowed me to advance the research.

Finally, much of the thorough examination of the Antarctic gateway cities and the polar politics that drive their host countries can be found in the chapters that follow. These are not mere collections of information, but a complement to the data obtained from the interviews (available in Chapter 7) to construct knowledge on the social phenomena studied here.

3 Conceptualizations

The central concepts and theories my research draws on include personal identity and group identity, sense of place, national identity, and the reconstruction of the homeland through symbols. The first half of this chapter explores these concepts while the second half is dedicated to the conceptual review of the terms *gateway* and, more importantly, how the term *gateway* fits in the Antarctic context.

For the purposes of this chapter, I draw on social psychology literature regarding the study of identities and place. Although the academic corpus on these topics is rich and deserves further discussion, in the interest of space I attempted to select and limit my discussion to the most salient literature. This chapter cannot offer an exhaustive analysis of the topic of identities, but it provides a conceptual framing within which I analyse the views of my research participants and draw conclusions supported by other scholars' contributions.

3.1 Understanding identity

Identity is a leading concept in this research. Although *identity* is a much-used word that is assumed to be universally understood, the concept of identity is elusive. Its interpretation appears to be determined by the field of study of the research in question within the social sciences and humanities disciplines.

In everyday language, *identity* refers to individuality and uniqueness, and the absence of it signifies trouble or crisis. Regardless of its interpretation, identity is considered to be an inherently human characteristic.

The academic study of identity is a relatively modern concern. Once understood as a rational and stable entity founded in childhood and sustained unchangeable throughout the life of a person, post-modernist research perspectives suggest that identity is a dynamic and changing process, highly individualized and subject to interpersonal and societal interactions (Lawler, 2008). For Hogg and Abrams, identity is "people's concept of who they are, of what sort of people they are, and how they relate to others" (1988, p. 2). A set of social interactions shapes the identity of an individual: the person's understanding of who they are and their perception of their primary social environment (i.e. family), the conforming to societal expectations and discourses, and their social connections. A person has multiple and overlapping identities, some of which will be determined (e.g. gender, ethnicity, age, place of birth), and others of

which will to a certain extent under the control of the individual (i.e. employment, musical taste, sporting allegiances, political inclination) (Appiah, 2005; Sen, 2006).

The construction of personal identity is interactive and exclusive to the individual. Through narratives, the person makes sense of their life and interprets the world around them. History, cultural practices, and social environment provide common sources for narratives from which a person produces their own identity. The process of identification with the past and the present confirms the person's sense of self and their place in the world. Also, narratives provide models to live life conforming to societal conventions; cultural narratives are socially created, transmitted, accepted, and assimilated (some may be contested), and they provide a social matrix in which a person shapes their identity (Appiah, 2005; Sen, 2006).

Moreover, identity and culture are closely linked and in constant flux. The formation of identity should not be seen as a passive assimilation of the social practices that a person is born into. Rather, the individual is a social agent who, in most societies, can make choices to adopt, challenge, or change cultural practices. New forms of culture and identities are constructed continuously around the world; these identities are not accumulative but are replaced with new forms to make sense of the multiculturalism that surrounds most current urban environments (Appiah, 2005; Sen, 2006).

Identity is also a social process shaped by the interaction of the individual with others and society. The person identifies positively with a group or groups (whether this affiliation is through birth, choice, or the imposition of others), and this group membership is a form of social categorization. In parallel, society ascribes characteristics, or stereotypes, to the individual, placing the person in a group with others who share the same attributes (Appiah, 2005). This social construct is known as *social identity*. In the following sections, I discuss the theoretical principles of social identities and the interconnections with nation and place.

3.1.1 The construction of social identities

In addition to a personal and unique identity, a person also has social identities. The person's understanding of who they are is intertwined with their membership of social groups and social categories. The social identities function in a structured society and precede an individual, as the latter is born into a culture and a set of pre-established social categories. However, as the person's life develops, they will be a member of a unique combination of social categories, which in consequence forms the self-identity (Stets & Burke, 2000).

In the 1970s, Tajfel and Turner studied the effects of social categorizations on intergroup behaviour, arguing the person's need to maintain and enhance a positive connection with the

group they belong to (in-group), establishing a distinctiveness from other non-desired groups (outgroup) to achieve an acceptable and valued social identity (Tajfel, 1982). Social Identity Theory (SIT) originated from the intergroup dynamic studies, and has since been developed further to understand social identities, intergroup relations, and group phenomena such as prejudice, discrimination, cooperation and competition, group decision-making, and national identity (Hogg & Abrams, 1988; Hogg, Abrams, & Brewer, 2017; Stets & Burke, 2000). For the purpose of this section on social identities, I will refer to the extensive scholarly body on this topic as “SIT”.

According to SIT, social identity involves three important cognitive processes: (a) social categorization, (b) social identification, and (c) social comparison (Hogg & Abrams, 1988). In social categorization, the person selects their belonging to a group (or groups). This self-categorization implies that the person perceives strong similarities with the selected group(s) regarding attitudes, beliefs, values, behavioural norms, etc., and differences from others (Stets & Burke, 2000). Social identification occurs when a person determines compatibility with the chosen group, or not, which will determine their affiliation to such group. Once the person joins a group, an emotional positive response increases self-esteem, validating that they belong to the group.

Lastly, social comparison happens when a person evaluates the group they belong to (or in-group) and compares positively perceived attributes and values against those of other groups (out-groups) (Hogg & Abrams, 1988). To increase self-image and achieve or maintain a positive group identity, the individual enhances the attributes of the in-group and finds negative aspects of the out-group. Social identity allows the individual to express their vision of the world between “us” (in-group) and “them” (out-group). Although it is recognized that humans are inherently competitive, in-group loyalty can result in extreme competitiveness manifesting as dangerous forms of discrimination and racism (Appiah, 2005).

The leading hypothesis of SIT centres on intergroup behaviour and competition over status to maintain and enhance a positive uniqueness of the group image, which ultimately creates a significant positive emotional response to the self from being affiliated to the group (Hogg & Abrams, 1988). Hogg and Abrams indicate that “. . . intergroup behaviour refers to the way in which people behave towards one another as members of different social groups” (1988, p. 29). Research on SIT has evolved to encompass the analysis of group membership and group life, addressing the interactions happening intra- and intergroup, from small- to large-scale social categories (Hogg, 2005). Social groups compete with one another to be distinctive; members cognitively identify a set of characteristics in the group, which are perceived as unique to that group. This complex set of qualities, values, and attributes are called *prototypes*,

interpreted as the person's cognitive representation of the group's norms; prototypes describe and prescribe the group members' appropriate ways to behave (Hogg et al., 2017). Moreover, through the lens of the prototype humans apply social categorization¹¹, creating generalized descriptions about people based on group membership. These are known as *stereotypes* and are understood as universal biases shared by large groups (Hogg & Abrams, 1988). Group members employ stereotypes to ascribe positive attributes (ranging from physical appearance to beliefs) to the in-group, and derogatory qualities to out-groups to maintain inferiority, which, in extreme cases, can result in prejudice and, even further, discrimination (ibid).

Groups will employ different strategies to compete for positive distinctiveness, which are not orientated to assimilate or standardize others, but to enhance the group's uniqueness evaluated as a positive outcome. The intragroup behaviour focuses on maintaining positive distinctiveness for their group, which satisfies group members' self-identity and homogeneity within the membership, and reduces feelings of uncertainty about personal identity (Hogg et al., 2017). Cultural practices and norms provide a framework for people's interactions and behaviours in social groups that share a special or well-defined environment, belonging, and intergroup conflict. The analysis of group membership through the lens of SIT can be applied to the study of culture in communities such as those in the Antarctic gateway cities as I explain later in this chapter.

3.1.2 National identity and the significance of national symbols

Comparable to the overarching definition of *identity*, *national identity* is another problematic concept to define succinctly, mostly because of its association with *nation* and the study of nationalism, topics extensively argued by social sciences and humanities scholars. Here, I will attempt to underline salient characteristics of the understanding of national identity through SIT. First, it is important to discuss *nation* and *nationalism*, as these are recurrent concepts in this thesis, which will be applied to the understanding of Antarctic geopolitics in Chapter 4.

Scholars have different views on the origin of the concept of nation. These are commonly credited to the 18th and 19th centuries' European national liberation movements (Salazar, 1998), but they are increasingly prevalent in present times. However, Burke (2013) argues that, as early as the 1500s, the translations of religious documents, such as the Bible, encouraged people to identify with their own nation. The seminal work of Anthony D. Smith and his theory of ethnosymbolism (1987) led the study of nation and nationalism in the academic world. Smith's approach to nationalism focuses on collective cultural identities

¹¹ Categorization is a cognitive process that allows the individual to organise perceptions of the world in categories, creating order and less ambiguity of the social environment (Hogg et al., 2017).

embodied in ancient and pre-modern ethnic communities, called *ethnies*, as the predecessors of nations (1987). For Smith, ethnies shared ancestral history and culture, symbols, values, and myths with an association to an explicit territory that forms the basis of a community's cultural identity. This cultural identity is transferred through generations, maintaining a connection with the remote past in which the community was formed, upholding a sense of cultural unity throughout time. Smith's theory assumes a continuity between pre-modern and modern forms of social identities, resulting in the formation of nations. Critics of Smith's ethnosymbolism theory argue that it is an idealistic perspective that focuses only on the cultural aspects instead of incorporating the political and economic influences, and that it overlooks the changes and ruptures brought in by modern times (Guibernau, 2004; Malešević, 2006; Salazar, 1998).

Smith defines a nation as "a named community possessing a historic territory, shared myths and memories, a common public culture, and common laws and customs" (2002, p. 15). Smith argues that his ethnosymbolic model is not limited to Western civilization, as other modernists' interpretations are, but encompasses all ethnies. However, Smith's definition is a static interpretation of a set of dynamic and changeable attributes in a social group that is not always shared by all who occupy the same territory. Attributes such as shared ancestry, common law, and public culture are limiting representations in a nation. Scholars such as Guibernau (2004) and Malešević (2006) question whether the absence of one of these qualities can be interpreted as the end of a nation. For instance, does a nation cease to exist when a culture or religion is banned from being performed in public, or when members of the ethnie do not observe the law and create other customs?

Another worthwhile perspective on the study of nation and nationalism is Benedict Anderson's work. For Anderson (1991), nations are mental constructs, "imagined communities" limited by flexible boundaries beyond which lie other nations. Also, imagined communities are sovereign, having political entity freedom (Anderson, 1991). Anderson argues that nations are imagined because members will never get to know, meet, or hear about the whole membership of the so-called nation, but they recognize each other through their common national identity, and, by doing so, they perceive themselves in this community. This process is a form of identity of self-consciousness and group awareness. Social group identification with the nation comes mostly by birth (being born in the place provides an anchor for the individual), but, more importantly, it also comes through culture, where language assumes a fundamental role for the transference of myths, customs, symbolism, and politics (Salazar, 1998).

From a sociological perspective, the study of nation begins with the understanding of national sentiment, considered an ancestral concept and encapsulating four elements (Salazar, 1998):

1. Territoriality: giving importance to a geographic environment in relation to the group members' behaviour in relation to the land.
2. Culture: where language is the maximum expression for transfer of knowledge, values and creation of positive feelings, identification, and loyalty to the place.
3. Ethnicity: which structures the ethnies around mythological beliefs and socio-cultural elements with an association to the land and attaining a common name.
4. State: conceived as the governing structure that through systematic use of ideology and institutions promotes and stimulates the national sentiment. The most common systems used by nations are education and mass media.

SIT provides tools for the understanding of emerging problems around subjectivity when thinking of nations and imagined communities. The SIT theoretical model identifies three basic features in the construction of national identity: *categorization*, *identity*, and *social comparison*. Categorization develops with a common name for the group (i.e. the nation) or a label for the land; the category becomes real once it is accepted internally and recognized externally by others. The second feature, identity, involves the individual's acceptance of the categorization of the group, and managing sentiments and behaviours of belonging. The third feature, social comparison, refers to the positive self-evaluation of the nation and the distinctive attributes that make it unique and better than other groups (Salazar, 1998). These features provide ways to frame intergroup behaviour and to observe the development of categories, hierarchy among categories, the construction of national identities, and the ethnocentric views of nationalism.

Scholars agree that national identity is a modern concept, with the exception mentioned above (Burke, 2013). According to Smith, national identity "involves some sense of political community, history, territory, patria, citizenship, common values and traditions" (1991, p. 9). Smith considers that national identity is multidimensional, and adds that ". . . nations must have a measure of common culture and a civic ideology, a set of common understandings and aspirations, sentiments and ideas, that bind the population together in their homeland" (1991, p. 11). Smith's conceptualization of national identity gives symbolism to the homeland, as the entity that contains all the attributes and elements of the nation, understood as shared by all members. For Poole, the homeland is perceived as a personality with moral integrity; it has a common history where victories and tragedies are celebrated or mourned, and are remembered as a lived historic reality (1999). Smith's concept also implies that every nation has a homeland, which is practically impossible when considering the diversity of cultural groups within a nation. Guibernau argues that national identity is generally shared among citizens of a nation-state, a concept she describes as

a modern institution, defined by the formation of a kind of state which has the monopoly of what it claims to be legitimate use of force within a demarcated territory and seeks to unite the people subject to its rules by means of cultural homogenization. (2004, p. 132)

This opens the discussion for nations without state and their legitimacy in international forums, which is outside the reach of this study.

National identity is here understood as a dynamic concept, a common social identity conceived by the members of a nation who have a strong sense of belonging to the homeland, and who have cultural and political qualities (Wodak, 1999). Therefore, national identity is a mental construct, produced and reproduced through socialization, with the intention to emphasize national uniqueness, uniformity, and distinction from other nations (Wodak, 1999). National identity is subject to change; it can transform over time, can be politically contested, and can even vanish.

National identity is constructed through discourse. It is represented in national narratives, which are present in the literature, arts, music, and everyday culture of a nation. For instance, stories connecting landscapes and historical events, national symbols and rituals, a nation's origins and tradition, myths of native peoples, etc. are interpreted as the nation's national character of originality, continuum, and perpetuity (Wodak, 1999).

National symbols are employed to foster a sense of community among members of a nation, appealing to emotions and feelings of pride with the purpose of unity beyond issues of ethnicity, language, and political stance (Isaacs-Martin, 2010). These symbols are often chosen, commissioned, and imposed by the nation's political elite, meant to connect the people with the state institutions (Bechhofer & McCrone, 2013). The deliberate adoption of national symbols started in Europe and South America in the 19th century, and continued in the following century in the East and in Africa's independent nations (Bechhofer & McCrone, 2013). For instance, flags, coins, stamps, anthems, monuments, national celebrations, all remind members of their common history and heritage; these symbols evoke glory and the values of the nation. National flags are the common national symbol that identifies the nation; "national colours" are represented in national celebrations, sporting events, uniforms, etc., personifying the nation. However, as these symbols are imposed by a top-down approach, it is unfeasible to expect that members of the nation identify unanimously with them. For instance, New Zealand's so-called national symbols have been researched extensively and discussed in everyday conversations, particularly when addressing issues of common identification in a bicultural country. Concerning the national flag, Sibley et al. found that the New Zealand flag triggers feelings of egalitarian values for most New Zealanders, while the

silver fern is the most universally accepted symbol representing the nation (Sibley, Hoverd, & Duckitt, 2011). It is important to note that the New Zealand and Australian flags have close similarities in appearance and reflect their British colonial histories, making it one from the other difficult. The New Zealand flag has been historically resisted and resented by Māori and other minorities (Sibley et al., 2011). In late 2015 a two-stage national referendum was started to determine whether New Zealanders wanted a change of the flag. It resulted in a contested debate over the process for choosing a new design, but in the end there were no changes to the current flag (Ministry of Culture and Heritage, 2016). Another example is the flag of South Africa, which in 1994 was created to unite the diverse population of the country after apartheid. Since the flag's inception, research shows a steady decline in identification and attachment to national symbols in South Africa, as members of the South African nation are disillusioned with their political leaders for the slow socio-economic progress of the country (Isaacs-Martin, 2010). The South African national flag and anthem are ubiquitous in international forums in representing the country; however, they have failed to unite a nation of diverse ancestral heritage still divided by racial and ethnic segregation (Isaacs-Martin, 2010).

The use of national symbols in everyday life to evoke representations of the nation has been the focus of research in the study of nationalism. Nationalism is defined as "an ideological movement for attaining and maintaining identity, unity and autonomy of a social group some of whose members deem it to constitute an actual or potential nation" (Smith, 2005). Concerned with understanding how nationalism is reproduced and represented through everyday life and popular culture, Billig coined the term *banal nationalism* to refer to "the ideological habits which enable the established nations of the West to be reproduced" (1995, p. 6). Billig argues that citizenry are reminded of their nation and its place in the world with these banal representations that, since being incorporated in everyday life, have become so familiar that they are trivialized, and thus incorporated into the symbolism of nationhood as if these had always existed in the nation's history. Billig's approach differs from other forms of "hot" or extreme nationalism studies; he discusses that banal nationalism should not be taken for granted or considered benign, since the alleged normality is forged continually in iterative practices and in influencing personal and group identities. Billig demonstrates that nationalism is an endemic political philosophy used by all states to make universal claims on behalf of a nation and to awaken nationalistic sentiments. For Billig, banal nationalism is reproduced through the use of language by political leaders and the mass media (e.g., "we", "us", and "ours"), the use of the national flag in an everyday context, such as its flying outside public buildings, the singing of national anthems at sporting events, or the employing of popular expressions to personalize the nation, among other examples (1995).

As shown above, the conceptualization of nation, national identity, and nationalism deserves further debate than the scope of this section allows. Here, I have attempted to discuss the most relevant issues of these concepts that are critical for the progress of this thesis and the discussion of results. Also, the study of nationalism, and particularly how it applies to Antarctica, is revisited in Chapter 4 on geopolitics in Antarctica.

3.1.3 Sense of place and islandness

A recurrent theme in this thesis is place, here understood as the Antarctic region, and the relationship between the Antarctic and the people of the Antarctic gateways. Place has been the subject of a corpus of research in the humanities and social sciences, mainly regarding geographical areas and the meaning that people assign to these spaces. However, Antarctic scholars claim that little research has been done concerning the relationship between imagined places that are relatively inaccessible and seldom visited, such as the polar regions and outer space (Antonello, 2016). This thesis aims to contribute to closing this gap in knowledge.

Occupying a geographic territory is integral to the human condition. *Sense of place* refers to the subjective relationship that people construct with a place, based on memories, traditions, history, culture, imagination, and personal experiences (Hashemnezhad, Heidari, & Hoseini, 2012). Sense of place is a complex social construct deeply rooted in the personal and group identity. It has cognitive, emotional, and physical aspects: people take different meanings from a place (positive or negative) and in return they convey meanings back (Hashemnezhad et al., 2012). Not everyone who has visited the same place has a similar emotional understanding or connect with it. Sense of place is determined by personal experiences, motivations, intellectual background, social activities, and the physical characteristics of the environment (Hashemnezhad et al., 2012). Sense of place changes through personal experiences, and describes people's perceptions and their interaction with the world around them. Lewicka (2008) reminds us that social memories tend to be biased, and external constraints, such as war, natural disasters, or ethnic differences, can alter the transfer of information.

Scholars argue there are different levels of sense of place, but they concur that the three main components are the following: belonging to a place, place attachment, and commitment to a place (Hashemnezhad et al., 2012). Belonging to a place encompasses more than just being born or living in a certain geographical space. It requires knowledge of the place and creating emotional connections with it, identifying its symbols. Place attachment is a meaningful and strong connection with a place that people feel attracted to through emotional and cultural bonds; the place is perceived to have a unique identity and characteristics that go beyond symbols, giving emotional meanings to people and how they relate to a place (Hashemnezhad

et al., 2012). Low and Altman (1992), consider place attachment as the affective relationship between people and landscape, incorporating emotional and cognitive elements in the construct of place. Place attachment involves processes such as genealogical history or family connection, linkage through loss or destruction of land, bond through ownership and politico-economic situation, spiritual and mythological beliefs, religion and secular pilgrimage, cultural celebrations, and narratives through storytelling and place-naming (Altman & Low, 1992). Lastly, commitment towards a place refers to the active involvement people have in a place and the role they develop within the place, which will vary according to external factors, such as money, time, and talents (Hashemnezhad et al., 2012). A true commitment towards a place is demonstrated by standing up for its ideals, even when it comes at a cost. These ideals may be shared or imposed by others, and, in their most extreme forms may explain wars and violent expressions of nationalism.

Place attachment has gained scholarly attention in the last two decades, particularly to address the changes in the people-places bond due to increased mobilization from rural to urban environments, economic migration, globalization, and greater awareness of environmental problems driven by human activities. The study of place attachment is also relevant in understanding the meanings people attach to remote places and their environmental perception of these places. Lewicka (2008) suggests that place attachment can stimulate interest in learning more about the place, which may result in the construction of further memories and meanings. Moreover, place attachment research can explain the sentiments of nation attachment and social constructs such as the anthropomorphism of the nation as “motherland” or “fatherland” in certain cultures, which result in deep ties similar to kinship with all members of the nation (Ferenczi & Marshall, 2013).

Islandness

Three of the five Antarctic gateway cities are located on islands, namely Christchurch, Hobart, and Ushuaia. The other two, Cape Town and Punta Arenas, are located in continental landmasses, but, historic socio-political structures that persist today offer parallels with the isolation and sense of identity in islands. Hence, I find it important to explore the concept of islandness, which may reveal relevant aspects related to identity of the gateway cities.

Islands have long occupied a place in Western imagination, and literature has contributed to fantasy and mythology about these geographies, from island paradise to island seclusion and mystery. The physical condition of islands, being completely surrounded by water, has led to the construction of islandness, the heightened experience of isolation (Hay, 2006). For Hay, islands are embedded in cultural imaginings and attract affection and loyalty, driving a desire to make sense of these places (2006). Islandness is a multifaceted expression of identity

attached to islands. For Stratford, islandness can be described as “an affect of particular land- and water-scapes, valued for their special qualities and deemed worthy of protection as such” (2008, p. 161). Conkling has a more romanticized conception: “islandness is a metaphysical sensation that derives from the heightened experience that accompanies physical isolation” (2007, p. 191). He argues that islandness transcends the local island culture and is shared with other archipelagos. As a construct of the mind, it is a particular way to make sense of the world. Islandness awareness seems to matter more to outsiders who associate themselves with islands than to islanders themselves, who understand the concept instinctively but may not need to express it with words (Conkling, 2007). The qualities of islandness are not exclusive to native islanders but can be earned over time, accepting values and perspectives the island life offers (Conkling, 2007). It should be noted that none of the scholars cited define *islander*, nor do they indicate what is the length of time that has to pass to be considered an islander or an outsider with connections to the island.

Central to the construction of islandness is the shoreline, which marks a physical boundary and containment (Hay, 2006). Islanders are well aware of these boundaries (physical or imagined). Living inside the shoreline can be idyllic or dramatic (or both), and it creates a sense of community dictated by natural boundaries and not created by humans (Hay, 2006). The shoreline also highlights the presence of the sea, which can be interpreted as separation from the rest of the world, isolation, or distinctiveness from other lands (Hay, 2006). The insularity offers locals a source for resilience and adaptability, qualities to cherish in islandness. Conversely, it represents inclusion or exclusion from the wider community and could lead to either acceptance or discrimination (Hay, 2006). Moreover, research shows that islandness can move people to value the special qualities of islands, to protect their environments, often in response to globalization (Stratford, 2008).

3.2 Understanding the concept of Antarctic gateway

3.2.1 The concept of gateway city and its evolution through time

The term *gateway city* had appeared in the scholarly literature by the 1920s, in relation to the role of Winnipeg (Canada), primarily, for the settlement of the Canadian Prairies at the beginning of the 20th century (Burghardt, 1971). Since then, the term has been comprehensively argued, particularly in the fields of transport geography, political geography, and human geography, and lately in the study of tourism and urban development.

During the first half of the 1900s, the rise of inland cities in the United States and their role in developing tributary areas gave room for a discussion on gateway cities. The concept of “gateway city” developed from the strategic role that a place had as the entrance point to a productive region(s). The scholarly work of Andrew F. Burghardt defines a gateway city as “an entrance into (and necessarily an exit out of) some area” (1971, p. 269). Burghardt (1971) proposes that a gateway city has a unique position as the entrance to the hinterland, commanding its connections with the tributary area and beyond. The role of the gateway city is not solely to be the passageway between areas but also to develop into a key point for collecting and distributing goods, services, and people who wish to travel to the hinterland (Burghardt, 1971). A city’s robust transportation network creates an advantage point over its potential gateway rivals. Thus, having transport infrastructure (i.e. port, airport, railway, passenger and goods exchange hubs, etc.), or a break in bulk-point service, which facilitates the storage of goods and the capability to transferring these to different modes of transport for better access to the regional markets (i.e. shipping container to truck, truck to box, etc.), is an essential component of a gateway city (Burghardt, 1971).

Burghardt’s paper focuses on the function of the gateway city in the economic development of an area that is outside the urban landscape, and to which there is a need or a desire to access. The gateway city enables connectivity; it controls the interchange of people and goods facilitated by a transportation and storage network, and it benefits from the interchange. Although Burghardt's hypothesis implies the city was already in place before it took the role of a gateway city, it is not clear whether a gateway city can be planned and built for such purpose. Understandably, the location of the city is fundamental for its function as a gateway, as long as the interest towards the hinterland that lies nearby remains.

In transport geography studies, interpretations of the gateway city focus on the function of the place as transportation hub: “a place that provides access (and often travel services for) a destination, place or region” (Lew & McKercher, 2002, p. 609). The notion of gateway is bound to the transportational facilities and services on offer at a particular entry and exit point of regional or national status. However, Hall (2015) reminds us of the distinction between a gateway and a transportation hub. In the latter, the main function is to provide service-orientated transport and temporary storage of goods coming in from other markets, whereas a gateway port “provide[s] the link between hinterland and foreland, generating significant turnover and having a large transport base at disposal to stimulate the trading and traffic of goods” (Hall, 2015, p. 263). Matthiessen considers a gateway as a “multifunctional hub” that has outgrown its transport function (2004, p. 200) and has control functions over accessibility and connectivity between the hinterland and foreland.

The concepts of gateway and hub seem to be intertwined, although the main distinction between hub and gateway is the nature of the connectivity services they offer. In a hub, the connections happen in the same mode of transport, whereas in a gateway the connectivity is performed in an intermodal transport system (Rodrigue, Comtois, & Slack, 2017). The emphasis is on developing a network of transport and communication systems that expands connectivity, which places the gateway city in a commanding role of the connections between the areas of influence and their economic development (Hall, 2015). The existing literature seems to use the term *gateway* in conjunction with an urban set-up where the majority of the connectivity takes place; for instance in a *gateway city*, *gateway port*, and *tourism gateway* (Hall, 2014, 2015; Matthiessen, 2004).

Connectivity at a gateway city does not occur only because of a strong transport system and the economic benefits derived from that. Gateway cities also serve as nodal centres for the reception and transmission of culture, knowledge, and information (Tan, 2007). These cities are not just passive economic transport channels to connect the hinterland; they have strong influences on the area they serve as conductors of political, cultural, and ideological changes. In addition, the interaction with people transiting through these cities and their motivations to access the hinterland has an effect on the gateway city, and on the way it interrelates with the hinterland. As result of this dynamic nature, the gateway's identity as a place is influenced and fused with the connections established with the hinterland and the city's own heritage (Tan, 2007).

Clearly, an interpretation for the term *hinterland* is needed since it is inseparable from the concept of a gateway city. The term *hinterland* is traditionally connected with a port area, and the sea is described as "the tributary (or catchment) area of a port, from which materials for export are collected and across which imports are distributed" (Gregory, 2009, p. 331). Thus, the hinterland is linked to the port and the city by maritime trade, highlighting the commercial links they provide to the port and, consequently, the city. The word *hinterland* has been used also to refer to a non-urban area, grouped alongside *rural*, *countryside* and *wilderness* as words used to describe what is not a city (Brenner, 2016). Social scientists and humanities scholars interested in the historic-cultural relationship between port cities and hinterlands have discussed the limitations of the definition of *hinterland*, particularly with regard to the changes that the gateway port and the hinterland experience over time. They propose that hinterlands are lands lying next or close to a coastline that are connected to central urban places, though they emphasize that the geographic proximity of hinterlands to a port can be continuous, discontinuous, or remote. Areas away from cities and their cultural influences can be considered hinterlands, too (Mizushima, Souza, & Flynn, 2015). Although there is a connection between port and hinterland, the latter interpretation does not rely on the commercial linkage

between zones but allows for a broader understanding of *hinterland*. For the purpose of this research, I will consider *hinterland* through its broader concept, connected to the gateway beyond lying in geographic proximity or having commercial linkages.

A question arises regarding the origin of the gateway city: can a gateway city be planned as such, or is it developed once a political or economic need is identified? Cities do not seem to originate as gateways but can be designated into this role by others (e.g. federal government), from the need to connect the *hinterland* and the foreland. The built environment of any city is the outcome of processes that have changed over time following the demands of population growth, geography, availability of natural resources, diversity of lifestyles, technological advances, social changes, and political strategies. Once a city starts operating as a gateway, the role will demand a comprehensive long-term plan to sustain this function, and it will require the political commitment of local and central governments. This is the foundation of strategic alliances between the public and the private sectors of a city, resulting in major investments towards the construction and maintenance of durable infrastructure, long-term certainty for the services and businesses involved, and attractive incentives to create a multifunctional centre for research, technology, corporate services, and business (Bird, 1980; Matthiessen, 2004). The capacity for adaptation and rapid change is a key aspect of a modern gateway; the gateway's relationship with the *hinterland* will inevitably shift focus as new markets emerge and modern technologies become widely available. In a fast-changing world, any city "can act as a gateway for the transmission of economic, political and cultural globalization" (Short, Breitbach, Buckman, & Essex, 2000, p. 319). Globalization brings opportunities but also forces the gateway city to redefine its goals and strategies to stay relevant and connected worldwide.

3.2.2 What is an Antarctic gateway city?

Antarctica's harsh environment and isolation pose logistical and technological challenges for people to access the southern continent. Currently, most of the travel to Antarctica is channelled through the so-called Antarctic gateway cities. There are five cities in the world identified with this function. These are: Cape Town (South Africa), Christchurch (New Zealand), Hobart (Australia), Punta Arenas (Chile), and Ushuaia (Argentina). Although other cities, such as Bluff (New Zealand) and Stanley (Falkland Islands), have been considered Antarctic gateways by scholars (Bertram et al., 2007; Dodds, 2012; Prior, 1997), their current association with Antarctica is relatively minor and mostly restricted to Antarctic tourism. Hence, these are not further discussed in this thesis, and the analysis of Antarctic gateway cities will focus on the five aforementioned cities.

The Antarctic gateway cities have forged multiple connections with the southern continent throughout their histories. Their relative proximity to the Antarctic and direct access to the

Southern Ocean, combined with the infrastructure developed to satisfy local urban growth, make these cities the most likely from which to launch a polar expedition. These cities concentrate the largest volume of people travelling to the Antarctic, independent of the reasons for their travels, whether they are scientific research and its associated support, diplomatic and governmental purposes, or commercial endeavours such as tourism or fishing.

Research in Antarctic tourism has brought scholars' attention to Antarctic gateways. Bertram et al. (2007) proposed a definition for *Antarctic gateway port* as "a coastal or island port, able due to its proximity to the Antarctic to benefit from, and control access to, Antarctic and Southern Ocean resources, including fishing, tourism and scientific support" (p. 124). Bertram and colleagues concentrated their efforts on the study of Antarctic tourism, which is largely primarily facilitated by ships. Their definition fits with the maritime aspect of a port area rather than a gateway city. Although the above-mentioned cities have active marine ports, in some gateway cities the preferred transport mode for travelling to Antarctica is by aeroplane.

For Bertram et al. (2007), an Antarctic gateway port is defined by its favourable geographical position with regard to the accessibility to Antarctica and the Southern Ocean, and by its commercial capacity to benefit by and control access to the *hinterland* (i.e. Antarctica). The authors also suggest that such an Antarctic gateway port should include: "(i) managers who maintain political and scientific interests in Antarctica, (ii) good deep-water facilities for refuelling and re-provisioning ships; (iii) an international airport close by; and (iv) local infrastructure developed to facilitate exchanges of commodities and people" (2007, p. 124).

Here, the concept of Antarctic gateway port is given a role beyond the function of a marine transportation hub that provides access to the Antarctic. Other elements have been incorporated into the notion of Antarctic gateway port: the political and scientific interests in Antarctica, and the need for a strong infrastructure that can provide for and adapt to the demands of a range of transport options for goods, people, and equipment. These complement the access to Antarctica by sea, and, in return, can enhance the functionality of, and generate economic value to, the city. The political and economic significance given to the Antarctic gateway ports no longer reflects the single role of a transportation hub, or that as a simple entrance to and exit from Antarctica. The gateway ports occupy a central function in connecting Antarctica to the international community, as this link translates to economic and political benefits for the city.

In a review of polar gateways, Hall (2015) suggests that the term *gateway* is used without precision, limited to the function as an entrance-exit and lacking examination of the linkages between gateway and mobility, and between connectivity and accessibility to the hinterland. Hall challenges the use of the term in relation to the current Antarctic gateway cities and argues

that they should be considered competing minor hubs (2015, p. 12). The core components of a gateway are its control function and the transport network, along with its capacity to increase connectivity (Hall, 2015). Considering these aspects, it is difficult to argue with Hall. Although most of the five cities support air and sea links to Antarctica, and some even host at least one National Antarctic Programme (NAP), these cities serve primarily as a temporary storage place and stopover; the transport network is often seasonal and is not based permanently there. In addition, none of the cities have an active control function over the access to Antarctica, due to the political complexities of the management of the Antarctic region. However, in the context of this thesis, I consider a broader approach to the concept of gateway than Hall's rather narrow geographical framing of gateways and hubs. The Antarctic gateways studied here maintain connections with the *hinterland* (Antarctica) in varying degrees to sustain their function. Their governments demonstrate different levels of political commitments to maintain the gateway role; they are the most popular centres for gathering and distribution of goods, people and services for Antarctic operations, they have developed long-term plans and infrastructure to facilitate access to Antarctica, and they enable connectivity, traffic and trade to and from the Antarctic.

Within the Antarctic Treaty System (ATS), the international governance regime for Antarctica, the term *gateway* has not yet been defined. The lack of an official description for *gateway* may be considered irrelevant since these cities are outside the legal boundaries of the Antarctic Treaty (AT) at 60° S Lat. However, human activities in Antarctica are partly determined by the facilities and restrictions at the gateways. One can speculate that the absence of reference to gateway cities in ATS documents is a reflection of the concerns of Antarctic non-claimant states over inadvertent recognition of sovereignty rights. Yet, the significance of the Antarctic gateways has been acknowledged at the high-level meetings of the ATS. For instance, at the 39th Antarctic Treaty Consultative Meeting (ATCM), the Russian Federation formally requested the gateway countries to ease immigration rules for members of the Russian NAP when traveling to and from Antarctica (2016, WP 39 rev. 1). The procurement of transit travel visas for Russian overwintering teams was cumbersome and slow, creating unnecessarily delays for expeditioners to return home after a long stay in Antarctica. Moreover, the Russian Federation recognized the five Antarctic cities studied here as instrumental for launching voyages to Antarctica for the tourism and fishing industries, and long-term collaborators of NAPs. "These facts allowed one to widely apply the term "gateway to the Antarctic" in the international community with regard to these sea ports and airports" (2016, p. 2, WP 39 rev. 1). Additionally, Russia acknowledged the political and economic benefits to the gateway countries derived from the Antarctic activities carried at these air and seaports (2016).

Furthermore, the *gateways* have been recognized as key places for monitoring potentially harmful intrusions to Antarctica. For instance, the “Non-native Species Manual”, created to provide guidance to Antarctic Parties concerning biosecurity risks to Antarctica, considers the gateways a logical checkpoints for prevention during logistic and supply operations (Committee for Environmental Protection, 2019, p. 13). Also, when Antarctic Parties discussed the rise of yachting activities in Antarctica, several of which are happening unpermitted, it was proposed that the “gateway locations” were the critical centres to gather details of these vessels’ travel intentions, and to distribute information with regards to compliance for non-governmental visits to Antarctica (Antarctic Treaty Secretariat, 2010a, p. 135). Curiously, none of the abovementioned ATS documents uses the term *gateway city* to refer to these places.

Nonetheless, gateway states seize the opportunity to incorporate their cities names in official reports of the ATCMs to highlight their gateway status. For instance, the final report of the 27th ATCM held in Cape Town contains the welcome address by South Africa’s Minister of Environmental Affairs and Tourism, who reminded attendees they were in “South Africa: Developing as Gateway to the Antarctic”, and informed that “Cape Town specifically, is set to become the next major gateway to the Antarctic” (Antarctic Treaty Secretariat, 2004, pp. 232-233). Likewise, Australia took the opportunity at the 39th ATCM to present the country’s Antarctic strategic plan for the next 20 years, in which demonstrates, among other actions, “[the] efforts to build Tasmania’s status as the premier East Antarctica Gateway for science and operations” (Antarctic Treaty Secretariat, 2016, p. 60). Similarly, Argentina highlighted “.the key role of Argentina’s Antarctic gateway city and port of Ushuaia” to research programmes that travel to Antarctica (Antarctic Treaty Secretariat, 2018b, p. 17).

These occasional mentions of the gateways at ATCMs’ official reports seem inconsequential but they are deliberate. Antarctic gateway states, all of which are Consultative parties to the AT, remind the international community they have better access to Antarctica than others do.

3.3 Concluding words

The study of identities has generated a vast corpus of research, some of which is outlined in this chapter. Identity is a complex and dynamic concept of the individual, who, as a social being, relates with others and makes sense of the world through interpersonal and societal interactions. Culture, language, and society influence the way a person self-identifies, and his/her interactions with other people. The theoretical study of intergroup behaviour can elucidate motivational aspects on the person’s categorization and identification with a social group, whether the group is selected or whether it is imposed on the individual through external

factors, such as politics, economy, and/or heritage. The person's social identification can lead to the sentiment of belonging to a nation, here understood as a mental construct where people who share common ancestral culture and customs, and have a deep affinity with a geographic space, claim to be a nation with its own identity and inherited rights. The seminal work of Anthony D. Smith and Michael Billig on nations and nationalism is also critical for this thesis, as these imagined communities develop cultural narratives and symbolisms to reconstruct a national identity that encompasses the values and attributes of the nation. The nation can have different forms, such as an island, but the key characteristic that unites the nation's identity is a shared territory. The subjective bond that people construct with places creates memories and meanings that can extend beyond the space they inhabit and can be applied to natural environments such as Antarctica. Nationalism, as an ideological movement, communicates through cultural narratives created to enhance the bond with a place. However, radical cases of national-focused group identities can result in dangerous forms of nationalism.

Also, I have investigated extensively the concept of gateway, largely used for transport geography and tourism development. I argue not only that a gateway city provides transport infrastructure and support for travels into the hinterland, but also that there are socio-political and economic exchanges generated by the city's facilities and expertise that must be considered in the study of the gateways and in its future developments. I examined the definition of *gateway*, particularly in the Antarctic context, and provided examples of seemingly casual inclusions of the Antarctic cities (and their function) within Antarctica's governing body. The concept *Antarctic gateway* is central to this study. Hence, the arguments made by other scholars before me (Bertram et al., 2007; Hall, 2015) concerning definitions, misconceptions, and uses of the gateway ports and airports to Antarctica will be assessed against the findings of the current activities and developments happening at these cities. Considering the diverse viewpoints and uses for the term gateway city explored before, I will use the following contingent working definition for this research: "Gateway Cities provide transport infrastructure and support for travel into, and broader socio-political and economic exchanges with, the Antarctic, leveraging the city's facilities, expertise and interests".

In the next chapter, I focus my attention to the geopolitical framework of the countries hosts to Antarctic gateways, and how their politics and policies shape the gateways to Antarctica.

4 Geopolitics in Antarctica

Human engagement in Antarctica is encouraged and supported by politics. The quest for knowledge, exploration, conquest, and economic exploitation of Antarctica was (and continues to be) driven by political ambitions beyond the interests of the individuals who visited the South. Nevertheless, the representations of Antarctica in cultural imaginaries seldom include politics, let alone geopolitics. In fact, Antarctica is popularly represented as a pristine wilderness with charismatic wildlife and sublime frozen landscapes that appeal to the popular imagination of extreme, isolated beauty and a land that for most people is almost forbidden. Although Antarctica encompasses all of the above, it also has plenty of politics, and these are not discussed in the popular understanding of the place.

The purpose of this chapter is to reflect on the geopolitical influences in Antarctica that have resulted in the legal framing of the so-called uninhabited continent (Leane, 2013), devoid of native population but with abundant human occupation. Here, I introduce the fundamental principles of the legal frameworks for the governance of the Antarctic region to understand the position that geopolitics have within the international regime. I also discuss into the Antarctic territorial claims and their justifications, as I consider these to be the foundation of the political ambitions and national agendas of the states involved in Antarctica. Finally, I examine the Antarctic interests of the five countries with gateway cities by reviewing their Antarctic national programmes and recent developments. The NAPs of South Africa, New Zealand, Australia, Chile, and Argentina operate from their gateway cities; their functioning and contributions to the local economy and culture reveal influences on the communities and their connection with Antarctica.

4.1 An introduction to geopolitics in Antarctica

The Antarctic region is governed under a system of international agreements. The increasing scale of human activity in Antarctica coupled with a changing climate, diversification of technologies and scientific focus, and an increase interest in Antarctica by countries deemed to be newcomers to the region (Hemmings, 2017), constitute worrying challenges in a place framed as fragile (Nielsen, 2020). The study of the history of Antarctic expeditions reveals insights into the geopolitical thinking of the nations involved.

Geopolitics is a contested and changing concept, once linked to the study of the state, represented as a living organism with demands for growth and needs for more resources, and its relationship with other competing states (Dodds, 2013). Traditional geopolitics have a poor

reputation, infamously linked to give rise to far-right political movements of the 20th century, such as the Nazi Party in Germany, and military dictatorships in South America (Sidaway, 2001). However, geopolitical studies have emerged in the 1990s focusing on the critical aspects of geopolitical thinking that transcend the relationship between geography and state politics, under the construct of *“critical geopolitics”* (see, inter alia, Agnew, 2003; Ó Tuathail, 1996). *Geopolitics* is here understood as the examination of the interactions between the geographic aspects of a place (e.g. territory, location, resources, climate, etc.), its layers and diversity, and its influence in shaping regional, national, and international politics. Also, I contemplate here the focus of critical geopolitics, which incorporate representations, discourses, and practices of geographic spaces employed by political actors in influencing global politics (Powell & Dodds, 2014). The ongoing salience of the polar regions in critical geopolitics scholarship is manifested for instance in the latest work of Dorothea Wehrmann (2019), where the author examines the polar politics and geopolitical discourses of four countries from an inter-American regional perspective. Wehrmann’s work looks at Argentina and Chile’s polar geopolitics and their involvement in the Far South (2019).

Scholars agree that geopolitical thinking in Antarctica was at its pinnacle during the 1940s and 1950s, and was somewhat tamed after the signing of the AT in 1959 (Dodds, 2017). It would be imprudent not to acknowledge that polar discovery expeditions of the 18th century were driven by political ideologies of expansionism and colonization. European explorers, such as Cook, Kerguelen, and du Fresne, performed different ceremonies to take possession of the newly discovered lands, including place-naming, which began to shape the maps of the little-known southern polar region (Chaturvedi, 1996; Roberts, 2017). The study of geomagnetism was in vogue during the 18th and 19th centuries, as it had major implications for navigation, and the polar regions were important for the understanding of the Earth’s magnetic fields in high latitudes (Atkin, 2012). Moreover, mapping the polar regions had political meanings: producing accurate cartography and setting records of farthest south proved the power of a nation.

During the 19th century and the beginning of the 20th century, Antarctic expeditions were motivated by European imperialism and American expansionism, coupled with explorers’ personal ambitions for pride and glory, which validated pursuing polar travels in the name of the nation. The Heroic Era of Antarctic exploration is characterized by the attainment of geographical landmarks, such as the South Pole, and inland exploration where no man had been before. More importantly, expedition accounts, including photographic records of the Great South, were reproduced for the public in romanticized literary forms, enhancing the heroism and bravery of the men involved. This vicarious travel to the ends of the Earth attracted the imagination of public and governments alike. Many expeditions were set to accomplish scientific work, and science became the reason for why the nation was undertaking

such nationalistic endeavours. Those expeditions that dedicated more efforts to inland exploration are still popular in the public realm. For instance, in 1901, four expeditions, from Germany, England, Scotland, and Sweden, participated in an international scientific cooperative programme in Antarctica, agreeing to carry out meteorological and geomagnetic observations (Lüdecke, 2004). These expeditions can hardly be compared against each other fairly: Germany and England had financial backing from governmental and private stakeholders, whereas Scotland and Sweden had to rely on private funding, promises of economic returns, and ongoing fundraising, since they had failed to convince their governments of the merit of these explorations, and thus had no official backing (Roberts, 2017). The scientific accomplishments of the German, Scottish, and Swedish expeditions were many, but at the time their achievements failed to attract national interests at home since there were no *first* geographical attainments to celebrate (Roberts, 2017). In contrast, the English expedition's scientific achievements were minor in comparison, and even flawed (Atkin, 2012). However, the representations of epic exploration and portrayals of heroism, gentlemanship, and tragedy masked the shortcomings of the expedition, and were construed as narratives of national pride and glory for the empire.

The turn of the 20th century brought to the fore another focus of interest in the Antarctic: whale oil, a precious commodity that was exploited in abundance. World War I put a hold on polar expeditions, but commercial whaling in Antarctica was flourishing; faster vessels allowed whalers the freedom to explore and discover new coastlines, and to add names of heads of state and supporter entrepreneurs to Antarctica's map. Interest in the commercial exploitation of Antarctica coupled with imperialist attitudes and political rivalries resulted in the first annexation of Antarctica, by the UK in 1908 (Chaturvedi, 1996). British interest in the commercial use of Antarctica was evident when in 1914 they named the seas directly below Australia, South America, South Africa, and New Zealand as the "Southern Oceans" (Dodds, 1997, p. 31), in support of delimiting the geographical vagaries of their Antarctic territorial annexations (Chaturvedi, 1996).

Western political discourse applied to Antarctica was dominated by a prominent geopolitical ideology of the 1900s, known as "naturalized geopolitics" (Chaturvedi, 1996). The state was conceived as a living organism with biological needs for territory and resources; natural boundaries and economic success to the detriment of other nations acquired a nationalistic dimension (Chaturvedi, 1996). Also, it implied that states' boundaries were not a representation of historical and political results alone, but that, instead, natural features (such as mountain chains) defined those limits too (Dodds, 1997). This vision was not exclusive to European countries; the geopolitics of South American countries were dominated by this ideology throughout most of the 20th century (Kacowicz, 2000). Kacowicz studied the 20th

century South American geopolitical principles, and understands these in “five visions”: the maritime perception, the continental vision, the aerospace dimension, the revolutionary/domestic dimension, and the resource vision (Kacowicz, 2000, p. 83). These visions refer to the key points of control over spaces (land, maritime, and outer space), governance and competition with others, and dominance over use of resources and distribution. The South American Antarctic territorial claims reflected much of this geopolitical thinking.

By 1950, seven states had claimed sovereignty over sectors of Antarctica, and the imminent Cold War would put more strain in the diplomatic relationships of the countries involved in Antarctic exploration, exploitation, and occupation. Moreover, the “scramble for territory” provoked by the overlapping Antarctic territorial claims of the UK, Chile, and Argentina brought to Antarctica a display of military power, construction of bases, mapping, and flag-waving activities, compounded by several near-violent encounters between these three countries (Dodds, 1997, p. 35). The territorial conflict was not going away, and there were fears that the major powers, the US and the Union of Soviet Socialist Republics (USSR), would also transfer their geopolitical disputes to the Far South.

In this tense political climate, the US proposed the organization of an international comprehensive science programme modelled on previous International Polar Years (IPY) (1882-82 and 1932-33), this time with a focus on geosciences in Antarctica (Chaturvedi, 1996). The 1957-58 International Geophysical Year (IGY) had 12 countries involved in Antarctic science programmes: Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the UK, the US, and the USSR. Argentine ambassador Guyer (1982), who led the Argentine delegation during the 1950s and 1960s discussions on Antarctica, indicated that the IGY was interpreted as a key period of negotiations that would later lead to the AT, but that it was not exempt from political upheaval. IGY scientific accomplishments were many, but the launch of the Soviet artificial satellite *Sputnik I* in 1957 overshadowed all science programmes in the polar regions and accelerated the US-USSR competition for outer space hegemony (Dodds, 1997).

It is often assumed that the success of IGY led to the signing of the AT, but scholars warn us that the road to agreeing the future of Antarctica was complex and not always straightforward. By mid-1940s, calls for the internationalization of Antarctica were popular among the public and the media in the US and several European countries; public opinion endorsed the idea and supported placing Antarctica under the United Nations (UN) control (Bulkeley, 2010). The intervention of the UN would have given little negotiation power to the conflict of ownership and the potential resources value of Antarctica; the US and the seven claimant countries would

have not been able to exclude the USSR from discussions¹² if Antarctica was under UN control (Dodds, 2010). Among these concerns, a series of events unfolded that increased the political attention to the internationalization issue: while public opinion speculated over the Soviet Union's intentions in Antarctica in the era of rockets and missiles, the escalating territorial conflicts in the Antarctic Peninsula between Argentina, Chile and the UK required immediate attention. In addition, two large military training expeditions were launched in Antarctica by the US Navy, which sparked mistrust in the US by its European and South American allies (Bulkeley, 2010; Dodds, 2010). To address Cold War anxieties and territorial tensions reflected in Antarctica, the US and UK governments proposed a "scientific internationalism" programme, inviting the claimant countries and the Soviet Union to take part (Bulkeley, 2010). This scientific programme later took the name of IGY. According to Bulkeley (2010), IGY did not set to start the diplomatic process that concluded in the AT, but the international scientific collaboration that unfolded in Antarctica proved that science was the mechanism for cooperation and exchange between unlikely partners. Another invaluable contribution to the process was Chile's proposal to suspend the territorial claims for the duration of the scientific collaborations programme (Bulkeley, 2010). Although deemed unthinkable that claimant countries would allow others to establish research stations and work in their claimed territories, the 12 countries involved in IGY agreed on the need to operate without restriction in Antarctica (Dodds, 2010). For Dodds (2010), the scientific collaborations and political status of Antarctica during IGY was accepted by all participant states because it required a commitment throughout a limited time and not in perpetuity. Hence, at the 1959 conference in Washington, tough negotiations were needed to secure some kind of agreement to settle, among other issues, territorial disputes, access to Antarctica, demilitarization, denuclearization and inspection of activities by any party (Beck, 2010; Dodds, 2010).

The IGY demonstrated that international and cooperative scientific activity in Antarctica was possible but required state support. However, the escalating tensions of the Cold War and the clear superiority (financial, scientific, military, and infrastructure) of the two powers involved triggered fears in the rest of the IGY's participant countries: if the US and USSR stayed in Antarctica past the IGY, these could, in the future, have greater grounds for sovereignty claims than the claimant states (Guyer, 1982). It was apparent that IGY participant countries did not want to leave their Antarctic stations, and after negotiations for the internationalization of Antarctica fell through, as it would negate the pretended sovereignty of some countries, there was an urge for a novel solution. One and half years after the IGY, more than 60 diplomatic

¹² In the end, the USSR was invited to participate in the international initiative, considered as the "lesser evil" country to include, compared to others like India (Bulkeley, 2010, p. 10)

meetings resulted in a treaty between the parties (Guyer, 1982). In December 1959, the 12 countries involved in IGY's Antarctic science programme agreed on signing the AT.

4.1.1 The Antarctic Treaty System

The AT is a concise document of only 14 articles, signed in Washington in 1959 by the governments of Argentina, Australia, Belgium, Chile, France, Japan, New Zealand, Norway, South Africa, the UK, the US and the USSR. Its main provisions are to ensure that Antarctica will be used for peaceful purposes; it guarantees freedom of scientific investigation and promotes international collaboration (Conference on Antarctica, 1959). The AT bans nuclear explosions and establishes the principle of non-militarization of Antarctica. This treaty applies to the area south of 60° South latitude (Conference on Antarctica, 1959), it has no end date but has provisions for any contracting party to call for a review at any time.

The AT entered into force in 1961, and since, the number of Parties to the AT has increased significantly, from the original 12 signatory states 42 other countries have joined to date: 29 are Consultative Parties and the other 25 are non-Consultative Parties (Antarctic Treaty Secretariat, 2019). Consultative Parties participate in the Antarctic Treaty Consultative Meetings (ATCM), make decisions and vote (Conference on Antarctica, 1959, under Article IX, 2). To gain Consultative Party status, a state must demonstrate "interest in Antarctica by conducting substantial scientific research activity there, such as the establishment of a scientific station or the despatch of a scientific expedition" (Conference on Antarctica, 1959, under Article XI, 2) and be invited to accede to the treaty with the consent of all Consultative Parties. The non-Consultative Parties are states signatories to the AT, which can attend the ATCMs but do not have decision-making vote. Decision-making in the AT is achieved by consensus of the Consultative Parties.

The framework for governing all activities in Antarctica is known as the ATS¹³, which comprises of the AT, five separate international agreements¹⁴ and hundreds of measures, decisions, resolutions and recommendations adopted by the Consultative Parties. These agreements added global credibility to the ATS. The complexities of the functioning of the ATS, such as decision-making process by consensus and its slow reaction to the challenges facing

¹³ "Antarctic Treaty System' means the Antarctic Treaty, the measures in effect under the Treaty, its associated separate international instruments in force and the measures in effect under those instruments" (Secretariat of the Antarctic Treaty, 1991, Art. 1(e)).

¹⁴ The five separate agreements that comprise the ATS are: the Agreed Measures for the Conservation of Antarctic Flora and Fauna, the Convention for the Conservation of Antarctic Seals, the Convention for the Conservation of Antarctic Marine Living Resources (CCAMLR), the Convention on the Regulation of Antarctic Mineral Resource Activities, and the Protocol on Environmental Protection to the Antarctic Treaty (Antarctic Treaty Secretariat, 2019).

Antarctica, have been discussed at length by others and are not within the focus of this work (Gilbert, 2015; Hemmings, 2017; Stephens, 2018) .

Generally, the AT has been considered as one of the most successful international policy agreements of the 20th century, acting in the interest of science and peace in a remote and isolated region (Triggs, 2011). Moreover, it managed the interests of 12 countries and the tensions of the Cold War becoming “a masterpiece which resolved the existing problems and established the machinery for anticipating situations that might arise in the future” (Guyer, 1982, p. 271). Since its inception, the measures adopted for the protection of the Antarctic environment and natural resources, particularly the Madrid Protocol and CCAMLR, also have been praised, as “a model for regional environmental management founded upon common values of cooperative scientific research and peaceful purposes” (Triggs, 2011, p. 40). The legal framework for Antarctica’s environmental governance is the result of much-discussed proposals and rejections to mineral exploitation from the 1970s-1980s period, an era of resource-driven geopolitical thinking that attracted a growing membership to the Treaty, by countries such as Brazil, China, and India (Dodds, 2017).

The ATS has worked competently for nearly six decades under the core values of peace, science, and environmental protection, and has succeeded in preventing armed conflicts in the area. However, it is not flawless, and scholars raise questions over its suitability to respond to future scenarios facing Antarctica, such as greater global pressure for resources, the impact of climate change, the advance of technology, and increased commercial activities in the South (Chaturvedi, 1996; Dodds, 2017; Hemmings, 2017). The ATS’ consensus-based decision-making process has been criticized for being slow but, on the upside, it guarantees all parties are equally contracted by the AT’s provisions (Gilbert, 2015; Triggs, 2011). It has six annexes, five of which entered into force between 1998 and 2002. Annex VI “Liability Arising from Environmental Emergencies” was adopted in 2005 but has yet to be ratified by all parties (Antarctic Treaty Secretariat, 2019). More than a decade of negotiations within the ATS have yet to resolve the complex nature of liability, on what constitutes damage to the environment, and, more importantly, who is responsible for compensation and at what cost (Hemmings, 2018). Moreover, there have been no further legal instruments added to the ATS since 2005, despite the robust scientific evidence of climate change affecting Antarctica, coupled with the exponential increase in commercial activities (e.g. tourism, fishing) in the region (Hemmings, 2017). For Dodds, the Madrid Protocol is “an instrument of deferral” in Antarctic geopolitics (2017, p. 207). For instance, the ban on mining activities has deferred too the issue of energy resources (which continues to feature high in the national priorities of Antarctic parties). Considering that the measures of the Madrid Protocol can be revisited within

a timeframe and eventually withdrawn ¹⁵with enough approval, the pressure for access to resources in the future will challenge the regime (Dodds, 2017).

Concerning the disagreements on Antarctic sovereignty, the ATS responded to this issue with a “conflict-avoiding mechanism” (Chaturvedi, 1996, p. 113). Article IV of the AT handles the complex disputes over Antarctic territorial claims by neither acknowledging nor rejecting these titles; the claims are simply suspended, unresolved. The AT holds that positions on territorial claims are held in abeyance, recognizing that the positions of claimant parties, non-claimant parties, and those who have asserted their potential basis to claim in the future (the US and Russia) are unchanged. It explicitly indicates that no activities undertaken in Antarctica will be considered for further territorial claims, nor will it support, deny, or extend existing claims (Conference on Antarctica, 1959, art. IV). Although the sovereignty dispute has not been resolved, this key article to the AT has maintained the working of the system in relative harmony (Triggs, 2011). This apparent “sovereign neutrality” (Triggs, 2011, p. 43) adopted by the ATS does not mean Antarctica is devoid of geopolitics. On the contrary, geopolitics abound. For instance, of the 12 original signatories to the AT, seven states claim territory in Antarctica (Argentina, Australia, Chile, France, New Zealand, Norway and the UK). Two other states (the US and the USSR), reserved their right to make a claim in the future “should they so wish” (Gilbert, 2015, p. 329), and three states are non-claimants (Belgium, Japan, and South Africa). Moreover, the claims of Argentina, Chile and the UK overlap considerably; they are contested by all three states and have been (and continue to be) the cause of tension in and outside Antarctica. Australia, France, New Zealand, Norway, and the UK recognize each other’s claims, whereas the US and the USSR dispute all the claims (Triggs, 2011). Additionally, none of the other Consultative Parties (non-claimants) to the Treaty recognizes any territorial claims in Antarctica.

National interests in Antarctica, coupled with global changes in the environment, world politics, and economics, and technological advances that reduce Antarctica’s remoteness, are testing the ATS model (Hemmings, 2017; Triggs, 2011). Antarctica is no longer an isolated, remote, and frozen-in-time place; the ATS requires modern strengthening beyond the ambiguities of diplomatic language, national sentiments, and resource security.

4.1.2 Antarctic territorial claims

Understanding the background for the territorial claims in Antarctica is of importance to this thesis. Four of the five gateway countries have laid territorial claims. Some states employ long-term geopolitical strategies to introduce to their nationals Antarctica as part of their own

¹⁵ The exception are mineral resource activities, which are prohibited (Secretariat of the Antarctic Treaty, 1991, Article 7)

territory; others employ discourse invoking seemingly altruistic environmental protectionist purposes that justify their presence in the South. In this section, I will focus on the claimant states' justifications for declaring sovereignty over Antarctic sectors. I will not discuss here the legitimacy of these claims, nor the political implications and conflictive nature of these pretended titles for the ATS, which have been extensively discussed by others (Chaturvedi, 1996; Conforti, 1986; Dodds, 1997; Hemmings, 2008; Vigni & Francioni, 2017).

By 1950, seven states had laid territorial claims in Antarctica. Table 4.1 lists all seven claims with the geographical delimitations and the legal justifications employed. Here follows a short description of the Antarctic claims, listed in chronological order:

UK: In 1908, the UK was the first country to publicly proclaim, which it did by royal letters patent, Antarctic territorial sovereignty (Chaturvedi, 1996). The geographical borders of the claim were revised in 1917 and placed under the administration of the governor of the Falkland Islands on behalf of the British Crown (Chaturvedi, 1996). The claim was justified by discovery of lands, by Capt. Cook (1770s) and others, and the sector principle from the British settlement in the Falkland Islands. The territory was named "Falkland Islands Dependency" (FID); FID initially regulated and collected profitable whaling fees in the South Atlantic and Southern Oceans (Hart, 2001).

New Zealand: In 1923, the British government issued an Order in Council to extend the Crown's Antarctic dominions to ". . . all the islands and territories between the 160th degree of east longitude and the 150th degree of west longitude which are situated south of the 60th degree of south latitude, [and which] shall be named the Ross Dependency" (in Quartermain, 1971, p. 40). The claim was put under the authority of the Governor General of New Zealand, who looked after the British vested interests in the administration of whaling in the Ross Dependency (Templeton, 2000). This claim is justified on the basis of exploration and discovery by British explorers, transfer of territory from the UK to a former colony, and "the provision of regular occupation and effective administration" at the time the Antarctic Treaty was signed (Quartermain, 1971, p. 41).

France: In 1924, by presidential decree, France formally annexed the islands of Saint Paul and Amsterdam, and the archipelagos of Kerguelen and Crozet (Indian Ocean) and Adélie Land in Antarctica (Chaturvedi, 1996). Adélie Land is a small wedge of land that divides the Australian Antarctic claim into two sectors. The basis of the French claim is discovery by Admiral Dumont d'Urville and the sector principle from France's possession of sub-Antarctic islands in the Indian Ocean (Chaturvedi, 1996).

Norway: Growing concerns over sovereignty issues and whaling activity in the Southern Ocean led to the Norwegian annexation of Peter I Island in 1931 and Dronning Maud Land in

1939 (Norwegian Polar Institute, 2015). Norway's claims are supported by the conquest of the South Pole by the explorer Roald Amundsen in 1911, and the exploration and extensive whaling activity by Norwegian whaling companies and vessels in the 1900s (Norwegian Polar Institute, 2015).

Australia: By the 1920s, the British government considered the annexation of the whole of the Antarctic, having seen the increasing interest in commercial whaling and other states' territorial assertions in the region (Haward & Griffiths, 2011). In 1933, the British government formally transferred sovereignty to Australia, enacting the Australian Antarctic Territory Acceptance Act (The Parliament of the Commonwealth of Australia, 2018). The Australian Antarctic claim is also supported on the basis of discovery and exploration from the expeditions conducted under the leadership of Douglas Mawson in 1911-14 and 1929-31 (Haward & Griffiths, 2011).

Chile: In 1940, under Supreme Decree 1747, the president of Chile, Aguirre Cerda, set the limits to the Chilean Antarctic Territory (CAT) (Mericq, 1987). The bases for the Chilean claim are several: historically, the southern land was inherited from Spain with the enactment of the Treaty of Tordesillas in 1494 at Chile's independence; also rights to the southern land were reclaimed by the founding father of the nation, Bernardo O'Higgins, in 1831 (Cañas Montalva, 1956). In addition, Chile maintains that the geological continuity of the Andes mountains over the Antarctic Peninsula and the geographical proximity to the Antarctic constitute natural justification for the claim (Cañas Montalva, 1956).

Argentina: In 1940, the Military Geographic Institute published the official map of Argentina delimiting the Antarctic pretended sector (Canepa, 1948). In 1943, Argentina announced the formal claim to the Argentine Antarctic Sector (Dodds, 1997). In 1946, Presidential Decree 8944 officially annexed the Argentine Antarctic Sector (Capdevila & Comerci, 2013). Argentina maintains that the justification for its Antarctic claim is similar to that of Chile (inheritance from Spain, geological continuity, and geographical proximity), and its proven effective occupation of the claimed land since 1904, when Argentina took over the meteorological station in the South Orkney Islands, gifted by Scottish explorer Dr William Bruce (Capdevila & Comerci, 2013).

Table 4.1: List of Antarctic territorial claims per state¹⁶

Claimant state	Year of claim	Geographic limits of the claimed area	National name of the claimed area	Justifications for laying claim
UK	1908 (1917) ¹⁷	south of 60°S, between 20°W and 80°W	British Antarctic Territory	exploration and discovery; sector principle
NZ	1923	south of 60°S, between 160°E and 150°W	Ross Dependency	exploration and discovery; transfer of territory; propinquity
France	1924	south of 60°S, between 142°E and 136°W	Terres australes et antarctiques françaises	exploration and discovery; sector principle
Australia	1933	south of 60°S, between 45°E and 160°E, and between 136°E and 42°E	Australian Antarctic Territory (AAT)	exploration and discovery; transfer of territory; propinquity; sector principle
Norway	1939	between 45°E and 160°E, and between 136°E and 142°E ¹⁸	Peter I Øy Dronning Maud Land	exploration and discovery
Chile	1940 ¹⁹	south of 60°S, between 53°W and 90°W	Territorio Antártico Chileno o la Antártica Chilena	<i>Uti possidetis</i> ; propinquity; permanent occupation
Argentina	1943 ¹⁹	south of 60°S, between 25° and 74°W	Sector Antártico Argentino o la Antártida Argentina	<i>Uti possidetis</i> ; propinquity; permanent occupation

¹⁶ Territorial claims per state (Alnæs, 2017; Dodds, 1997; Gilbert, 2015)

¹⁷ In 1917 the UK rectified its 1908 Antarctic claim to incorporate the FID (Gilbert, 2015).

¹⁸ The Norwegian claim has not defined its northern and southern boundaries.

¹⁹ The year of claim indicated for Chile and Argentina in the table above refer to the year each country officially delimited the Antarctic claim. It should be noted that both South American states argue that their Antarctic territorial claims are part of a post-colonial inheritance, placed since the Treaty of Tordesillas of 1494 (Mancilla, 2018; Mericq, 1987).

Territorial assertions in Antarctica were intellectually justified invoking traditional theories employed during the imperialist and colonial expansion periods of the 16th to 19th centuries. Conforti (1986) listed the four main theories invoked by Antarctic claimants: (a) the principle of effective occupation; (b) the sector principle; (c) the theory of congruity and continuity; and (d) the *uti possidetis*²⁰ principle. In addition, transfer of territory to former colonies, discovery, and exploration were other justifications employed by Antarctic claimants (Vigni & Francioni, 2017). Scholars argue that none of these theories fully apply to the claimant states' arguments, and, therefore, they do not provide effective grounds for assertion of territory (Conforti, 1986; Dodds, 1997). Others question whether maintaining these claims is morally justifiable under the current management of Antarctica and with the potential future scenarios of changes to the ATS mechanisms (Mancilla, 2018).

Here follows a brief examination of the above-mentioned theories:

Effective occupation:

The ideologies arising from the 1884-1885 Berlin Conference (Gavin & Betley, 1973), which determined the partition and colonization of Africa by European states, and which favoured effective occupation of the annexed lands (among other norms), were translated to Antarctica (Chaturvedi, 1996). In the early 20th century, the acquisition to title of a territory encompassed a sophisticated set of rules: discovery of territory, followed by occupation and demonstration of effective possession or occupation of *terra nullius*²¹ (Vinuesa, 2004). Antarctica's hostile environment proved nearly impossible for establishment of human settlements and maintenance of permanent occupation until later in the century (Vinuesa, 2004). Nevertheless, the Antarctic claimant states invoke the principle of effective occupation²² by maintaining a presence in Antarctica, manning research stations and postal services, conducting some scientific research, establishing small human settlements (as in the cases of Argentina and Chile), and enacting domestic laws to extend the state's jurisdiction to the pretended Antarctic sector (Canepa, 1948; Conforti, 1986; Vigni & Francioni, 2017).

The sector principle:

First employed by Canada to claim Arctic territory, the sector principle stipulates that states whose territories are adjacent to the polar region acquire sovereignty over the land that extends towards the geographic Pole (Conforti, 1986; Mancilla, 2018). Delimiting the pretended land requires the drawing of arbitrary lines from the extreme ends of the circumpolar territory towards the polar sector to converge at 90° South latitude. Therefore, the territorial

²⁰ *Uti possidetis*: "as you possess under law" (Mancilla, 2018, p. 347).

²¹ *Terra nullius*: territory that is not subject to the sovereignty of any state (Vinuesa, 2004).

²² Conforti finds 'absurd' to maintain that state jurisdiction by effective occupation can be claimed in the case of Antarctica, when most of the continent remains inaccessible (1986, p. 256).

claims appear visually as triangular wedges that converge at the South Pole, with the exception of the Norwegian claim²³. The territorial claims do not encompass the entire Antarctic continent.²⁴ Despite the obvious impediment to this theory, that no claimant state's territory is adjacent to Antarctica, the sector principle was invoked by the UK, New Zealand, France, and Australia on the basis of possession of neighbouring land to the Antarctic (Vigni & Francioni, 2017).

The theory of congruity and continuity:

Also known as "propinquity theory", the theory of congruity and continuity indicates that a state with sovereignty over a part of a geographical unit, such as an island or on the coast of a barren territory, is entitled to proclaim sovereignty over the extended periphery to such geographical land (Conforti, 1986; Mancilla, 2018). This old doctrine, applied in international law, was accompanied by effective occupation, which was hard to demonstrate in Antarctica at the time of laying territorial claims (Conforti, 1986). Conforti argues that the contiguity and continuity principle follows geographical features, such as mountains, and not straight drawn lines on a map as the Antarctic claims do (1986).

The *uti possidetis* principle:

This indicates that new independent states acquire or inherit from the motherland the territory situated within the borders of the dominion that existed prior to independence (Conforti, 1986). Argentina and Chile invoke this principle, appealing to official documentation from the time the two countries were under the dominion of Spain, to claim inherited legal rights to the land that extends to the South Pole (Mancilla, 2018). The Papal Bull that resulted in the Treaty of Tordesillas (1494) between Spain and Portugal is of particular interest in asserting territorial claims in Antarctica. This treaty divided the New World between the two conquistador Catholic countries with a line that ran close to the Cape Verde Islands (North Atlantic Ocean), and that extended to the ends of the Earth (Mancilla, 2018). The Treaty of Tordesillas is commonly dismissed by European states since it did not encompass all naval powers in the 15th century but only those under Catholic ruling, and it allegedly included land that was yet to be discovered.

Despite Article IV of the AT, Antarctic territorial claims continue to occupy a critical place in the geopolitical agendas of the claimant states and in the cultural imaginaries of its nationals. To some extent, legitimization of the pretended Antarctic sovereignty dominates the discourse on national strategy plans and validates the expenditure on infrastructure and other resources to

²³ Norway's Antarctic claim does not include either a northern or southern boundary; Norway does not sustain the sector principle in the polar regions (Conforti, 1986)

²⁴ There is an unclaimed sector on Marie Byrd Land, on the western side of Antarctica that remained unclaimed by the time the AT was signed.

maintain a presence in Antarctica. This argument should not diminish the high-quality scientific research undertaken in the region by these countries (and the logistic support that is required to undertake science in an inhospitable place); researchers have contributed greatly to the knowledge of Antarctica and the Southern Ocean and their work is not here underestimated (Elzinga, 2017; Hemmings, 2017). However, scientific curiosity alone would not warrant the mobilization of resources on a large scale, unless the governments see the benefits (Elzinga, 2017). National science programmes in Antarctica have replaced the flag-waving scenarios of the 1940s, even though there are still many nationalistic references present in Antarctica (including plenty of national flags). Moreover, the Antarctic science programmes supported by claimant countries are, in large, conducted within the country's claimed area. In some respects, this speaks of the intricate nature of Antarctica: travel logistics to remote areas are complicated and expensive. Nevertheless, states' national policies embrace Antarctic science, which is the justification for being in Antarctica and a source of national prestige (Hemmings, 2017).

Within the ATS, the Antarctic parties have the provision of designating protected areas in the region under different systems of protection. Geopolitics also seem to play a significant part in the selection of the areas of protection by the proponents. Hughes and Grant (2017) demonstrated that largely the Antarctic claimant countries have been the proponents for designating protected areas located within the claimed territories and the zones operated by their national programmes. Once the protected area is adopted by the ATCM, all signatories to the Protocol share the responsibility to ensure the area remains protected, though in practice the proponent state becomes responsible for its management (Hughes & Grant, 2017). Although at a glance, it seems of little political value for a state to propose the designation of protected areas, an Antarctic Specially Protected Area requires the approval of a management plan and permission for entry from the designated authority, which largely is the proponent country. Designated protected areas can contribute to the protection of Antarctic ecosystems, for instance by reducing pollution and transfer of non-Antarctic species, including through the prohibition of the construction of large-scale facilities and recreational visits (Hughes & Grant, 2017). Geopolitically, designated protected areas offer to the proponent state some control over the periphery of their operating area in the Antarctic. Antarctica's protected areas serve the preservation of Antarctic zones of singular value, while they also have geopolitical value to a state's national interests.

4.2 The Antarctic interests of the gateway countries

This section introduces the Antarctic interests held by countries that host Antarctic gateways. It includes the organizational structure under which Antarctic activities are managed per

country, and an overview of each NAP and its Antarctic capabilities, and it pays attention to the documents that manifest the country's interests in Antarctica. It should be noted that all five countries studied here participated in the IGY, are original signatories to the AT, and are Consultative Parties. The five countries are also members of ATS bodies and associated organizations (CCAMLR, the Committee for Environmental Protection, the Scientific Committee on Antarctic Research (SCAR) and integrate the Council of Managers of National Antarctic Programs (COMNAP). Moreover, all five countries have search and rescue (SAR) responsibilities (aerial and maritime) in the Southern Ocean, in zones immediately adjacent to their southern borders and to Antarctica (COMNAP, 2017).

4.2.1 Argentina in Antarctica

Argentina too has a long-standing and proud Antarctic history, promoting its status as the first country to maintain permanent and continuous occupation of Antarctic land since 1904. Since 2004, Argentina has hosted the AT Secretariat, promoted as an achievement of international recognition of the country's Antarctic leadership, and a vote of confidence from the Treaty partners (Ferrada, 2019). However, the distinction of being the host of an Antarctic international agency is largely ignored by Argentina's nationals, and, at times, is confused as part of the bureaucratic body of organizations that manage the Antarctic national policy.

Despite ongoing economic decline since the beginning of the 21st century, Argentina has continued running Antarctic programmes and it is an active participant in the ATS. Argentina's footprint in Antarctica is widespread; it has 13 stations scattered along the perimeter of its Antarctic territorial claim. Six of these stations operate year-round, and collectively the 13 stations have accommodation for over 400 people (COMNAP, 2017). The bases have scientific equipment and laboratories to assist with the research programme. In addition, Argentina's flagship is the icebreaker *ARA Almirante Irizar*, which returned to service recently after catching fire and being in state of disrepair for a decade. A special unit of the Armed Forces assists with the logistics of the NAP, providing maritime and year-round air-links, SAR functions, and the running and maintenance of the bases. Argentina's military presence in Antarctica is conspicuous. The military manage all Antarctic bases, and their staff comprise the majority of Argentina's winter-over personnel.

The institutional organization of the Argentine Antarctic programme is highly centralized, bureaucratic, and top-heavy. At the head is the Ministry of Foreign Affairs and Worship (Cancilleria), in charge of policy and diplomatic representation of the country's Antarctic matters. Within Cancilleria there is the Undersecretary of Malvinas, Antártida, and the South Atlantic, which is composed of three departments, two of which are involved in national Antarctic governance: the National Department of Foreign Antarctic Policy and the Dirección

Nacional del Antártico (DNA) (Ministerio de Relaciones Exteriores y Culto, 2018b). DNA represents Argentina's NAP. Its responsibilities include the programming, planning, and execution of the country's Antarctic activities (Dirección Nacional del Antártico, n.d.-b). In addition, the Argentine Antarctic Institute (IAA) is the scientific research and technology organization that leads and coordinates Argentina's Antarctic science (Dirección Nacional del Antártico, n.d.-b). IAA was established in 1951 to support Argentina's Antarctic interests; it is known as the first organization in the world to dedicate exclusively to Antarctic research (Wehrmann, 2019). Argentina's Antarctic programme is considered among the well-established programmes within the SCAR membership category (Scientific Committee on Antarctic Research, 2017).

Argentina's Antarctic interests are expressed in the national policy act of 1990; the fundamental essence of this policy is to support and strengthen Argentina's sovereign rights in the Antarctic (Poder Ejecutivo Nacional, 1990, I. Objetivo). To achieve this goal, Argentina seeks a leadership position within the ATS by upholding environmental protection and conservation of natural resources agreements (specifically mentioned are fishing and minerals) (Poder Ejecutivo Nacional, 1990). In addition, Argentina aspires to lead the South American Antarctic parties and attract these to operate from its southern borders. Since the 1980s, Argentina, Chile, and Uruguay have organized regular Meetings for the Administrators of Latin America NAPs (RAPAL) to discuss common issues and best practices among Antarctic Peninsula operators. Argentina also offers training for developing Antarctic programmes, such as the Antarctic navigation course organized by the Argentine navy and attended by peers from South American countries and private stakeholders (Armada Argentina, 2018). Argentina's Antarctic policy gives priority to the development of Antarctic science and technology, under the leadership of DNA and IAA, two agencies that have a long history in Antarctic matters (since the 1940s). However, a recent evaluation of IAA's performance showed that the institution is in decline, unable to raise the profile of science within the national Antarctic programme. Some of the reasons alluded to concern budget cuts, but also to a fracture in the national system, dominated by two powerful partners: foreign policy and the military (Dirección Nacional del Antártico, n.d.-b). Despite the predicaments of the 1990 policy act, science is not at the forefront of Argentina's priorities; Argentine Antarctic scientists feel IAA has no input to the national programme's objectives, and budget priorities are destined to maintain the country's presence rather than creating opportunities for scientific development (Bicego, Lewis, Mata, & Porta, 2016). In addition, the report found that the current facilities for IAA are crowded and not conducive to an academic environment; many Antarctic researchers work from other institutions and publish their research under other affiliations rather than under IAA, which neglects institutional connectivity and community identity, and makes it cumbersome to integrate Antarctic science outputs with the national programme

(Bicego et al., 2016). Moreover, international cooperation in the Antarctic is encouraged but scientists argue there is poor institutional support to access these networks, and the lack of capacity building programmes affects the retention of trained experts and the formation of future generations of Antarctic scientists (Bicego et al., 2016). It might take longer to resolve these and other issues for the scientific community in Argentina under the current poor-performing economy. As a state policy to control outcomes, the government heavily funds Argentina's science, but science strategies follow geopolitical interests of governments in office rather than long-term planning for science and technological advance.

Argentina's 20th century geopolitics continue to dominate the political discourse and society's thinking on sovereignty rights over the South Atlantic and Antarctic regions. As Dodds (1997) pointed out at the end of last century, Argentina's strategic interests in the South Atlantic and the Southern Ocean support the security of its coastal borders and the control of resources and shipping in the South Atlantic, as well as justification for the Antarctic territorial assertion. Geopolitical influence has ruled state education programmes since mid-20th century, where geography was taught with illustrative maps of the Argentine territory, reflecting territorial ambitions rather than actual dominion, to support Argentine consciousness over the extent of the homeland (Dodds, 1997). The enduring conflict with the UK over the Malvinas/Falklands is founded in geopolitical principles of sovereignty rights and territorial losses,²⁵ which reignite fears and anxieties rooted in the Argentine consciousness over the presence of *others* in the national (imagined) territory and their intentions of seizing something that belongs to Argentina. As Benwell remarked, the Malvinas and the *Antártida Argentina* are deeply entrenched as one region in the nation's consciousness, and changes to the status quo produce a deep sense of insecurity and mistrust (2017). Simultaneously, *defending* one area is interpreted as protecting the sovereignty of the entire region. An example is the recently formed national project Pampa Azul, created in 2014. This is a multi-ministerial effort to combine science, technology, and industries in the South Atlantic, developing innovative and sustainable uses of the marine resources, employing "scientific knowledge to assist national sovereignty" (Ministerio de Ciencia y Tecnología, n.d.). *Pampa Azul* is an evocative name, combining cultural narratives of the fertile pampas where agriculture thrives, and *azul*, or *blue*, in reference to the sea and maritime economy. This project has five priority geographic areas to develop the science programmes, two of which are in the conflict area in the South Atlantic: Marine Protected Area Namuncura-Banco Burwood (approximately 200 kilometres south of the Falkland Islands), and the sub-Antarctic islands of South Georgia and South Sandwich, all

²⁵ The thesis on Argentina's territorial loss is rooted in the political and cultural narratives of the country, where nationals are suspicious of other states appropriating (or attempting to appropriate) land that historically belongs to Argentina. This deep territorial nationalism has been part of the public education system throughout the 20th century (Escudé, 1988).

of which are also claimed as Overseas Territories by the UK (Ministerio de Ciencia y Tecnología, n.d.). Coincidentally, the sub-Antarctic islands group is led by the senior officials of the Argentine Antarctic Programme. Moreover, the map that illustrates the geographic areas of priority for Pampa Azul (available for free download from the website), mirrors Argentina's 2009 submission to the United Nations Conventions on the Law of the Sea for the extension of the continental shelf. In the case of Argentina, this submission also includes the Antarctic claimed portion (Vigni & Francioni, 2017).

The international agreement for Antarctic cooperation signed between Argentina and the UK (May 2018) signifies a major change in the foreign policy of the country (Ministerio de Relaciones Exteriores y Culto, 2018a). Although the May 2018 agreement was received with satisfaction from the Argentine Antarctic science and diplomatic community, political commentators led by the opposition interpreted it as the government neglecting to continue advocating for Argentina's *sovereign rights* to the South Atlantic and Antarctica. Argentina seems to operate with a constant politically antagonistic approach in matters of the South Atlantic and Antarctica.

Argentina will continue operating in Antarctica despite the setback of past poor administrators (riddled with corruption), and a top-heavy and military-dependent leadership. It will require as much international collaboration as is on offer, considering its ageing Antarctic infrastructure and budget reductions that favour presence in Antarctica over science programme. Argentine scientists are already contributing to the knowledge of Antarctica, but science will not be one of the country's top priorities unless a drastic political and cultural change happens with the national representations of Antarctica. The *raison d'être* for being in Antarctica, Antarctic sovereignty, may have to take other forms. The former Argentine Minister of Foreign Affairs, during her visit to Antarctica in 2017, pleaded with Argentines to think of modern ways about sovereignty, ". . . new forms to defend sovereignty, in Antarctica we have a commitment to defend it by presence and research" (Tomas, 2017). It seems Argentina cannot yet stray away from the geopolitical thinking of the mid-20th century.

4.2.2 South Africa in Antarctica

South Africa is the only country from the African continent fully engaged in Antarctic affairs. Despite its turmoil-laden political history that dominated the second half of the 20th century, South Africa participated in Antarctic politics and science, albeit at times modestly, throughout this period. In times of widespread condemnation of the apartheid regime, Antarctica provided South Africa with an international forum where it could participate equally without being

questioned over its in-house politics, despite attempts from outside commentators, such as the UN in the mid-1980s (Dodds, 1997).

South Africa's presence in the Southern Ocean was marked with the official annexation of the sub-Antarctic Prince Edward Islands group (PEI) in 1948, namely Marion and Prince Edward (Dodds, 1997). These islands, located in the Indian Ocean, fall under the jurisdiction of the Western Cape government and Cape Town Magistrates' Courts. South Africa operates weather stations on Marion and on the South Atlantic Ocean's Gough Island,²⁶ conducting year-round biological research and long-term wildlife population monitoring programmes, and it has been working extensively to control invasive species (SANAP, n.d.). "The islands", as most South Africans refer to them, have the highest environmental protection status given to any land in South Africa; the PEI were declared a Special Nature Reserve (1995) to protect their sensitive biodiversity (Davies, Chown, & Joubert, 2007).

In the Antarctic region, South Africa's official presence dates from late 1959 when the first South African National Antarctic Expedition (SANAE) accepted an offer from Norway and officially took over the Norwegian IGY research station at Dronning Maud Land (McNish, 1971). This exchange of facilities is considered a crucial proof of South Africa's legitimate interests in Antarctica (Roberts, Dodds, & Van der Watt, 2013). In 1962, SANAE I station opened near the old Norwegian base; by 1997, South Africa had moved its operations inland and SANAE IV has operated uninterrupted year-round at its new location, with accommodation for 80 people (COMNAP, 2017, p. 127). The station also has scientific laboratories and science equipment on-site to assist with research programmes. The construction of SANAE IV coincided with South Africa's implementation of the Madrid Protocol in 1995 during government led by Nelson Mandela, a period of renewed hope for democracy and environmental stewardship in the African country (Dodds, 1997). As a result, SANAE IV adhered to the "new" environmental restrictions from the Madrid Protocol, and South Africa was among the first countries to apply environmental impact assessments and monitoring to their Antarctic footprints (Dodds, 1997); the Madrid Protocol's environmental principles also extend to the management of the PEI.

South Africa's polar capabilities are complemented by its own polar vessel, *SA Agulhas II*, which operates year-round in icy conditions (Department of Environmental Affairs, n.d.). Launched in 2011, the *Agulhas II* was designed as a multipurpose (logistic and research) ship to support the country's science programmes; it services the three aforementioned research stations, including by the ferrying of passengers to Tristan da Cunha in the South Atlantic

²⁶ From the Tristan da Cunha group (South Atlantic Ocean), a British Overseas Territory (SANAP, n.d.).

Ocean (Department of Environmental Affairs, n.d.). In addition, South Africa has joined European countries in a logistic pool known as DROMLAN (2020), which provides an Antarctic air-link from Cape Town and intra-continent transportation (COMNAP, 2017).

South Africa's organizational structure for Antarctic matters is multi-layered. The South African National Antarctic Programme (SANAP) has the responsibility for coordinating logistics and supporting the science programme, and for the running of the three above-mentioned research stations. SANAP functions under two ministerial agencies: the Department of Environmental Affairs (DEA), responsible for the logistics and infrastructure of South Africa's remote southern stations, equipment, and the vessel, and the Department of Science and Technology (DST), which manages the scientific and technology portfolio (SANAP, n.d.). Moreover, the Department of Public Works has been involved in the construction of SANAE bases, and the South African navy and air force are involved in transport and logistic support for SANAP (Sidiropoulos & Wheeler, 2016). Lastly, the Department of International Relations and Cooperation manages South Africa's Antarctic diplomatic affairs (Sidiropoulos & Wheeler, 2016).

At an international level, the South African Antarctic science programme is well regarded by its peers. Under the SCAR membership, South Africa's is listed among the well-developed programmes,²⁷ which is the top category assigned by the science committee. SCAR membership is divided into categories based on the stage of development of the country's research programme (Scientific Committee on Antarctic Research, 2017).

South Africa's Antarctic interests are centred on the ocean. Although a non-claimant Antarctic country, the sovereignty over the PEI offers South Africa access to the Southern Ocean and CCAMLR fishing zones (Glazewski, 2010). The importance of the PEI as South Africa's ocean foothold is visible: the research programmes conducted in the sub-Antarctic research stations are integrated into the Antarctic programme despite their northerly location in relation to Antarctica. In fact, the national science funding instrument is region-specific: it ". . . supports research in the Southern Ocean, including Prince Edward Islands, and in Antarctica" (National Research Foundation, 2017, p. 7). Antarctica and *the islands* seem to be one item in South Africa when referring to the polar region.

Internally, South Africa's organizational structure of relevant Antarctic national agencies is also connected with ocean management. For instance, SANAP is incorporated into the programme area "Oceans and coasts: blue economy/ Operation Phakisa" under DEA administration

²⁷ Countries with a multidisciplinary and productive Antarctic research community, which can include Antarctic infrastructure, or a local scientific community working alongside international partners (Scientific Committee on Antarctic Research, 2017).

(Department of Environmental Affairs, 2018), which shows the importance of the country's presence in Antarctica. Additionally, the *White Paper on National Environmental Management of the Ocean* (Republic of South Africa, 2014) reveals the country's ambitions for becoming Africa's leading maritime nation through a modern coordinated approach to ocean environmental management and sustainability. South Africa's leadership in Southern Ocean matters has been represented at the highest levels of management. For instance, Dr Denzil Miller, krill expert, led CCAMLR between 1997 and 2000, and Dr Monde Mayekiso chaired the Commission from 2016 to 2018 (CCAMLR, 2018).

South Africa's new democratic period has focused on the ocean economy as the regenerator of the country's wealth. The country's extensive coastline provides access to the Atlantic and Indian oceans; for centuries South Africa has been one of the busiest sea routes for southern hemisphere commerce. Economic powers, such as the US, recognize the strategic position of South Africa in maritime shipping: Cape Town is the ideal location to manage shipping to East Africa and South America, while Durban controls shipping to South Asia (International Trade Administration, n.d.).

Scholars also identified South Africa's ambitions as a maritime leader. Glazewski praises the long-standing oceanographic research and expertise of South Africa in the Southern Ocean, identifying it as the country's major contribution to the ATS (2010). Although a non-claimant country, South Africa advocated for the demilitarization of Antarctica in the 1980s. On this basis, Verbitsky sees untapped opportunities for South Africa to step up as a leader in Antarctic politics, advocating for a democratic reform of an otherwise old-fashioned Western-colonialist view of the AT governance system. He also notes the opportunity to champion environmentally sustainable legislation for bioprospecting in Antarctica, with a benefit-sharing scheme that aligns with the oceans management plans (2015b). However, leadership in Antarctic politics requires robust and coherent relationships between South Africa's foreign policy and Antarctic management agencies. To date, South Africa does not have a national Antarctic strategy to guide the country's vision and activities. The lack of a leading policy was identified as a major obstacle for the advancement of the country's Antarctic ambitions in a recent colloquium on oceans economy (Mayekiso, 2017). Although a Southern Africa Antarctic and Southern Ocean strategy is said to be in preparation, experts indicate that South Africa is falling behind in science and technology compared with its Antarctic peers (Mayekiso, 2017). This could lead to a form of "knowledge colonization" by external parties, where partners may take advantage of South African Antarctic infrastructure, expertise, and capabilities, and impose their critical mass to the detriment of the African partner (Sidiropoulos & Wheeler, 2016, p. 36). Also, training and retention of expert staff in South Africa are critical for the advancement of science and technology, but no provisions for these have been put in place yet. The South African

Antarctic science community echoes this concern, stating that the government's “. . . confusion, lack of funding, lack of consultation and lack of transparency” are jeopardising substantial developments in science and technology, mostly guided by divergent political manipulation rather than an understanding of science and environmental challenges of the polar region (Treasure et al., 2013, p. 1). South Africa's recent investment in a polar vessel and improved facilities at Marion Island have not made substantial contributions to growing scientific research in the region. Moreover, the *Agulhas II* spends almost half of the year providing logistical support to the remote bases instead of conducting Antarctic and Southern Ocean research (Sidiropoulos & Wheeler, 2016; Treasure et al., 2013). Although international collaboration is fostered within the ATS and offers opportunities for advancement of science, generally these are in the form of invitations to individual scientists and not to a whole research team. Moreover, the expenditure of the already restricted budget for Antarctic activities lacks coordination; each government agency with an Antarctic portfolio manages its incidentals and deliverables, resulting in overall confusing and inefficient use of public funding (Sidiropoulos & Wheeler, 2016).

4.2.3 New Zealand in Antarctica

New Zealand claims to have a closer association with Antarctica than other countries, from historic connections to the early European explorations that sailed south from the Antipodes, to ancient geological and geographic environment links that influence New Zealand today. For Brady, “. . . New Zealanders have a stronger sense than the citizens of most other nations that Antarctica is part of their national history and heritage” (2011, p. 126), a statement that reflects personal social imaginaries accepted as national narratives, connected to heritage and New Zealand's colonial past.

Although the New Zealand government took no initial interest in Antarctica during the first half of the 20th century, besides the logistic support to expeditions and the profits from commercial whaling, it has been actively involved in Antarctic politics and science since its participation in the IGY. Lately, New Zealand has been portrayed as a champion for Southern Ocean environmental protection after the entering into force of the Ross Sea Marine Protected Area (MPA) within CCAMLR in 2017.

Scott Base is New Zealand's only research station in Antarctica, located furthest south of other Antarctic coastal bases (COMNAP, 2017). This is a year-round operational facility with a total of 86 beds (COMNAP, 2017, p. 93). The original buildings from the mid-1950s have been replaced by a modern facility that contains general-purpose laboratories and equipment to support research. Apart from New Zealand's Antarctic claimed Ross Dependency, the country has sovereignty over six sub-Antarctic islands, more than any other country (Carey, 2015).

However, unlike with other claimant countries, research carried out in the sub-Antarctic islands is not included in New Zealand's Antarctic portfolio.

New Zealand's research programme is mainly supported by the joint logistic pool between the New Zealand Royal Air Force and the US Air Force, which provide regular Antarctic air-links from September to March. New Zealand's only ice-strengthened vessel, the RV *Tangaroa*, is designed and equipped for ocean scientific research but not for exclusive use in Antarctica (NIWA, 2016). Considering that New Zealand is a significant maritime nation, its ocean research and transport capabilities are limited. However, it is expected that the new vessel acquired by the New Zealand Defence Force recently, the HMS *Aotearoa*, will provide much needed support in the Ross Sea region (Ministry of Defence, 2018) .

The Antarctic Policy Unit from the Ministry of Foreign Affairs and Trade (MFAT) coordinates New Zealand's Antarctic interests. Representatives from the ministries of Primary Industries, Defence, Research, Science and Innovation, Conservation and Environment, Tourism, Transport, and Land Information, and other associated government organizations, also sit at the Officials Antarctic Committee, led by the Antarctic Unit at MFAT (Brady, 2019). This multi-ministerial approach to the NAP indicates the relevance that Antarctica has for this small Pacific nation. New Zealand's NAP is led by Antarctica New Zealand (ANTANZ), the trading name of the New Zealand Antarctic Institute. This government agency established in 1996 is responsible for carrying out New Zealand's Antarctic activities, managing Scott Base, supporting the science programme, and communicating to policy-makers and the public the science outcomes (Harrowfield, 2017). ANTANZ is governed by MFAT and by a board of directors (Harrowfield, 2017). The breadth of expertise of the board, particularly in business, communication, and foreign investment, shapes the direction and activities developed by ANTANZ beyond supporting the science programme (Antarctica New Zealand, n.d.). The business-like approach of the board has its benefits. For instance, New Zealand operates in Antarctica with a limited budget compared with its Antarctic partners, and the New Zealand government largely funds the Antarctic programme. To overcome a funding shortage, ANTANZ created in 2012 the New Zealand Antarctic Research Institute (NZARI) (Harrowfield, 2017), a charitable trust responsible for seeking philanthropic partnerships with individuals, business organizations, and research agencies to fund scientific research in Antarctica and the Southern Ocean (New Zealand Antarctic Research Institute, n.d.). Since its inception, the NZARI has led initiatives to guide New Zealand's Antarctic science strategies, and has created funding partnerships with organizations such as Aotearoa Foundation, Air New Zealand, and National Geographic (Harrowfield, 2017). The NZARI works closely with ANTANZ in science outreach efforts to engage the New Zealand public; the NZARI's corporate partnerships have been instrumental in creating positive impacts in the local and international communities in

portraying New Zealand as a leader in Antarctica. Concerning future funding, New Zealand has yet to develop a long-term plan to fund its science programmes. The NZARI has launched another appeal to potential benefactors, while the Ministry of Business, Innovation and Employment (MBIE) will manage the funding for the next seven years of the Antarctic Science Platform (Ministry of Business, n.d.). The Antarctic Science Platform consists in four leading science projects that set the priorities for New Zealand: (1) ice dynamics, (2) ocean and atmosphere dynamics, (3) Ross Sea ecosystem changes, and (4) sea ice and carbon cycle (Antarctica New Zealand, 2020a). The platform goals are to understand the pressures of climate change and the potential implications for the Antarctic and New Zealand environments (Ministry of Business, n.d.).

Currently, ANTANZ is planning the redevelopment of Scott Base, expected to be a multi-year project to upgrade the current facilities. Scott Base's renovation is promoted as the largest project ever undertaken by ANTANZ, supported by multi-million dollar funding from the government. The purpose stated for this substantial financial investment is that to "continue commitment & (sic) influence within the Antarctic Treaty System, requires Antarctica New Zealand to produce high quality science, and maintain a credible year-round physical presence on Ross Island, Antarctica" (Antarctica New Zealand, 2020b). ANTANZ's rationale for the need to maintain a permanent presence in Antarctica is aligned to claimant country discourse: being visible to others, projecting power and exercising rights to have facilities on the country's largest claimed territory. As an original signatory country to the AT, New Zealand (as well as the other eleven signing countries), acquired Consultative status automatically in 1961, not having to demonstrate its research commitments in Antarctica as it is required to all other acceding states (Conference on Antarctica, 1959, art IX.2). In addition, New Zealand's Antarctic science programme has proved to be above *credible*; it has been praised internationally (and regionally) for its quality outputs and approach to international cooperation and the sharing of resources (Morten, 2017; Tinker Foundation Inc, n.d.). Moreover, within the SCAR member classification, New Zealand's programme is rated as a well-developed programme (Scientific Committee on Antarctic Research, 2017).

New Zealand's statement on its Antarctic strategic interests articulates a strong sense of stewardship towards the conservation of the Antarctic and Southern Ocean, aligning the country's attention to the South with the peaceful, nuclear-free, and environmentally responsible goals of the ATS (Ministry of Foreign Affairs and Trade, 2019). The language employed is altruistic and seemingly devoid of nationalistic expressions in support of the territorial claim; yet the message is firm when stating the environmental connection with Antarctica and the Southern Ocean, remarked 'as part of New Zealand's heritage' (Ministry of Foreign Affairs and Trade, 2019). In addition, leadership in conservation, fishing management

and science reinforces the role of New Zealand (and Christchurch's) as the gateway to the Ross Sea region. The government appeals to the cultural imaginaries of New Zealanders with the incorporation of the Māori concept of *manaakitanga*²⁸ to the country's statement of commitment with the Far South, bringing Antarctica closer to environmentally-minded New Zealanders (Ministry of Foreign Affairs and Trade, 2019). It should be noted that New Zealand's Antarctic claim encompasses the least amount of land of any of the territorial claims, but it includes the whole of the Ross Sea, considered ". . . only one of the most significant marine areas in the world" (Dodds & Brooks, 2018, p. 7). New Zealand positions itself as the steward for the Ross Sea, supporting its conservation and, unquestionably, protecting the fishing industry that the country initiated in these southern latitudes in 1997 (Dodds & Brooks, 2018). Antarctica fishing contributes with approximately NZ\$20 million per year to the New Zealand's economy (Brady, 2019, p. 267). The government statement does not elaborate further on how New Zealand will protect its interests in Antarctica and the Southern Ocean, besides its commitment to protect biodiversity, leading the efforts to eradicate illegal fisheries in the Antarctic ocean, and promoting high standards on scientific research output and international collaborations (Ministry of Foreign Affairs and Trade, 2019). Intriguingly, New Zealand chooses not to mention its own commercial fishing activities in the Southern Ocean in the short statement of commitment. Instead, chooses a densely worded obfuscation ". . . take precautionary and ecosystem approaches to conservation and sustainable management of living marine resources in the Southern Ocean, particularly in the Ross Sea, supporting strong environmental standards and sustainable economic benefits, and contributing to scientific understanding" (Ministry of Foreign Affairs and Trade, 2019). The government's environmental stewardship role appeals to the New Zealand public, who identify their country largely with images of nature and purity responding to the branding campaign "100% PURE", created to attract international tourism to New Zealand through imaginaries of pristine landscapes (Durr, 2008, p. 59). In 2017, New Zealand's environmentalist role in Antarctica was cemented, and highly celebrated, when the largest Antarctic MPA entered into force (Dodds & Brooks, 2018). However, the New Zealand government narratives of this environmental achievement does not reflect the five years of negotiations, controversy and lobbying that occurred to achieve consensus in designating the Ross Sea MPA. For instance, the 2012 initial proposal by New Zealand became entangled in politics: CCAMLR members questioned the large area proposed for an MPA, which mirrored the proponent's state Antarctic sovereignty claim (Dodds & Brooks, 2018). Other details of the MPA designation agreement are not mentioned in the New Zealand government's websites. For instance, agreement only includes one third of the proposed protected area (Brady, 2016). It poses the question on

²⁸ Manaakitanga: hospitality, kindness, generosity, support - the process of showing respect, generosity and care for others (Moorfield, 2020)

whether economics rather than conservation and politics, and the protection of a profitable fishing industry, were prioritised in New Zealand international negotiations (Brady, 2016).

The 2018 New Zealand defence strategy highlights the roles of the armed forces in Antarctica (i.e. monitoring the Ross Sea MPA, SAR, participation in the joint logistic pool, etc.), but under “Global implications: Strategic competition and compounding disrupters”, Antarctica is represented as a region of increasing interest to other nations, and under increasing pressure by them (Ministry of Defence, 2018). The strategy states that “. . . this will lead to increased congestion and crowding . . .” in the near future, listing as examples the Italian planned runway and the Chinese construction of its fifth Antarctic station (Ministry of Defence, 2018, p. 22). New Zealand sees these developments as encroachments into the Ross Dependency; a threat from *others* to national security borders (the Antarctic included), competition for space and fishing quotas, and the creation of alternative transport and logistic capabilities that end (or supplement) the US-New Zealand joint logistic pool hegemony in the Ross Sea. More importantly, the construction of new infrastructure for satellite and space-development programmes by Russia and China in Antarctica, are seen as a challenge to New Zealand’s national security (Brady, 2019)

New Zealand is a small country with limited resources fulfilling its obligations in Antarctica. International collaboration, diplomacy, and high-performance scientific outputs have been the keys to its activities in the polar region. However, science funding continues to be a key issue for long-term planning, and it appears New Zealand is flexing its muscles for a bigger and bolder visible presence in Antarctica than ever before.

4.2.4 Australia in Antarctica

Australia has more than a century of history in Antarctica. Before Antarctica was managed by the ATS, Australia had conducted its own expeditions of exploration and research in the South. This long-standing involvement with Antarctica allows for recreation of cultural imaginaries regarding the strength of this bond, such as asserting that “. . . Australians felt a growing affinity with, and responsibility for, their ‘Great Frozen Neighbour’” (Kawaja & Haward, 2011, p. 9), or declaring that the past Australian explorers’ legacy, which “. . . has forged, *for all Australians* [emphasis added], a profound and significant connection with Antarctica” (Commonwealth of Australia, 2016, p. 1).

Australia regards itself as a committed and influential actor in Antarctic politics, and as a leading country in science (The Parliament of the Commonwealth of Australia, 2018). Australia’s footprint in Antarctica is spread over the extent of its territorial claim. It has three research stations that operate year-round: Casey, Davis, and Mawson. Between them, the three bases have 243 beds for staff and scientists; all facilities carry scientific equipment to

assist with the research programme (COMNAP, 2017). Australia has sovereignty over two sub-Antarctic territories that are included in its Antarctic programme: Heard and McDonald Islands (in the Indian Ocean) and Macquarie Island (in the Pacific Ocean) (Carey, 2015). Both island territories are north of 60° South Lat., but the former is included in the CCAMLR area. Also, both are under the jurisdiction of the state of Tasmania (The Parliament of the Commonwealth of Australia, 2018). Australia's Antarctic travel and logistics are supported by their flagship *Aurora Australis*, an icebreaker that services the three aforementioned stations, and that will soon be replaced by a modern icebreaker, RSV *Nuyina*, currently under construction and expected to be completed by 2020 (Australian Antarctic Division, 2019). In addition, Australia has an Antarctic air-link from Hobart to Casey station, but the backbone of the programme continues to be the maritime transport (Australian Antarctic Division, 2018b). The Australian Defence Force participates in delivering air cargo to Antarctica, and it takes on the duties of patrolling and monitoring the Southern Ocean (McGee & Smith, 2017).

The Australian Antarctic Division (AAD) is the country's NAP; it coordinates the functioning of the Australian Antarctic Programme (AAP), providing support and logistics for science; but it also represents the country in all Antarctic and Southern Ocean international forums (Kriwoken, Jabour, & Hemmings, 2007). The AAD is an agency of the federal Department of Environment and Energy. The Department of Foreign Affairs and Trade is also involved in Antarctic policy, leading Australia's Antarctic diplomatic portfolio (Haward & Griffiths, 2011). However, Australia's Antarctic policy responsibilities are shared among agencies. The AAD's unusual policy role (on top of the coordination of Antarctic logistics and science) has the benefit of concentrating knowledge and decision-making in one agency, but this is also seen as a disadvantage and even a stretch for the AAD's capabilities (Kriwoken et al., 2007). The Department of Foreign Affairs and Trade provides diplomatic leadership for Australia's Antarctic activities, but this is one of the many other international duties of this government agency. Inter-agency communication, capacity, and coordination have been identified as some of the challenges facing the effective execution of Australia's Antarctic policy (Kriwoken et al., 2007). Nevertheless, the AAP is one of the leading science programmes in Antarctica, and is recognized internationally by SCAR within the well-developed programme category (Scientific Committee on Antarctic Research, 2017).

In 2016, Australia revealed its Antarctic planning for the next two decades, setting the country's national interests in Antarctica. The Antarctic Strategy was a much-anticipated document, since substantial budget cuts had been imposed to the science programmes funding. Also, a shortage of funds to upgrade ageing infrastructure, such as the icebreaker, would place Australia at a disadvantage with competing states (Fogarty, 2011; Press, 2016). In the Strategy, Australia is committed to maintaining the principles of the AT and to supporting a

robust legal framework for the management of the region. It is committed to conducting a high-level competitive science programme and environmental protection and stewardship. Also, it is interested in the economic opportunities that arise from the Antarctic and Southern Ocean connection, and in “. . . preserving our sovereignty over the Australian Antarctic Territory, including our sovereign rights over adjacent offshore areas . . .” (Commonwealth of Australia, 2016, p. 17). Australia’s discourse as an Antarctic claimant state is unapologetic within its domestic borders; the claim justifies its costly presence in Antarctica and it is high-priority in the list of national interests. Australia’s Antarctic bifocalism²⁹ has balanced the adoption of the ATS legal frameworks while continuing to protect the country’s territorial claim (Bray, 2016). However, the Antarctic sovereignty discourse intensifies with the presence of other countries that may pose a threat to its national interests. For instance, the rise of China as a powerful and ambitious country in Antarctica investing in larger facilities and transport capabilities within the AAT³⁰ is perceived as a contestation of Australia’s authority in its own territory. The presence of *others* exerting power in the AAT creates anxieties over potential risks to safety in Australia’s southern borders, and over prospective commercial fishing and bioprospecting opportunities for others (Buchanan, 2019a). Moreover, China’s inland capabilities in Antarctica allow its scientists to reach areas that Australians have been denied so far due to logistical restrictions, and Chinese increased ocean research efforts with newer and faster ships than Australia’s, threaten Australia’s position as a scientific leader in this discipline (McGee & Smith, 2017). Recently, Australian strategists called for the government to revisit the country’s agreements with China in Antarctica; Chinese Antarctic developments and investments in Australia’s research institutions have immediate benefits and huge potential downfalls: “[w]e run the risk of being mendicants living on Chinese research funds” (Bergin & Press, 2020).

All these actions incite local debates supporting the need for action to continue the protection of Australia’s Antarctic (pretended) rights (Bray, 2016; McGee & Smith, 2017), as the country’s leadership in Antarctica and the Southern Ocean is perceived at jeopardy, including its national security (Buchanan, 2019b).

Australia’s Antarctic strategy is an ambitious and well-crafted plan that sets the country as a frontrunner in Antarctic matters at the international level. It promotes Australia’s motivations as a policy and security leader in the southern hemisphere, an end to support the protection of the Antarctic territorial claim while enabling international collaboration and high-level engagement with political and economic allies. The author of the strategy plan, Tony Press, expresses that “. . . Australia must continue to reach out to like-minded nations in order to

²⁹ Article IV of the AT accommodates the interests for claimant and non-claimant countries by setting aside the resolution of sovereignty (Bray, 2016).

³⁰ There are over a dozen stations from seven other countries besides Australia within the AAT.

ensure that Australia remains ‘. . . vigilant about [any] changes in norms and modes of operation’ in Antarctica” (in The Parliament of the Commonwealth of Australia, 2018, pp. 23-24). Press does not expand to comment on which countries can be classified as “like-minded”, but presumably he refers to Antarctic claimant countries, which are now a minority in an expanding ATS. The changes alluded to in the above quotation refer to the consensus-based decision-making process within the ATS, which will become open for modification in 2048 (Mancilla, 2018).

As Bray (2016) argues, the ATS has been successful in protecting Antarctica and serving Australia’s (and other claimant countries) Antarctic interests for over half a century. Modifications to the system will inevitably affect the status quo, and will only perpetuate Australia’s *need* for being in control of its Antarctic territory, or its risk of losing it all. Finally, discussions on climate change and its impact on Antarctica and Australia lead the country’s science strategy. This is Australia’s contradictory argument, as indicated in the latest report from The Australian Institute, an independent public policy think-tank. The number of Australians concerned with the impacts of climate change and demanding government action is on the rise, while at the same time the country’s emissions have grown steadily since 2013 (Bennett, 2018, p. 3). The Morrison administration maintains that Australia will meet its international accorded agreements to reduce carbon emissions, while Australia “. . . plans to double its thermal coal exports over the next decade” (Bennett, 2018, p. 3). Clearly, Australia is not alone in deciding its carbon policies for the near future; Antarctic leadership will be demonstrated by those who act accordingly and in a timely manner.

4.2.5 Chile in Antarctica

Chile invokes colonial literature as inspiration for its connection to and legacy of commitment in Antarctica. Supposedly, the 16th century rhymes of *La Araucana* inspired the fathers of the nation and many generations of Chileans to build their Antarctic consciousness, centuries before Chile was an independent country (Berguño, 1998).

Chile’s first Antarctic expedition occurred a decade before the IGY. By the 1990s, Chile had spread its Antarctic footprint to its current size with a strong military presence in keeping with the country’s military regime. Although the government is generating incentives to boost the profile of Antarctic science programmes in Chile, and the international science community welcomes the collaboration of Chilean peers, the domestic political establishment is ambivalent about the value of scientific research for a claimant country. Leon Wöppke argues that Chile’s Antarctic science contribution has been modest but inventive with the available resources, and is better recognized outside Chile. “Chileans find it difficult to appreciate the corollary [. . .] between scientific activities and the defence of their Antarctic rights. They still

believe that the nation's permanent occupation provides one of the strongest bases for its rights" (2009, p. 163).

Chile's strong presence in Antarctica is supported by nine bases, dotted along the coastline of its territorial claim (COMNAP, 2017). Of these facilities, Frei, O'Higgins, Prat, and Escudero operate year-round, providing a total of 300 beds to accommodate base personnel and scientists (COMNAP, 2017). Escudero is the only base fully set up for scientific research; the other stations offer an assortment of basic laboratory facilities. Defence maintains Chile's Antarctic transport capabilities: the air force manages the air-link between Punta Arenas and Antarctica year-round, while the navy operates the cargo ship *AP41 Aquiles* and the icebreaker *AP46 Viel*. The latter will be decommissioned in late 2020 and replaced by a new Chilean-built icebreaker (INACH, 2018).

A complex and top-heavy system runs Chile's Antarctica programme. The Chilean National Antarctic Institute (INACH) is the country's NAP and is responsible for the coordination and planning of the science programme. INACH is a technical agency of the Ministry of Foreign Affairs, which is responsible for Chile's Antarctic diplomatic representation and policy (INACH, 2018). The latter houses the Antarctic Division, which oversees the functioning of the Antarctic Policy Council (APC), a consultative body to determine the policy and the economic and scientific actions within the CAT, including the setting of the national budget for Antarctica (Gorostegui & Waghorn, 2012). The APC is composed of representatives of the ministries of defence, finance, economy, development and tourism, and environment, and the Chief of Armed Forces (Ministerio de Relaciones Exteriores, 2017). Similarly, each armed force has an Antarctic unit within their organization to manage the polar presence; each military force operates at least one Antarctic base, provides logistics for the science programmes, and participates in SAR missions.

Chile's National Antarctic Policy was created in 1956 and was recently updated to follow changes in the country's aspirations and global environmental challenges (Ferrada Walker, 2017). The first objective of this policy has not changed since its inception: "To protect Chile's sovereign right over the Antarctic Chilean Territory. To defend and promote the national interests in the Antarctic Continent" (Ministerio de Relaciones Exteriores, 2017, p. 3). However, the 2017 policy update has a stronger emphasis on the protection of the Antarctic environment than its past iterations had. Antarctic environmental protection is seen as beneficial to Antarctica and an obligation as an Antarctic party, but also is seen necessary to safeguard Chile's interests and economic advantages from its polar connection. To promote Chile's leadership and influence within the ATS, scientific excellence is identified as the conduit for success. This is the most significant change in the policy, and it demonstrates a

new mind-set in the political thinking of Chile in Antarctica. This line of thinking was followed by the creation of Chile's Ministry of Science and Technology in 2018.

Chile assigns great value to participating in the ATS, demonstrated in the large delegation that represents the country at ATCMs (Wehrmann, 2019), and sees itself as an influential South American partner without challenging its territorial aspirations. Antarctic leadership will enable Chile to further develop the Magallanes region as the centre for polar logistics and research (at a national and international level), and to grow economic activities in Antarctica (e.g. bioprospecting, fishing and tourism). The 2017 Antarctic national policy is the result of Chile's strategic plan document that advises the government on the focus for the next two decades. The *Chile en la Antártica, Visión Estratégica al 2035* document identifies the country's advantages and weaknesses as an Antarctic actor. It proposes that to maintain and strengthen Chile's rights in Antarctica it is critical to invest in and support a robust long-term science programme, to secure knowledge in Antarctic matters that remains in the country and that is promoted to its citizens (Dirección de Antártica, 2015, p. 46). Base Union is seasonally operated by Chile's Air Force (FACH); its year-round functionality would allow Chile to access inland Antarctica and offer a stronger transport access to its Antarctic partners. Furthermore, the development of Base Union, on Union Glacier, Ellsworth Mountains, is identified in this strategy as *fundamental* to advance Chile's leadership in Antarctica (Dirección de Antártica, 2015). The Antarctic strategy plan contains a thorough analysis of Chile's history and capabilities in Antarctica; yet, parochial discourse on Antarctic sovereign rights has a strong presence in the document. It seems sovereignty speech is required to satisfy the domestic powers and the public.

Despite its long-standing presence in Antarctica, Chile did not have priorities for its science programme until the 2000s. Since then, INACH has worked to shape and influence the science priorities and funding to achieve excellence and international cooperation. The international science community has recognized these efforts and supports Chilean scientists through training and shared logistic support, manifested in the growth of research proposals in the last decade (INACH, n.d.). Yet, Chile faces uphill challenges to put Antarctic science on top of the political agenda. Chile is a SCAR member under the "initial-stage programme"³¹ membership, and this reflects the level of national science funding. Moreover, the Chilean public has the perception that science must respond to immediate solutions to societal problems and needs, creating practical applications to benefit the people and country, and often confusing scientific knowledge with technology (Comisión Nacional de Investigación Científica y Tecnológica,

³¹ *Initial-stage programmes*: programmes from countries that are still growing their science programmes and developing resources for sustained activities. The next level up is *well-developed programme* (Scientific Committee on Antarctic Research, 2017).

2016). In addition, Antarctic science in Chile does not have the political high profile that other Antarctic actors do, such as those who *live* in Chilean Antarctica. In June 2018, a fire destroyed large installations of Frei station on King George Island (Antarctica), particularly affecting the premises of the national maritime government post “Gobernación Marítima de la Antártica” (La Prensa Austral, 2018b). No lives were lost, but damage to the buildings was substantial, which made the headlines of the country’s most prominent news outlets. The incident revealed the inadequacy and age of the premises, and the decades of negligence in maintenance of the infrastructure (La Prensa Austral, 2018b). It caused a national uproar, from politicians to the public, and a blow to the national pride. Politicians used the news to accuse political adversaries of negligence, while the public felt Chile was losing presence in Antarctica. Once again, fear, a sense of insecurity, and a *need* to protect Chile’s rights dominated the discourse. As contradictory as it seems, Antarctica is not a national priority, but maintaining sovereign rights and a presence in the pretended territory continues to be in Chile’s national interests.

4.3 Concluding words

Humans have been drawn to the idea of Antarctica for centuries, but the conceptualization of the place has changed through time. Explorations helped with the geographic knowledge of the polar region that transformed it from a vast frozen wasteland into a treasure trove for marine resources. Geopolitical thinking of the 20th century continues to influence the way we perceive Antarctica today.

Once understood as *terra australis incognita* (the unknown land that was waiting to be discovered at the south), later it was classified as *terra nullius*: land not belonging to anyone (yet). The signing of the AT during times of extreme global tensions from the Cold War placed Antarctica in the public sphere, in what I denominate *terra protecta*, a place not to be concerned about as it lay protected in its natural frozen state. This perception supports Hemmings’ (2017) argument on the rudimentary understanding of Antarctic politics in the public domain. In the last three decades, science has gathered robust evidence to demonstrate that global climatic changes affect Antarctica, and the predictions indicate dramatic future scenarios for the polar regions. This reshaping of the understanding of Antarctica is what O’Reilly refers to as *terra clima* (2013). Despite these new paradigms, no substantial changes have been made to the ATS regime to adapt to the new challenges (e.g. climate change, increased human activities, pressure over access to the resources, national security), and scholars are questioning the resilience of the system and of Antarctica in the near future (Chown et al., 2012; Dodds, 2019; Rintoul et al., 2018).

Public generalized confusion over the politics of Antarctica is fostered by claimant countries’ national policies. The persistence of the need for presence in the Antarctic to defend national

interests (and territorial assertions) is misinterpreted at home as a precautionary effort to be ready when Antarctica becomes *available*. Public generalized understanding that the territorial claims in Antarctica are “frozen”, and, therefore, free of conflict and politics, is supported by all member countries in the ATS, claimants and non-claimants. The former can justify their political and economic investments in Antarctica; the latter disregard the claims as non-existent. Wrongfully, key dates circulate in the public realm as expiration dates for the AT, such as 2048, but no Antarctic claimant country benefits from framing the Treaty as a timeless document. The understanding of the perpetuity of the AT neglects Antarctic national efforts in infrastructure, logistics, and science. It seems that the bifocalism approach adopted regarding the ruling of Article IV of the AT supports this purpose too.

The gateway states are active contributors to the ATS, and they have been at times instrumental in supporting the environmental protection of the polar region. Their status as five of the 12 original states that established the AT have placed them in a position of authority over the newcomers to the system. New Zealand, Australia, Chile, and Argentina have similar interests in Antarctica; the dominant reason continues to be supporting their sovereignty claims and access to the Southern Ocean. For South Africa, the only non-claimant of this troupe, access to the Southern Ocean through its sub-Antarctic possessions and its Antarctic scientific-logistic participation is vital for the regeneration of the country’s economy.

In essence, all have common ambitions of leadership in science and environmental protection, which are interpreted as enablers of control over resources in the Southern Ocean and power over competing Antarctic operators. These Antarctic ambitions are not simple to execute; Antarctic infrastructures and science programmes are expensive and operate in harsh environments. However, states seem to legitimize these efforts by articulating policies and programmes that appeal to the national consciousness, incorporating Antarctica in the history and customs of the country. State-legitimising Antarctic nationalism will be analysed in the chapter that follows.

5 Nationalism in Antarctica

Antarctica is frequently portrayed as an extraordinary place, like no other in the world that requires our attention for the protection of its remarkable environments. Without a native population to call this place “home” or gather under the concept of “nation”, Antarctica offers a *tabula rasa* for countries to project their culture, scientific knowledge, management, and political ambitions. Antarctica’s characteristics appeal to polar geopolitics: an exceptional and fragile place requires an equally exceptional guardian. To that end, Antarctic political agendas are constructed in the interest of each signatory party, and are conceived as integral to the completeness of the country. In other words, we see in Antarctica what we see elsewhere in the international domain: states seeking to maximise what is generally termed *national interest*. All states, at all times, sensibly attend to their national interest. But at the extreme, national interest may shift into (or be entirely co-opted to) something else.

In Antarctica, national interests are given effect by foreign ministries, central government and NAPs: their policies, strategies, the science they support, and even the customs and traditions that people working under this umbrella (even scientists) bring to Antarctica all convey elements of the nation. For instance, historical events where a heroic act or actor represented the nation are brought to the fore to make sense of the present and of the significance (and rights) of being in Antarctica. Moreover, Antarctic science programmes convey leadership, national prestige, and the *needs* of the nation to be a frontrunner on scientific knowledge before *others* take that place. As Hemmings remarks, “to this day, ‘our’ science is always exemplary, essential and ‘leading’, it offers our state the most coveted public policy attribute, ‘leadership’” (2017, p. 507). The overall interest is protecting Antarctica, mostly from the actions and ambitions of *others* (and not from *our* ambitions) (Hemmings, 2017). If the hegemon interests shift, Antarctica becomes a site of old and new political rivalries; it provokes anxieties and critical reviews at home for the fear of losing the leadership position to *others*. The above-mentioned are representations of Antarctic nationalism. Nationalism is present in Antarctica, and it continues to drive Antarctic engagement in and outside the political boundaries set by the ATS.

I referred to the principles of nationalism and its *banal* form in Chapter 3. The nation is at the core of all interests; it is the source of political legitimacy and comradeship. Nationalism has an insatiable desire for securing power and prestige for the nation. It reminds its compatriots of the glorious past and the sacrifices of others to accomplish grandeur for the nation; it recreates national identity by reconstructing memories of traditions and values that make the nation unique and worth protecting (even fighting - and dying - for). For Closs Stephens, nationalism is also “a tool for the State to discriminate between ‘insiders’ and ‘outsiders’”

(2013, p. 1). Finally, the nation does not only live in institutions but in individuals and social groups, which foster and forge continual interactions to perpetuate the national (imagined) space.

Nationalism in Antarctica is not a modern occurrence. Nationalism was visible during the voyages of exploration in the 19th century, many organized as national expeditions to fulfil the nation's needs for knowledge. During the Heroic Era, "European nationalism bloomed" (Roberts, 2017, p. 318), and Antarctic expeditions carried the nation's sentiment to attain something before others did (e.g. the South Pole). Nationalism certainly fuelled the mobilization of countries in Antarctica before the IGY, particularly the claimant countries. Antarctica was interpreted as a contested place and national rivalries escalated to incidents of aggression over the presence of the *other* in the pretended sovereign space. The scholarly literature is abundant on this particular period. For instance, Howkins dedicated much of his work to analysing the hostile relationships between Argentina, Chile, and the UK, and the politics at play before the signing of the AT (2006, 2008). Dodds remarks on how New Zealand's participation in the British-Commonwealth 1955-58 Trans-Antarctic Expedition was fundamental to consolidating the Ross Dependency claim, but, more significantly, in putting Antarctica on the map and in the minds of New Zealanders (Dodds, 2005). Van der Watt and Swart questioned the narrow-minded nationalistic views of South Africa as an Antarctic nation during the first half of the 20th century, which had led to the country's lesser participation in territorial attainment (2015).

Antarctic nationalism did not wane with the implementation of the ATS. In effect, these two coexist because of Article IV's deferral of the issue of territorial claims. For Abdel-Motaal (2016), the veneer of cooperation set by the AT only disguised more-aggressive nationalism among the Treaty parties (2016). Countries continue to employ and display multiple expressions of nationalism at home to satisfy the state's national interests in the South. It is important to distinguish that nationalism in Antarctica is not manifested in the horrific forms of violence, populism, and ethnic discrimination that have risen elsewhere in recent decades. Instead, Antarctic nationalism is disguised under diplomatic discourse; scholars agree there is plenty of evidence of states' nationalistic manifestations of power and polar presence. Some refer to these as "inflamed Antarctic nationalisms" (Dodds, 2016, p. 16); others see that ". . . a more muscular nationalism has been able to flourish in Antarctica", manifested in various levels of domestic discourse among the political elite, and in a mediated form consumed by nationals (Hemmings, Chaturvedi, Leane, Liggett, & Salazar, 2015, p. 531). Moreover, Dodds employs the term *awkward Antarctic nationalism* (2016, p. 16), referring to complex and somewhat uncomfortable moments where expressions of nationalism are used to manage national expectations over the perceptions of threats to the country's Antarctic ambitions.

For nationalism to thrive, it requires *something* to be nationalistic about (i.e. presence and leadership in Antarctica, or Antarctic territorial assertions). Also, having *knowledge* of the place is essential (i.e. expertise in science and logistics); the place needs to have or show prospects of *benefits* that will be of *national relevance* (i.e. fishing, bioprospecting), and the presence of *others* in the place is interpreted as contenders seeking to access the same resources (Hemmings et al., 2015). For instance, political commentators and the media alert the nation to the others' intentions, employing rhetoric that grows suspicion towards foreign intentions in Antarctica and the implications of *their* actions against *ours*; this rhetoric is at the heart of nationalism. Also, implicit labelling of *new* countries to the ATS against the *old* countries, those that hold the prestige of being *the originals* to the regime, also feeds nationalism. In this context, scholarly attention has been focused on the Antarctic national interests of Asian countries, particularly the rise of China, a powerful Treaty member that invests heavily in infrastructure and polar logistics. China, just like Korea, India, and Malaysia, is not shy about its polar agendas for hegemony, says Brady (2013b). However, this flexing of Chinese geopolitical muscles worries others, such as Australia, which feels challenged to keep pace with the growth of competitors or become inconsequential. Australia's vulnerability is exposed in the territorial nationalistic rhetoric used to emphasize defence of its Antarctic claim and the potential risks to home security (Dodds, 2016). Australia is not alone in this geopolitical thinking towards other non-Western countries; during the Cold War, the USSR played the part of challenger with its presence in Antarctica. During pre-signing negotiations of the AT, it was considered strategically safer for all parties involved to include the USSR in the Antarctic agreements than exclude it. Today, China appears to represent the same threat to the West that the USSR did in the 1950s. This aspect of nationalism has been the focus of the concept *polar orientalism*,³² employed to remark on the growing rhetoric regarding the rise of other (non-Western) countries in Antarctica, and the potential threats that represents to the status quo (Dodds & Hemmings, 2013, p. 1430).

Nationalism stimulates national rhetoric that resonates with people from the nation (Billig, 1995). Geopolitical imaginations of the power and position of the nation contrasted with that of others are represented in expressions of banal and everyday nationalism (Jones & Merriman, 2009). The influence of geographic knowledge, state-led education, public media, technology, and digital communication cannot be underestimated when studying the impact of nationalism in cultural narratives, as these reshape identities across physical and imagined borders (Benwell, 2017; Dodds, 2016).

³² *Orientalism* refers to the scholarly corpus originating from Edward Said's seminal work, where he argues that orientalism is a Western construct created to dominate and have authority over the Orient (East), employing exaggerated and distorted representations of the Oriental world (Said, 1979).

5.1 Embedding Antarctic geopolitics within national identities

Geopolitical representations of Antarctica are reproduced in everyday life in the five countries studied in this work. These representations create connections between the polar region and the *nation*. Although Antarctica has attracted the imagination of mankind for centuries and has been imagined, reproduced, visualized, and represented to be considered “the Most Mediated Place on Earth” (Glasberg, 2012, p. xix), it poses a challenge to be significantly represented in a way that ensures it is remembered and integrated into the values of the nation. It is a politically contested space but also has a geographical isolation that creates physical separation from the territory of the state. Even more, it has the peculiarity of not having an indigenous population that can call this place “home”, notwithstanding the strong arguments put forward by South American claimant countries invoking geographic continuity to their national territories and their attempts to establish permanent communities in modern Antarctica. In the process of Antarctic meaning and place-making, governments employ multiple cultural forms, such as language, images, symbols, sounds, art, etc., to frame Antarctica as extraordinary, and to support and sustain this geographical imaginary. Imaginative geographies of spaces with geopolitical significance, such as Antarctica, have implications for their governance, and they influence those involved with it (i.e. diplomats, scientists, logistic operators, etc.) (Powell & Dodds, 2014).

Geopolitical imaginaries are conceived in the nation largely as national narratives, which are perpetuated in the culture of the nation. Banal and everyday reproductions of nationalism require a multiplicity of actors to consume and reproduce these forms, from regional politics to popular culture discourse. These geopolitical imaginaries resonate with the actors, who select, appropriate, and reformat the narratives to best suit their reproduction. Nationalism thrives in subtle messages of mundane life, seen as innocuous by some commentators but nevertheless represented, reproduced, and understood by the members of the nation (Billig, 1995; Jones & Merriman, 2009).

This section is concerned with the practices of everyday geopolitical representations of Antarctica, reproduced and consumed by the citizens of South Africa, New Zealand, Australia, Chile, and Argentina. I draw on concepts of nationalism (banal and everyday practices) that I referred to in Chapter 3, and on the scholarly literature on Antarctic territorial nationalism (Benwell, 2017; Child, 2005; Dodds, 2011; Dodds, 2016; Hemmings et al., 2015). My intention here is to add to and not to replicate the expressions of nationalism that others have remarked on before. This section attempts to contribute to the understanding of how Antarctic

nationalism is performed in mundane life and how it contributes, or not, to the construction of national identities in the countries on which this study is focused. The representations collated here were collected throughout the period of this research; these were selected to provide information on the cultural background of this research's participants.

I have organized these representations of Antarctic nationalism under subtitles, guided by the list of preliminary bases on which Antarctic nationalism might be manifested, as compiled by Hemmings et al. (2015, p. 538). The categories selected are not exhaustive representations of nationalism, but they are illustrative examples of the material available in the public realm. I argue these constitute representations of banal and everyday nationalism that nationals from the Antarctic gateway states consume and reproduce in the mundane life.

5.1.1 Territorial sovereignty in Antarctica through maps and education

Maps are important visual instruments to depict the extent and borders of a state's territory; they can illustrate new political geographies and territorial expansion, and they can trace back geopolitical goals. Also, maps define political boundaries with neighbouring countries, or they can obscure the other's presence. Cartography is employed in public education systems to recreate an image of the nation, its borders, and regional hegemony, while becoming practical tools for the unification of its nationals (Flint, 2016). For Dodds (2011), maps are political provocations of sovereignty performance, and in the Antarctic context they support the modern colonization of Antarctica.

Argentina and Chile are commonly considered "the most hawkish" (Dodds, 1997, p. xii) countries in defending their alleged sovereign rights in Antarctica, and their nationalistic views extend to the use of cartography and naming of their Antarctic territory (Benwell, 2017; Dodds, 1993, 1997; Elzinga, 2013). It is important to note that Dodds and Hemmings have also remarked that Australia is on "the vanguard of Antarctic nationalism right now" (2009, p. 529).

Since its development years, Argentina has employed nationalistic policies through the public education system for the formation of the national identity. State-led education programmes facilitate the dissemination of geopolitical thinking in Argentina, through the instruction of geographical knowledge and tradition embedded with a sense of patriotism (Escolar, Quintero Palacios, & Reboratti, 1994). Geopolitical influence has characterized the formation of a national identity in Argentina. Regarding Antarctic territorial nationalism, Argentina has been referring to the Antarctic claimed area as "Antártida Argentina" since the 1940s, and it enacted national legislation incorporating the Antarctic territory into the official map of the country. Antártida Argentina's triangular shape was symbolised as an insert box in the national cartography until 2010, when legislation reshaped the official map of Argentina, now known as

“Argentina Bicontinental” (Figure 5.1) (Congreso General de la Nacion Argentina, 2010). Currently, the use of the bicontinental map is compulsory in schools, and the map has to be prominently displayed in all governmental organizations (Instituto Geografico Nacional, 2010). The rationale for this legislation is to represent the whole country on the same map scale, showing “the Antarctic sector in its real proportion in relation to the continental and insular sectors” (Congreso General de la Nacion Argentina, 2010, Ley 26651/2010, art. 1). Curiously, the proponent of the bill was the Congress representative of the province of Tierra del Fuego, Antarctica and the South Atlantic Islands (TdF), who revived an old proposal created in the early 1990s by retired military officers with Antarctic interests. The motivation for this project was to enhance the size of Argentina with the inclusion of the Antarctic sector, lengthening the imaginary of a country that had suffered recent territorial losses (i.e. through the Malvinas/Falklands conflict), which extended from the sub-tropics to the South Pole. Coincidentally, the bicontinental map places TdF at the centre of Argentina (instead of at the far south as it was before), and, notably, TdF is represented as the largest provincial territory of the country since it encompasses the (claimed) South Atlantic islands and *Antártida Argentina*. The bicontinental map is of geopolitical importance for Argentina, visually representing a large (imagined) country that assumes its territorial ambitions as real assertions, and, therefore, with rights to sovereignty. This geopolitical thinking was expressed by the director of Argentina’s National Geographic Institute (IGN)³³ in an interview on a nationwide popular radio station. During the interview, the discussion centred on the realistic representation of Argentina’s territory in the new map. Mr Cimbraro’s reply was:

. . . the (Antarctic) Treaty will open at some point, and evaluations will be made on each nation that signed it and what they did in terms of effective occupation and sovereignty [. . .] that is why I see it is correct to continue with our defence of sovereignty . . . [I]f the government discourse elsewhere is to claim the totality of its national territory, we have the obligation to represent it as such . . . (Radio Mitre, 2015)

Mr Cimbraro’s nationalistic views have correlations with scholarly studies on Argentina’s education system. Scholars agree that, since the 1930s, Argentina’s state and compulsory education programmes have been designed to assist with the construction of a national identity, based on the principles of defending the *patria* to maintain national security and order. Thus, any potential territorial loss is a threat to the unity of the nation and must be acted upon (Garcia, 2009; Jaramillo, 2012). In addition, state-led education resources introduce *Antártida Argentina* to the student as a peaceful place, free of conflict. The presence of the Argentine

³³ IGN is Argentina’s government agency responsible for creating and printing the official maps of the country.

military in Antarctica maintains peace; the military hoist the national flag, take care of the place, live and work in a harsh environment, and defend it; these are cultural imaginaries imposed by the Junta regimes of the 1950s to 1980s (Jaramillo, 2012). In the cultural imaginaries of Argentina, Antarctica requires defence to maintain the peaceful order, providing justification for the military presence in the South (Jaramillo, 2012). A strong sense of historical territorial losses is embedded in Argentina's territorial nationalistic thinking; the nation has suffered from the territorial ambitions of *others* and must be protected (Escudé, 1988). In schools, *Antártida Argentina* is studied as a separate unit from the Antarctic continent, which is seldom represented in its totality; the most popular image of Antarctica is the triangular shape of the Antarctic Peninsula that is disputed with the UK and Chile. Argentina's involvement in the ATS is associated with the perception that the country is a polar leader, whose participation in the Antarctic international regime does not mean *renouncing* its territorial rights (Jaramillo, 2012).

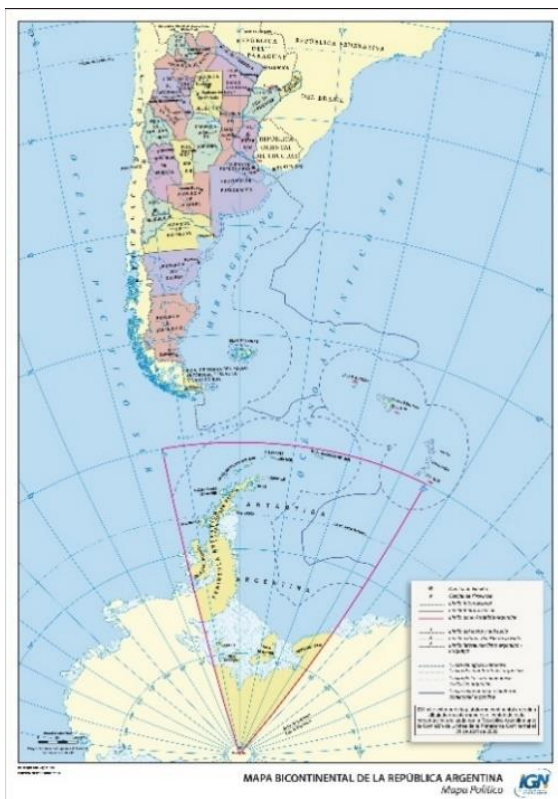


Figure 5.1: Mapa Bicontinental de la Republica Argentina: Mapa Político (Instituto Geográfico Nacional, 2010)

Moreover, other countries employ official maps to represent their Antarctic territorial claims. For instance, the official map of the Republic of Chile (Figure 5.2) incorporates the Antarctic claim since 1954, instructed by Law 432 (Biblioteca del Congreso Nacional de Chile, 2017a). However, the boundary outlines of a long and thin country such as Chile create a challenge to show the extension of its territory and projection to Antarctica for geopolitical purposes, and to obscure neighbouring countries with competing ambitions.

Other Antarctic cartographic additions created with geopolitical purposes are azimuthal projection maps employed between the 1950s and 1980s by Chile (Figure 5.3), Argentina (Figure 5.4), and Australia (Figure 5.5). In the azimuthal equidistant projection, all points on the map are at proportionally correct distances from the centre point. Azimuthal maps allow placing a specific geographic location (e.g. Australia) in the centre of the map, projecting Antarctica immediately south as the focal point for the viewer, while the shape of nearby landmasses (and competing claimant countries) becomes distorted and somewhat unrecognizable. For claimant countries, these maps demonstrated proximity to, and the extent of, their Antarctic territories in relation to the mainland. Although azimuthal maps are not frequently in use, the examples illustrated below are still available in public spaces. The maps in Figures 5.3, 5.4, and 5.5 were found in the Antarctic or geography literature sections of public libraries in Punta Arenas (Chile), Buenos Aires (Argentina), and Hobart (Australia), respectively.

5.1.2 Relative proximity of Antarctica to one's metropolitan territory

One of Argentina and Chile's bases for asserting Antarctic territorial claims is the relative proximity of their territories to Antarctica. To demonstrate administrative control of the claimed area, Argentina and Chile incorporated the polar region into the national legislative and political systems, connecting Antarctica to their southern metropolitan areas. For instance, Argentina's southern state is TdF, the Argentine province with the largest land surface, totalling an area of 1,002,445 km², including the South Atlantic territories and *Antártida Argentina* (Aguero, Danza, Martinioni, & Fernandez, 2002). Similarly, in Chile, the Magellan and Chilean Antarctica Region (Region of Magallanes y Antártica Chilena), is the largest administrative state in that country, extending over 132,000 km² between continental Chile and the archipelago of Tierra del Fuego (Biblioteca del Congreso Nacional de Chile, 2017b). The Region also incorporates Chile's Antarctic territorial claim, adding another 1,250,000 km² of surface area to Magallanes, which represents nearly 69% of the total extension of this long and narrow country (Biblioteca del Congreso Nacional de Chile, 2017b). The citizens of these southern regions are reminded every day of the Antarctic annexation to their territories, as local governments proudly exhibit the Antarctic name of the provincial state in government buildings, official stationery, coats of arms, plaques, speeches, and even tax bills. The official incorporation of the Antarctic territory into these southern provinces of Argentina and Chile has increased their profile within the nation; no longer are these forgotten, dead-end border towns.

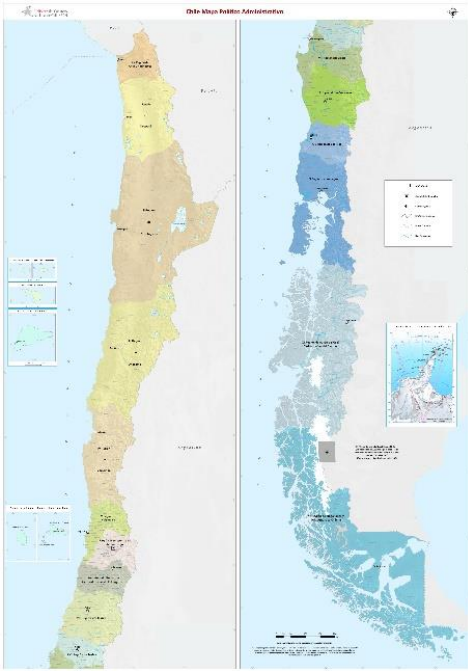


Figure 5.2: Mapa de la Republica de Chile (Biblioteca del Congreso Nacional de Chile, 2017a)

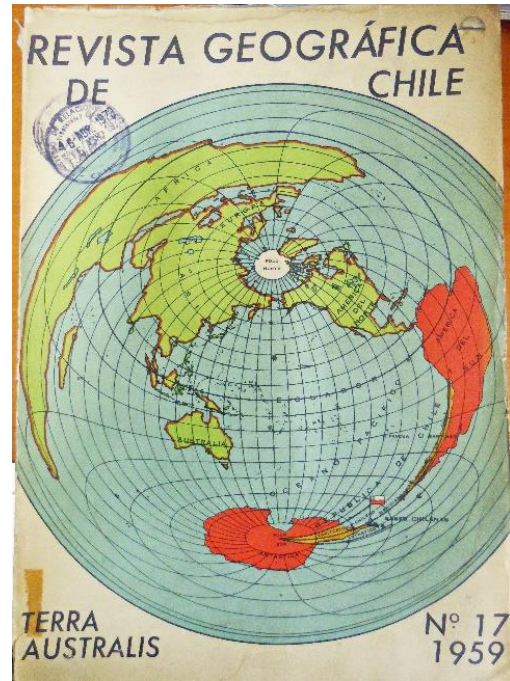


Figure 5.3: Revista Geográfica de Chile (Comite Nacional de Geografia, 1959)

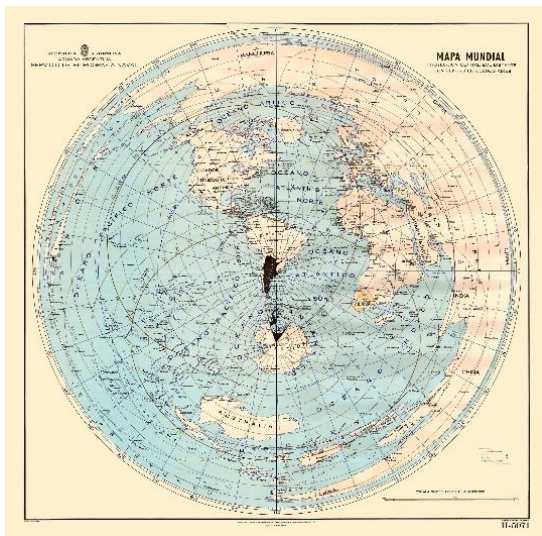


Figure 5.4: Mapa Mundial (Instituto Geografico Militar (Cartographer), 1975)

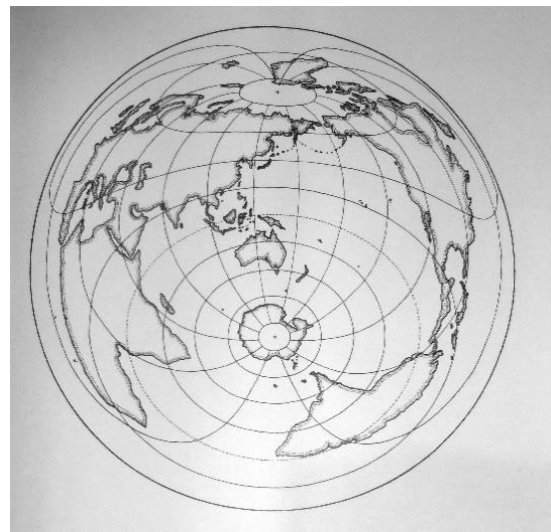


Figure 5.5: Australia and the Antarctic (Bechervaise, 1978)

The role of the gateway cities in the mobilization of Antarctic actors also denotes a geographic closeness between the two territories; the relative proximity provides arguments for constructing narratives of geopolitical tensions and anxieties over competing entryways, and reconstructing mythical imaginaries of connections with the places that lie beyond. Guyot sees these cities “as the main bridgehead place of the conquest frontier”; these cities have a role in consolidating and legitimizing the polar claims (2013, p. 11). For instance, gateway cities that reap the benefits of Antarctic commercial activities, such as tourism, often inform their citizens about the estimated percentage of the passengers and ships involved in Antarctic tourism that have travelled from their shores. The people living in Ushuaia are frequently reminded that their city is the gateway to Antarctica, demonstrated by their status as the busiest entry/exit point for Antarctic travellers. However, seldom is there mention of which are the other entryways, or of the circumstances that allowed this industry to develop from their front door. Obscuring the existence of other gateway cities used in Antarctic tourism has one exception in Argentina: the Malvinas. It often occurs that Antarctic tourism voyages also include the Falklands as an entry/exit point in combination with Ushuaia for logistic purposes. The TdF government collates the information on these voyages as a commercial activity happening within its borders, exercising its pretended administrative control over the South Atlantic and Antarctica area. The Malvinas is not perceived as a competitor but as an integral part of the offer of support to Antarctic travels that happens from TdF (InFueTur, 2016). Moreover, the preeminent position of Ushuaia within the universe of gateway cities reinforces regional pride. Expressions such as *world’s closest* to the Antarctic and *world’s busiest Antarctic gateway* (InFueTur, 2016, p. 5; 31) are consumed and reproduced by locals, and are seen as *their* contribution to Argentina’s Antarctic leadership role.

Competition between Antarctic gateway cities seems to be a national matter, and any comparison with competitor gateways warrants further explanation. For instance, the Tasmanian media announced a new research project focusing on three Antarctic gateways, including Hobart, attempting to analyse the city’s Antarctic connectivity and sustainability profile. The news article reporting the launch focused on comparisons of Hobart with the *other* cities, rather than the research aims. The article headline “How does Hobart fare in battle to be ‘gateway to Antarctica?’” is highly subjective and employs nationalism and alleged conflict to attract attention (Fantin, 2017). The news piece was filled with statements that reaffirmed Hobart’s leadership as *the* Antarctic gateway, but it also included warnings to the local audience of the competition that lurks nearby. For instance, interviewees were asked, “Is Hobart really the best gateway?” and, “How do the others compare?” (Fantin, 2017), which were matters not central to the proposed research project allegedly reported in this news article. The media framed the anxieties of competition and comparisons with other gateways in a search for an affirmation of the preeminent status of Hobart. These expressions of soft

nationalism are consumed and performed by nationals, supporting the construction and reproduction of differences between *us* and *them* that validates national efforts and nurtures national pride.

5.1.3 Historic and institutional associations with Antarctica

It appears that Antarctic states consider it imperative to feature historical associations with Antarctica when the opportunity arises; polar heroes are remembered in public speeches, literature, arts, education programmes, and even national currency. Reviving the memories of the heroic past seems to give a sense of authenticity to the polar connection. Moreover, a home-grown polar explorer is celebrated as a national treasure. For instance, besides in museum pieces and sculptures in public spaces, Mawson's Antarctic expeditions were remembered in Australia's largest banknote, used as legal tender from 1984 to 1992 (Reserve Bank of Australia, 2016). Mawson, wearing an iconic balaclava (featured in photographic records of the Australian Antarctic expeditions), featured on the one-hundred-dollar banknote, having been selected from among those Australians "who have contributed to the nation" (Reserve Bank of Australia, 2016, p. vi).

In New Zealand, the late Sir Edmund Hillary³⁴ is the national Antarctic hero chosen to be perpetuated in the everyday lives of New Zealanders. Hillary's mountaineering and Antarctic accomplishments have been honoured on the country's five-dollar banknote (Figure 5.6) since 1990, Hillary thereby becoming the only living person (other than Queen Elizabeth II) to be selected for a New Zealand banknote (Reserve Bank of New Zealand Te Putea Matua, 2016). The obverse of the five-dollar banknote exhibited a portrait of Hillary, Aoraki/Mt Cook, and the illustration of one of the farm tractors that was used to reach the South Pole in 1958³⁵ during the Trans-Antarctic Expedition (TAE) (see Figure 5.6, bottom left of the picture). It is important to note that at the completion of the TAE (1958), Hillary and his traverse to the South Pole, which his team reached before the British leader did, were not remembered as fondly as they are today (Thomson, 2010). In New Zealand, Hillary was criticized for the deliberate disregard of the expedition's instructions, from being driven by personal ambition rather than logistic operational matters. Although debate on Hillary's reasoning for his decision-making in Antarctica continues today, his leadership for the support party to the TAE has made possible New Zealand's presence in Antarctica since 1957. The latter accomplishment is a significant milestone in the country's history that is celebrated annually and indirectly in the financial transactions of ordinary New Zealanders. Elements of legal tender with Antarctic associations

³⁴ Hillary led the New Zealand support party for the TAE (1955-58), during which New Zealand's Antarctic base was established.

³⁵ In 2016, the tractor was removed from the updated version of the banknote, to allow for new security features (Reserve Bank of New Zealand Te Putea Matua, 2016).

are part of everyday life for nationals, and a subtle reminder of the nation's history and assets that ought to be celebrated.



Figure 5.6: New Zealand five-dollar banknote

Another understated introduction of Australia's Antarctic historic connections was employed in a controversial but popular promotional video for Meat and Livestock Australia in 2017. The video was released for Australia Day celebrations, a contentious festivity that commemorates the country's colonialist past in detriment to recognition of the rights of Aboriginal peoples. The video portrayed a beach party hosted by famous Australian Aboriginal personalities; their invitees included European characters arriving by ship and hoisting flags from the main colonial powers (i.e. Britain, Dutch, French, etc.), the *neighbours* (i.e. Māori from New Zealand), and groups representing cultural and gender diversity in Australia (Meat and Livestock Australia, 2017). While the guests are arriving, a party host asked, "who is bringing the ice?", followed by black and white footage of a ship trapped in ice and two characters, meant to represent polar explorers, conversing: "how many bags do we need, Douggie?", alluding to Mawson's first name, *Douglas*, with a mischievous nickname (Meat and Livestock Australia, 2017, 1:12 min). When the polar explorers arrive to join the beach party, holding bags of melted ice, they say, "There is no party without ice!" (Meat and Livestock Australia, 2017, 2:02 min). According to the producers, the video promoting lamb products to celebrate a national day had intentions of praising Australia's history, unity, and awareness of cultural and gender sensibilities in the country (Brennan, 2017). Although Aboriginal group advocates deemed the video controversial, it is an entertaining visual tool consumed through popular media; it portrays notable moments that make national identity, in which Antarctica is ascribed to Australia's history.

5.1.4 Social and cultural associations

Art fellowships and community engagement programmes run by NAPs are sophisticated ways to communicate the nation's interests in Antarctica and transmit to the citizenry the relevance

of the country's presence in the polar region. These programmes are highly competitive and costly for the host country to maintain, but the output seems to balance the efforts. For instance, Australia's Arts Fellowship expects from successful applicants that their contribution will "increase Australian and international awareness and appreciation of Antarctica, the sub-Antarctic, and the Australian Antarctic Program, with a focus on communicating within Australia and internationally: the activities of the Australian Antarctic Program" (Australian Antarctic Division, 2018a). Under these directives, artists and their diverse art forms are to illustrate the nation's imagination of the legacy of Australia in Antarctica, depicting sounds, forms, colours, images, movements, and words of the polar world to national audiences.

New Zealand's Community Engagement Programme is an iteration of the Artist and Media in Antarctica Programme, which had its first alumni in 1958 (Antarctica New Zealand, 2018). The new programme was launched in 2014, targeted to attract "applications with new and fresh ideas which aim to capture our target audiences" (Antarctica New Zealand, 2018), referring to New Zealand audiences of 35 years old and younger (Harrowfield, 2017). The Community Engagement Programme has hosted those ranging from television presenters to social media influencing personalities, aiming to capture the imagination of the young generation of New Zealanders. For instance, in 2013, a popular television personality known to New Zealand television audiences for his parenting-advice shows, psychologist Nigel Latta, was a part of the 2013-14 cohort. In Antarctica, Latta filmed a two-part television series titled *On Thin Ice*, for television and online broadcasting channels, funded by the national funding agency NZ On Air (Razor Films (Producer), 2014). On camera, Latta describes his feeling on flying to Antarctica on a US military plane: "I'm in the footsteps of the great pioneers before me, Scott, Shackleton and that Norwegian bloke", alluding to Amundsen in his trademark humorous way (Razor Films (Producer), 2014, 0:19 min). Latta does not reflect on the contradiction of his words: while traveling in a comfortable and fast aircraft he feels he is following the same paths as his polar heroes, who travelled in slow and usually inadequate vessels. The documentary shows a map illustrating Latta's travels: an aeroplane leaving New Zealand and heading south to Antarctica. The only features described on the map are the Ross Sea, the Ross Ice Shelf, and Ross Island, where the only place indicated is New Zealand's Scott Base (Razor Films (Producer), 2014). Latta's arrival to Antarctica is depicted with an image of a New Zealand flag contrasted on the backdrop of Antarctic mountain scenery (1:13 min), and the camera stops for the audience to appreciate the wooden sign that reads "New Zealand, Lat. 77° 51 south, SCOTT BASE" (3:13 min). Latta's documentary is packed with cultural narratives that appeal to New Zealand's audiences, from the remarks on the science *we* are doing and the many adjectives used to describe Antarctic exceptionality that *we* are part of, to the historic remarks on the visit to the TAE hut:

. . . this is where New Zealand presence in the Antarctic really started! . . . [The hut is] very Kiwi, . . . it smells of adventure . . . you can almost, kind of, imagine Sir Ed coming in and brushing off the snow of his boots and putting a cup of tea on . . . (Razor Films (Producer), 2014, part 2, 14:05 - 14:14 min)

Latta's words are compelling and arouse the imagination of his audience; entering the historic hut is compared to accessing a portal to a proud past. These remarks are notable, considering that the TAE hut, like other buildings in Antarctica, has been altered since its original inhabitants were last there. The TAE hut was used for storage and temporary accommodation before being listed as Historic Site #75 under the ATS's Historic Sites and Monuments in Antarctica (Antarctic Treaty Secretariat, 2010b) and undergoing repairs and conservation work. But the historic huts appeal to an era of glory that must be remarked on. Latta's intention is to recall historic events of significance, particularly if these involve one of New Zealand's most recognized heroes, Sir Edmund Hillary. Although the above-mentioned expressions of banal nationalism seem innocent and incidentally included in the documentary, these perpetuate the national understanding of the history of New Zealand in Antarctica and the justification for its icy foothold.

Items of cultural significance displayed in prominent spaces in Antarctica appeal to the national cultural imagination (O'Reilly & Salazar, 2017). The sign with the name of an Antarctic research station often displays the flag or national colours too, a reminder of which nation is behind this endeavour in the remote South. As reported before, New Zealand's Scott Base sign includes the words *New Zealand* and the latitude of the station in Antarctica. In addition, the large sign and wooden carving stand prominent in front of the buildings greeting staff and visitors. The wooden carving is a traditional Māori marker post, a *pouwhenua*, carved by Māori artists from the largest *iwi*³⁶ of New Zealand's South Island. Interestingly, in Māori culture a pouwhenua represents a post marker of ownership, a boundary marker and "post placed in the ground to *mark possession* [emphasis added] of an area or *jurisdiction* [emphasis added] over it" (Moorfield, 2020, my emphasis). The unveiling of the pouwhenua was to mark Scott Base's 56th anniversary in 2013, an event hosted by New Zealand's Prime Minister Key; invitees included Māori leaders and the national media (Mussen, 2013). According to the master carver, this pouwhenua symbolises exploration, adventure, and discovery, which are characteristics shared among Māori and those who travelled to Antarctica; also, it is a celestial navigation mark that represents environmental elements (i.e. wildlife, ice, land) (Te Rūnanga o Ngāi Tahu, 2013). In addition to the pouwhenua, there are two carved panels depicting

³⁶ *iwi*: Māori term for extended kinship or tribe (Moorfield, 2020).

traditional stories of cultural memories: one with crosses and shining stars remembers those who have been to Antarctica and have passed on, and the other panel depicts stories of knowledge and learning, which acknowledges the scientific endeavours undertaken in the South (Te Rūnanga o Ngāi Tahu, 2013). Another detail is that New Zealand's native wood was employed for all wooden carvings, a piece of home away from the homeland. The New Zealand media reported this event extensively, describing the Māori carvings as symbols of the country's biculturalism that was lacking in Antarctica (Mussen, 2013). Also, the media interpreted one panel as symbolizing Māori ancestors interwoven with New Zealanders who had died in Antarctica, emphasising the deaths of 257 people on the 1979 Mt Erebus plane crash in Antarctica (Mahon, 1981; Mussen, 2013). In the latter comment, the media conveys an interpretation of an ancestral ethnic tradition with a fatal accident that occurred in Antarctica in recent history, which many New Zealanders would remember because of the magnitude of the tragedy and the controversy that unfolded after this event. A Royal Commission of Inquiry³⁷ was launched to investigate the accident, which had no survivors and left a whole nation mourning and confused (Mahon, 1981). The reference to the Antarctic air tragedy is meant to appeal to the emotions of New Zealanders who may not feel sympathetic to Māori culture but would be compelled by a tragedy that affected the nation. Another aspect of this event that appeared to be a celebration of a nation's biculturalism was later revealed as a political act. During the event, Prime Minister Key said:

. . . Scott Base has a place in the hearts and minds of New Zealanders even if they haven't visited here. Māori culture is enshrined in who we are as New Zealanders and to have this representation here is a lovely touch . . ." (Mussen, 2013)

Key's words to the media were carefully chosen. In a special place for the nation (Scott Base), there is inclusion of the cultures that *make* New Zealanders. Here, Key was attempting to settle the resentment for the recent enactment of the controversial foreshore and seabed legislation³⁸ that is interpreted as undermining Māori rights in coastal areas (Orange, 2013). Moreover, Key's political detractors had criticized his focus on international trade agreements and campaigns profiling the country to foreign audiences (i.e. tourism, entertainment industry) instead of tackling New Zealand's inequalities, such as in public health and income, which affected a large Māori population (Espiner, 2012). However, these criticisms do not seem to

³⁷ The investigation on the DC10 air crash in Antarctica placed the responsibility of the accident on Air New Zealand's reprogramming systems (Mahon, 1981). Mahon's (1981) report was challenged and conspiracies onto who was to blame ensued for decades. In 2019, the New Zealand government apologized to the families of the victims and recognized their wrongdoing in concealing information on the truth about the air crash (Department of the Prime Minister and Cabinet, 2019)

³⁸ Marine and Coastal Area (Takutai Moana) Act, New Zealand (Ministry of Justice, 2017)

reach Antarctica, which has been framed (and frequently imagined), as a place for national unity and not for discord.

5.1.5 Demonstrations of regional hegemony

Antarctic claimant states often perform acts of territorial nationalism to demonstrate leadership and control over the region. The modern colonization of Antarctica has moved beyond flag-waving acts to protect the pretended sovereignty: nationalism is performed through creative practices and enabled by the advance of technology. In addition, regional hegemony over Antarctica and the Southern Ocean is valued, protected, and defended by national actors.

A creative practice of territorial nationalism is Radio Antártida. Public broadcasting connects large audiences and shortens geographical (and imagined) distances within the Argentine nation. National radio broadcasting is a popular channel to spread national culture and to share artistic expressions and political ideas that construct and maintain an identification with a nation. As governments frequently provide funding for public broadcasting, it becomes a platform for political discourse to a wider audience that may, or may not, be located within the borders of the nation-state. Before the advent of digital and satellite communications in Antarctica, radio communications were critical for the travel and safety of people on the continent. In 1979, Argentina set up a different kind of radio station at Esperanza base (Hope Bay), on the northern tip of the Antarctic Peninsula. Esperanza is different from other Antarctic stations: since 1978, a group of families (with their children) have spent a year in Antarctica, following Argentina's geopolitical strategy from the 1950s of maintaining permanent occupation and populating the claimed territory (Capdevila & Comerci, 2013). The radio station at Esperanza, *Arcángel San Gabriel*, started operations with a modest programme to create a sense of community within the base, connecting the daily whereabouts of the young and adults, celebrating birthdays and national holidays over the radio waves within the confines of their settlement. Over the decades, radio *Arcángel San Gabriel* became incorporated into Argentina's national radio broadcasting system; its relative proximity to Ushuaia allows the transmission of a daily radio programme produced in Antarctica that can be listened to anywhere in Argentina (Radio Nacional Argentina, 2018). Listeners from mainland Argentina are encouraged to participate and engage with those in Esperanza, fostering an integration of the communities of the imagined country through the same medium. The use of public radio to connect nationals from all corners of the nation, including Antarctica, perpetuates the cultural narratives of the extent of the imagined country and the sense of community belonging in the bicontinental state.

Chile adopted a similar geopolitical strategy to Argentina's. In 1984, President Pinochet's Junta established the settlement known as "Villas Las Estrellas" (VLE), annexed to Frei station

at King George Island, starting with six military families who spent a year in Antarctica (Llanos, 2017). The purpose of this exercise was to validate Chile's polar sovereignty and capabilities, while demonstrating that Antarctica is an extension of the country, where nationals can have a quality lifestyle akin to that of anywhere in the nation's territory (Llanos, 2019). From 1984 to December 2018,³⁹ this village functioned as the country's southernmost civilian outpost: it had a primary school, a post office, and a population of over 100 people, and it had welcomed the births of babies and marriage ceremonies (Martinic & Gonzalez, 2018). The Chilean Air Force officers who served in Antarctica could apply to bring their spouses and children to VLE for a year (Martinic & Gonzalez, 2018). The national media frequently reported on the lifestyle of these families, employing nationalistic expressions that related to cultural narratives of polar pioneering and national resilience rather than the reason for the military presence in Antarctica. Images of young children walking to school over an icy ground with Antarctic scenic images illustrated the news from VLE (Gonzalez, 2018). Newspapers headlines such as "Taking a chance living in Antarctica" (Gonzalez, 2018, pp. C14-15) arouse the imagination and sentiments from fellow nationals, who perceived those living at VLE selflessly defending Chile's (claimed) sovereignty in Antarctica. Life at VLE was portrayed by the polar residents as being "just like in Chile. . . . we are far but we are not isolated" (Gonzalez, 2018, pp. C 14-15). Indeed, VLE is not alone on King George Island: nearby on this Antarctic isle there are research facilities from other countries, such as Russia and six other nations connected with Frei station's airfield (Gonzalez, 2018). However, little attention is paid to the internationality of the surroundings, or to the scientific projects carried out by Chileans on the island. VLE is an example of Chile's conquest of the south; it proves Chileans occupy the imagined spaces of the nation (from the desert to the Pole), and it validates Chile's Antarctic territorial ambitions.

Nationalism is also at play when the nation is under scrutiny or losing prestige on account of the actions of one of its own. In 2013, "The Spirit of Mawson Expedition" led by Chris Turney set an ambitious programme to celebrate the centenary of Mawson's Australasian Antarctic Expedition. Turney, an accomplished and awarded Australian climate scientist, proposed to take a team of scientists and "citizen scientists" to Antarctica in a privately funded expedition on board the ship *Akademik Shokalskiy*, operated by New Zealand company Heritage Expeditions (Turney, 2014). Under the premise of retracing the voyage led by Mawson one hundred years earlier, Turney's expedition followed an elaborate science programme that included digital communication technology for outreach purposes. Blogposts, videos, and social media platforms were used to track the progress of the expedition. In late December 2013, the ship became beset in ice in East Antarctica (Jabour, 2017). A distress call was sent

³⁹ Currently, there are no Chilean families living in Antarctica. VLE closed for the foreseeable future in late 2018; budget constraints had delayed maintenance of buildings that are deemed unsafe for civilian habitation (Martinic & Gonzalez, 2018).

to NAP vessels that were in the vicinity; a French and an American polar vessel were tasked with assisting the SAR operations, while the Chinese icebreaker *Xue Long* and Australia's *Aurora Australis* went to the rescue. All passengers were safely transferred by helicopter to the Australian ship while the *Xue Long* unsuccessfully attempted to liberate the *Shokalskiy* (Jabour, 2017). The Chinese icebreaker and the *Shokalskiy* remained trapped in ice for over a week until ice conditions changed and both ships were naturally freed from the ice (Turney, 2014). The aforementioned events seem to describe a serious but plausible incident to happen in Antarctica. However, the circumstances that led to the ship being entrapped in ice are a less than common occurrence. Unofficial information gathered from the social media posts shared by the expeditioners, along with testimonies of witnesses and the ship's officers, indicated that a series of misunderstandings, poor communication in the leadership, and bad decisions resulted in the besetment of the ship (Jabour, 2017). Moreover, it was revealed that the ship's captain's orders to leave the area earlier were overlooked by the expedition leader, and the ice conditions worsened quickly (Darby, 2014). The Australian public and the media slammed Turney and his associates: there was misleading information regarding the AAD's permission to conduct a research programme during the expedition, which was granted only as a private visit and not as a scientific endeavour (Jabour, 2017). Also, the Australian scientific community questioned the value of Turney's science programme and expressed concerns about how the stricken expedition could affect the reputation of the national Antarctic science (Witze, 2014). To Australians, the expedition now appeared more as a tourism venture than a celebrated science enterprise; poor decisions had led to the besetment of the ship, and conflicting information on the seriousness of the situation worsened the public opinion of this event. Local commentators observed that Turney's beset ship had exposed Australia's weakening Antarctic capabilities. In recent years, Australian Antarctic and political experts had argued over the country's ageing polar facilities and the lack of vision and planning from the government to invest accordingly as a claimant country (McCallum, 2013). The ageing *Aurora Australis* had responsibilities in supporting Australia's research programme and the management of SAR operations in a large area of the Southern Ocean; the long distances to the rescue area and the urgency of this operation required the assistance of others (Cosier & Phillips, 2014). As more information on the unfolding of the events became available to the public, Turney's expedition was perceived as a national embarrassment, and the earlier stories of adventure and success reported by the expedition turned into targets of public mockery. In addition, the Australian government distanced itself from Turney's expedition and announced that it would pursue compensation for the operative costs of the SAR operations and the delays caused to the national Antarctic programme (Darby, 2014; Jabour, 2017).

The troubled Spirit of Mawson Expedition exemplifies attitudes of nationalism motivated by the perception that national pride, and hence the nation, are under threat by the actions of one of its own. A celebrated leader and its praised expedition became the focal point of expressions of nationalism when the unfolding of events revealed a weakened Australian polar power. Antarctic operators quickly distanced themselves from the stricken expedition, fearing the potential implications of loss of reputation and credibility of Australia's Antarctic hegemony.

5.1.6 South Africa's *monochrome* Antarctic nationalism

A different aspect of nationalism is manifested in postcolonial South Africa. The history of South Africa and Antarctica is riddled with race politics and representations of nationalism. As Van der Watt and Swart (2015) point out, Antarctica was a political matter for white supremacist South Africa and its relationship with the UK; the involvement in Antarctica of labourers from the black population was ignored in historical depictions of the African country's polar expertise despite their many contributions. Revisiting the past to make sense of the present is common practice and contributes to perpetuate the glory of the nation for the younger generations. In the case of South Africa, reliving the past of Antarctic exploration to nurture a connection with the South becomes a highly politicized matter. The South African government has many challenges attempting to unite the nation under democratic principles of egalitarian economic policies; unification of South Africa cannot ignore the racial, ethnic, religious, and class identities that have existed in South Africa beyond the influence of apartheid (Chipkin, 2016). In the context of nation-making, Antarctica occupies a secondary place in the South African consciousness: stories of a white past are acknowledged but seldom illustrated or celebrated. The South African Antarctic pioneers represent an era in the history of the country that many, reasonably, want to forget. In South Africa, the glorious Antarctic past represents another nation; reconciling history is confronting, particularly when the government aspires to strengthen the nation's connections with Antarctica and the Southern Ocean in support of national interests. Bringing Antarctica to the fore of the nation's consciousness means publicly acknowledging the rich Antarctic legacy of South Africa, but there seems to be a deliberate refusal to recognize the merits of pioneering South Africans in Antarctica because of the colour of their skin. Antarctic nationalism in South Africa appears to be temporal and monochrome. For instance, the first record of a South African in Antarctica was the participation of meteorologist Hannes la Grange in the TAE in 1955 (Glazewski, 2010). During this expedition, la Grange crossed the South Pole in a snow tractor in 1957 and bore the South African flag in the interior of Antarctica (Glazewski, 2010). Other nations would celebrate similar historic events as acts of patriotism and a source of national pride (and even as legal tender in the country, as seen in this chapter), but in today's South Africa la Grange's accomplishments are associated with the political interests of an oppressive and violent

supremacy, and, therefore, not fêted. Visual culture contributes to the construction of national identity, and it is a reflection on how nationals see their nation. However, it is unlikely that images of the first steps of the old South Africa in Antarctica will emerge in the country's public realm in current times. For instance, the flag that la Grange took South, which flew over the SANAE bases until 1994, was the former orange, white, and blue Union of South Africa's ensign, an emblem of black oppression that most certainly would not be celebrated today.

The government's efforts to recreate a modern history of the country in Antarctica and prevent white South African polar history from surfacing has original approaches. In 2004, South Africa was the host of an ATCM, the 27th, for the first time since joining the ATS. This was a historic moment for the new democratic republic, as during apartheid it had not been invited to host international Antarctic meetings. In the opening address, the local Minister of Foreign Affairs compares South Africa with Antarctica:

Like Antarctica, we too were once regarded as remote, removed and lacking of relevance. . . . Like Antarctica our appeal lay, for centuries, in the belief that ours was a land of strange terrain and even stranger people. Like Antarctica this has changed.

(Antarctic Treaty Secretariat, 2004, p. 232)

In this opening statement, the Minister is recognizing the historical grievances of exploitation, separatism, and political isolation of South Africa, drawing a parallel with Antarctica, imagining both places influenced and interfered with by the same (political) forces, while the world powers watched without taking action. The *strangeness* mentioned can be interpreted as the colonial misconstructions of South Africa's rich ethnic identities, once demeaned, and, like Antarctica, now praised and valued. Unlike other representatives of Antarctic parties, the Minister did not remind the audience of South Africa's Antarctic history or of the many connections with the Heroic Era. Instead, the speech is inviting delegations to explore possibilities of international collaboration with today's South Africa, remarking on the capabilities of Cape Town as a gateway city and SANAE IV as a model Antarctic research station (Antarctic Treaty Secretariat, 2004). Coincidentally, attendees at the 27th ATCM received a booklet made by the host nation. In the *Antarctica, a South African Journey* booklet, the authors acknowledge that Antarctica was off-limits to some South Africans before 1994, but that 10 years of democracy have changed that restriction (Department of Environmental Affairs and Tourism, 2004). The publication considers the alluded to changes as an "extraordinary transformation that has taken place within SANAP", and includes the biographies of remarkable South Africans who study and work in Antarctica (Department of Environmental Affairs and Tourism, 2004, p. 1). The biographies and accompanying portrait photographs in the booklet are of three "young scientists" and two "logistic specialists", which are meant to inspire

the new generations of nationals “with a passion for science, adventure and hard work” (Department of Environmental Affairs and Tourism, 2004, p. 2). Noticeably, all five individuals chosen to represent the new era of SANAP are from traditionally under-represented demographics in South Africa’s Antarctic Programme.

It appears that the government intends to embody the new era of South Africa in Antarctica with demonstrations of ethnic diversity, youth aspirations, leadership, and international relevance, while concealing the whiteness of the past. Antarctica represents a new beginning, a foreign and *strange* place, yet familiar to South Africa. Also, Antarctica represents a source of employment for some, a symbol of progress in a country with economic inequalities.

The Antarctic departure of the *SA Agulhas II* from the port of Cape Town is a public event. It is advertised in local newspapers and social media, inviting nationals to farewell the expeditioners. Family and friends gather to wave goodbye to the ship in a festive atmosphere, accompanied by evocative music. In December 2016, I witnessed the departure of the ship to the sound of the popular song “Lady in Red” by Chris de Burgh. The soundtrack title referred to the mariners’ tradition of considering a ship a feminine entity; also, to the colour of the ship, and, most importantly, in honour of Miriam Makeba, a Xosa-born popular singer and activist who the vessel is dedicated to (Department of Environmental Affairs, n.d.). The dedication of the ship to Miriam Makeba, also known as “Mama Africa”, is not inconsequential. The ship is the embodiment of the new South Africa; it personifies a highly recognized leader who symbolized resistance to segregation, an activist who represented Black Power and obtained international recognition while in exile (Feldstein, 2013). Here, the vehicle for South Africa to Antarctica is imbued with gender and race politics, is symbolic, is nurturing and tribal, and speaks of the liberation movement and of black cultural narratives. At her prime as an entertainer, Makeba was said to have had the ability to bridge the extravagant and elite audiences and mass culture (Feldstein, 2013).

Antarctic nationalism is also manifested in South Africa in references to the exceptionality of the connection with polar activities. On the occasion of the ship’s departure to Antarctica, the public speech of the Director of SANAP, Nishendra Devanunthan, included appraisals such as “the SANAE teams are of a particular source of pride for us . . . our people are among the best in the world”, and the voyage provided “a great opportunity for our brave young scientists” (personal experience, 2016). Devanunthan employed rhetoric similar to that of other Antarctic states that pretends to stimulate national pride in the country’s Antarctic participation: South Africans perform very well with others, and the young are brave to venture into this foreign environment.

The national media reproduces these representations, framing the new geopolitical imaginations of South African nationals in Antarctica. For instance, a journalist reporting on the sailing of the South African ship to Antarctica includes expressions of courage and patriotism: “these adventurous and brave members of SANAE 58 team” (Chetty, 2018). Others refer to the sacrifices made to fulfil the nation’s obligations in Antarctica: “it takes guts of steel to be away from your family and loved ones” (The Mercury, 2017). Also, expressions of national pride are visible when the *SA Agulhas II* is involved in other expeditions besides supporting the NAP. For instance, media reports that the ship “will play a *starring* [emphasis added] role in the historic, international multi-disciplinary Weddell Sea Expedition” are enhanced by the importance of the research event: “the international multi-disciplinary Weddell Sea Expedition is *the most important* [emphasis added] non-governmental scientific expedition to take place in 20 years” (Chetty, 2018, my emphasis).

Although it is outside the scope of this chapter, further research is needed to expand on the understanding of race politics and black cultural narratives as inspirational for constructing Antarctic connections in South Africa among nationals.

5.2 Concluding words

The study of nationalism in Antarctica is relatively new. Antarctica is perceived as an exceptional and peaceful place managed in accordance with international agreements within the ATS. For many commentators outside the polar humanities, nationalism occurs only in places of conflict and political tension. The perception of Antarctica as a place free of conflict seems devoid of nationalistic practices. However, geopolitics and nationalism are at play in Antarctica and influence the perception and connections people construct with the polar region.

Nationalism drives the motivations of Antarctic parties to remain engaged in Antarctica. Assertions of sovereignty, aspirations of leadership roles in science and policy-making, and perspectives over the future access to resources revive nationalism. Strategies for political legitimacy and science excellence in Antarctica are motivated by nationalism. As the Antarctic continues to attract attention from world powers, suspicion and tensions grow over potential competition and conflict from the presence of others. Nationalism thrives when the nation is perceived as at risk and national pride is at stake (Hemmings, 2017).

In this chapter, I focused on representations of banal and everyday nationalism, drawing concepts from the work of Michael Billig (1995), the scholarly critique from Jones and Merriman (2009), and the corpus on Antarctic nationalism. Here, my interest focused on

understanding the understated expressions of Antarctic nationalism that are part of the daily lives of nationals from South Africa, New Zealand, Australia, Chile, and Argentina. The Antarctic national interests of these countries are rationalized, consumed, defended, and reproduced by nationals in mundane activities. Many of these expressions may be seen at times as harmless, and as culturally expected practices in some countries, but these banal and everyday processes influence the personal and national identity of the citizens of Antarctic states. Popular concerns over protection and performance of a state in Antarctica are often manifested in *awkward* nationalistic expressions, and absorbed by the Antarctic geopolitical imagination of the nation (Dodds, 2016). As more-aggressive forms of nationalism thrive worldwide, scholars warn us that the ATS does not have the capacity to react to political matters derived from escalating interests in resource potential: “we should surely be alert to the seriousness of unrestrained nationalism” (Hemmings et al., 2015, p. 554).

Also, this chapter explores the representations of Antarctic nationalism that exist in the public realm of the Antarctic gateway states. These representations were collected during the course of this research. For instance, I chose officially printed maps to represent geographic proximity of Antarctic to the territory of the nation. For Argentina, the incorporation of the Antarctic territory into maps has successfully influenced the national identity of Argentines, who feel they have sovereign rights over Antarctica. These rights to polar land must be protected at all times, and military forces take the role of protector and peacemakers in Antarctica. Cartography has also assisted Chile and Australia to represent Antarctic sovereignty; although the use of these maps is not compulsory as in Argentina, these cartographic geopolitical resources are available in public libraries as educational materials.

Geographic proximity to Antarctica and the Southern Ocean has inspired South American countries to incorporate their Antarctic territories into the political administration of their provincial states. For the people of the southern regions of Argentina and Chile, Antarctica is perceived as an extension of the imagined homeland, where lifestyles and needs are met, and where resilience is key to living at the southernmost borders of the nation. Nationalism is infused with patriotism, while everyday heroes maintain a vigil protecting the polar homeland.

The relative proximity to Antarctica is predicated at the gateway cities as the binding element to the Antarctic connection, along with historical and cultural ties. Validation of the gateway role comes from being the *first*, the *busiest*, the *southernmost*, etc. and the geopolitical decisions made upon framing these cities as gateways to Antarctica are taken for granted. Nationalistic expressions of regional hegemony pretend to set the gateway city ahead of others. There seems to be an unspoken competition among the gateways for validation of their role that involves Antarctic nationalisms related to sovereignty claims, home security, leadership, and mobility (Dodds, 2016).

Historic and cultural Antarctic connections present seemingly innocent forms of nationalism. Banknotes and images of cultural diversity with Antarctic territorial nationalist connotations are accepted in the everyday lives of Australians and New Zealanders. These reproductions of polar heritage reinforce historic ties and celebrate national pride. Socially constructed Antarctic symbols (i.e. flags, polar heroes, buildings) represent the nation and its glorious past, and they are carefully presented as cultural narratives that unite, influence, and assist with the construction of a national identity.

I made a separate distinction for South Africa's Antarctic nationalism. I called this section *monochrome* nationalism to stress the relevance of race politics and ethnic identities in South Africa's connections with Antarctica. The South African democratic governments make efforts to conceal the Antarctic history of the country that represents an oppressive past, and reconstruct present and future polar connections with a visible and celebrated ethnic diversity. Moreover, no longer does white masculinity dominate the narratives of South Africa in Antarctica. The dedication of South Africa's polar ship to Miriam Makeba, better known as Mama Africa, symbolizes the nation's new era in gender and race politics. In earnest, Antarctica occupies a secondary role in the reconstruction of South Africa's national identity; its isolation and foreign environments are alien to most members of the multicultural nation.

Nationalism is present in today's Antarctica and science programmes, media, and arts, and most Antarctic actors help to perpetuate the perception that the nation must remain engaged with the polar region. The motives for this engagement are embedded in territorial nationalism, which is consumed and reproduced in the everyday lives of the people living at the Antarctic gateway states. The study of Antarctic nationalism is critical to understanding the extent of the influence of national agendas in the construction of a national identity that incorporates Antarctica.

6 The Antarctic gateway cities

The study of the Antarctic gateway cities reveals their significance for the international polar community, and for the Antarctic interests of their host countries. The gateways have a role in facilitating the logistics for the travel of people and goods to Antarctica; they are strategic bastions of territorial sovereignty, they contribute to environmental stewardship and safety at sea in Antarctica, and they enable diplomatic relationships with different Antarctic actors.

This chapter starts with an overview of the modern role of the Antarctic gateways. The main body of work is concerned with a comprehensive description of each Antarctic gateway city, and an analysis of the factors and characteristics that have contributed to their association with Antarctica. I study the socio-economic and political aspects of each city to understand the influence of Antarctica in everyday life for locals, and I examine the Antarctic connections, from the historic and contemporary perspectives, to the economic and cultural influences. The following sections are not intended to provide information for a comparative analysis between cities. Instead, the purpose is to reflect on the linkages that support the role as Antarctic gateways.

The frontispiece of this thesis contains a map with the locations of the Antarctic gateway cities studied here. In the following sections, the gateways are listed in alphabetical order.

6.1 The contemporary role of the five Antarctic gateways

The Antarctic gateway cities were established as urban centres long before their involvement in the logistics of travel to Antarctica. The function of Antarctic gateway developed over time and is tied to the city's historical links, its advantageous geographic location, environmental associations, and the economic and geopolitical opportunities that the Antarctic connection represents to the host country and its polar interests.

All Antarctic gateway cities claim to have a strong connection with Antarctica, which appears to influence the community identity of these cities (Wehrmann, 2019). For some, Antarctica is linked to their heritage; for others it is an extension of their territory. Regardless of the origin of their connection, being associated with Antarctica matters. The cultural narratives linked with Antarctica refer to heroism, legacy, survival, leadership, and patriotism, among other qualities, which influence the construction of an Antarctic identity in the local community. Irrespective of how strong the Antarctic connection is in each of these cities, local and national

governments routinely appeal to the discourse of social imaginaries of the South to enhance the city's place in the international Antarctic community.

For those wishing to travel to the Antarctic region, the gateways appeal to their needs for accessing Antarctica. These cities promote themselves as Antarctic specialists, building on a distinct reputation. The Antarctic connection generates valuable income for the gateway cities; Antarctic business is considered a regenerator of the regional economy and attracts innovative solutions, technologies, and businesses to supply the growing demand for polar supplies. As Hall (2000, p. 158) argues, the "Antarctic brand" is a powerful and appealing commercialization tool for the gateways; the Antarctic association symbolizes wilderness, purity, and nature, qualities that the gateways remark on as their own. Also, as Leane (2016) suggests, (some) Antarctic gateways are framed as being on the edge of the familiar world, and as the portals to another, the southern polar region. Hence, competition among gateways seems inevitable, despite certain characteristics that some have over others. For instance, the city's geographical location enables convenient travel to the adjacent Antarctic sector but not to the rest of Antarctica.

Antarctic gateways are politically important to their national governments. For some, the gateways contribute to sustaining the Antarctic territorial claim (with the exception of South Africa, the only non-claimant country to host a gateway city), but they also assist in building Antarctic partnerships with other countries, and cities, generating mutual benefits, and/or valued diplomatic allies within the ATS and other international forums of a less-pacific nature (Prior, 1997).

It is unclear when the aforementioned cities adopted the title of *Antarctic gateways*. Between the late 1980s and throughout the 1990s, the name *Antarctic gateway* appeared connected to the cities in Antarctic-related political discussions, national policies, and media reporting. In 1987, the imminent construction of facilities to host the US NAP in Christchurch was reported as an opportunity for the city to "market itself as 'the gateway to the Antarctic'" (Forrester & Mulder, 1987). The moniker *Antarctic gateway* was adopted by the New Zealand media in connection with Christchurch's Antarctic developments, encouraged by the Minister of Tourism, Phil Goff, to "stake a claim as the principal gateway city to Antarctica" (Riddell, 1988). Concurrently, *New Zealand's White Paper on Antarctic Environment* stated that the history of New Zealand as a gateway to Antarctica was one of the reasons for the country's involvement in the South and its commitment to the protection of the polar environment (New Zealand Government, 1989). Moreover, Argentina was at the forefront of assigning a strategic importance to Ushuaia in the Antarctic National Policy (Poder Ejecutivo Nacional, 1990). Furthermore, TdF's Antarctic policy indicates that all activities for the polar region that take place in the province should lead towards consolidating Ushuaia as the gateway to Antarctica

(Poder Legislativo, 1996, art. 2). The concept of Antarctic gateway gained a commercial meaning with the development of Antarctic tourism in the 1990s. According to Day (2012), New Zealand was attracted by the potential economic benefits from the Antarctic tourism industry and wanted to invest in infrastructure for the operation of cruise ships from Lyttelton to Antarctica. Moreover, the Chief Executive of the New Zealand Tourism Department, Neil Plimmer, was the driving force behind the idea of “consolidating ‘Christchurch’s claim as an Antarctic gateway” (Day, 2012, p. 512) with tourism ventures, and also developing tourist attractions in the city, such as dedicated museum exhibits. In 2000, Chile’s Antarctic National Policy focused on promoting the country’s condition as a “pais puente” (bridge country), enhancing and developing further infrastructure to entice the operation of NAPs from the country’s gateway city, Punta Arenas (Ministerio de Relaciones Exteriores, 2000). Finally, a New Zealand diplomat incorporates the term *gateway countries to Antarctica*, referring to fellow southern hemisphere states of Argentina, Australia, Chile, and South Africa (Prior, 1997, p. 14). Prior assigns stewardship responsibilities to Antarctic gateway countries because of their relative proximity to Antarctica, indicating these must work collectively to enhance the governance of Antarctica (Prior, 1997). Moreover, Prior (1997) considered that international cooperation among the Antarctic cities would enhance the gateway concept.

In 2009, representatives of the Antarctic gateway cities met for the first time in Christchurch to sign a Statement of Intent (SOI) aimed at maintaining international partnerships among them, collaborating, and sharing best practices in Antarctic education, workforce, and economic developments (Christchurch City Council, 2009). This non-legal binding SOI had a duration of 18 months from the date of the signature, September 25, 2009. Since then, no collaborations between the governments of the “Southern Rim gateway cities to the Antarctic” (Christchurch City Council, 2009, p. 29) have happened, despite the initial enthusiasm shown. It appears that the politicization of the term *gateway city* goes beyond the intentions of camaraderie and international partnerships of local governments. The Antarctic business and the geopolitical significance of the gateways to their national governments surpass intentions for collaborations. As Prior predicted ten years earlier, “the extent to which a sense of ‘corporate’ interest amongst the Gateway countries is capable of cultivation, remains conjectural” (1997, p. 14).

The following sections introduce the five gateways to Antarctica and the most relevant aspects of their Antarctic connection. I present an introduction of each city’s socio-economic and political views that provides a background to the contributing factors for the gateway role. The cities are introduced in alphabetical order.

6.2 Cape Town (South Africa):

Affectionately called the “Mother City” by the locals, Cape Town is the second largest city in South Africa, with a population of approximately 3,750,000 inhabitants spread over 2,450 square kilometres (City of Cape Town). This is by far the largest of the five Antarctic gateway cities in relation to both land size and population.

Cape Town is the provincial capital of the Western Cape, a large province located at the southern tip of the African continent, with an extensive coastline that borders the Atlantic and Indian oceans. The Western Cape has the lowest unemployment rate in the country, circa 22%; the manufacturing and construction industries have been the top employers since 2007 (Trade & Industrial Policy Strategies, 2017).

6.2.1 Socio-economic views

The socio-economic inequalities in Cape Town are evident outside the city’s central business district (CBD), negatively affecting mostly the black and coloured⁴⁰ populations. The politics of race and the historical baggage that Cape Town carries from its Dutch and British colonial past, and more recently during the violent apartheid regime (1940s to 1990s), are still present within the city’s identity and politics. Although apartheid laws no longer apply in South Africa and the country has been working towards reconciliation since the 1990s, Cape Town’s social and spatial landscapes continue to be divided as much as they were under the past regimes.

The social fabric of Cape Town constitutes an ethnically complex population. Cape Town’s largest ethnic group is coloured, followed by black, and then by a white minority (Leildé & Bekker, 2006). Despite the white population’s low numbers, white political-economic dominance is prevalent in the Western Cape. Moreover, the dominant languages spoken in Cape Town are Afrikaans, English, and Xhosa (in descending order); although Xhosa is largely spoken by a black population, Afrikaans is the prevailing language of the city (Leildé & Bekker, 2006). The coloured communities were once perceived as non-black with a strong affinity to Western culture and values, with allegiance to Afrikaaners or British and opposed to African heritage (Adhikari, 2009). However, the 1950s Group Areas Act that forced the eviction of 150,000 coloured people from their communities in a racial removal in Cape Town changed the social landscape of the city and the social status of coloured people (Adhikari, 2009). The government reasoning for enacting this forced relocation was based on grouping communities by ethnicity to avoid racial conflict and to improve stereotyped unhygienic conditions. Samara

⁴⁰ In southern Africa, a *coloured* person is someone of mixed racial ancestry, differentiated from a *white* or *black* person (Adhikari, 2009).

(2011) argues that before the 1950s, Cape Town was one of the best racially integrated cities in Africa, and that the forced relocation was based on economic interests for urban developments on the occupied lands, and pure racism from the white South African oligarchy. The segregation and relocation to impoverished locations had devastating effects on Cape Town's coloured and black communities that continue today. Post-apartheid, political parties seeking votes from non-whites regained interest in the coloured communities, but the historical baggage and the socio-economic inequalities have remained with the segregated groups despite the establishment of democracy several decades ago.

The urban revitalization of greater Cape Town is slow and inadequate; the relatively low unemployment in the region attracts domestic migrants, but affordable housing is an issue, resulting in expanding ghettos, squatters, and overcrowded satellite settlements mostly for the coloured population. In spite of the city's modern profile and European flair, the marginalized groups of Cape Town interpret the social tensions and economic disadvantages as another form of racism (Malala, 2012). In contrast, the local government has restored credibility for foreign investment in the central city. Since 2011, Cape Town's city council has led the Cape Town Central City Improvement District (CCID), a public-private city stakeholders partnership set up for the redevelopment of the CBD (Koblitz, 2017). The CCID dramatically improved the city centre; once considered too dangerous, filthy, and occupied only by homeless, today it is a vibrant and economically viable district for the hospitality, retail, innovation technologies, and property industries (Koblitz, 2017). The CCID also employs hundreds of public safety officers, who patrol the CBD to provide safety and security to those living, working, and visiting the city. Although this may seem a sensible service to provide to an affluent area, it also saw the removal of beggars and street children, thus once again creating in the CBD a socio-spatial segregation of disadvantaged people from those more affluent. The contrast between the CBD and the poor townships located in the periphery of the wealthy downtown appears to be a continuity of the urban displacements of the past, and accentuates the perception that the local government attends only to the interests of the wealthy (Samara, 2011).

6.2.2 Political views

Politically, Cape Town has an important role within the country's government: it is host to the House of Parliament of the Republic of South Africa (Constitutional Assembly of South Africa, 1996). However, the constitution of South Africa does not designate one capital city. Instead, the powers of the government reside in different cities, namely Cape Town, Pretoria, and Bloemfontein. The absence of a designated capital for the country has been a recurrent political dispute between provinces since the end of the Anglo-Boer War in 1902, and it has not found resolution with the new constitution of 1996 (Slack & Chattopadhyay, 2009). Housing the South African parliament offers Cape Town a political status and symbolic power over

other important urban centres in the country. Cape Town's perceived political dominance over other South African cities has its caveats: the local city council takes care of the cost for hosting the parliament and its associated requirements for safety, services, and other expenses (Slack & Chattopadhyay, 2009). In return, Cape Town benefits from global exposure when hosting international and distinguished visitors, representing South Africa to the rest of the world.

Regarding national politics, Cape Town and the Western Cape Province are the stronghold for the Democratic Alliance (DA), the largest opposition party to the governing African National Congress Party (ANC); the DA holds the provincial and metropolitan government seats. The DA's liberal policies and active campaigns against the corruption by former President Zuma's government (including a petition to remove him from office) have been popular with voters, the party growing more support in 2017 than any other political party in the country (Cara, 2016). The DA's party vision aligns with the ideals of the country's new constitution after apartheid for a united, multicultural, and inclusive South Africa. However, despite of the ethnic diversity of the party leaders and its principles, the DA is seen as the political platform for the white establishment and their economic powers, which are largely based at the Western Cape (Pressly, 2017).

6.2.3 Cape Town's Antarctic connections

6.2.3.1 Historic links

Cape Town's connections with Antarctica date back to the 1700s, when European expeditions began searching for Terra Australis. The colonial settlement of Table Bay was known as a provisioning station for European merchant shipping to the Indian Ocean spices market, ruled through colonial times by Dutch and, later, British governments (SAHO, 2000-2017). In 1772, French naval ships led by Marion du Fresne sailed south from Cape Town and rediscovered two sub-Antarctic islands known today as Marion and Prince Edward (Cooper & Headland, 1991). Dutch ships had previously sighted these islands but they were poorly recorded on charts. The news attracted the attention of British explorer James Cook, who commanded three expeditions to the Pacific Ocean and further southern latitudes searching for the illusive southern continent. Cook called into the settlement of Cape Town on all his major voyages: in 1772, his second expedition sailed south from there, becoming the first to cross the Antarctic Circle and to circumnavigate the Antarctic continent (Glazewski, 2010). Although Cook's expedition did not confirm sighting of the Antarctic continent, his accounts of the abundance of seals and whales in the Southern Ocean led to the expansion of the sealing industry in following decades (Cooper & Headland, 1991). In 1776, Cook sailed to Cape Town en route to England and sighted du Fresne's islands, charting and re-naming them *Prince Edward*

Islands (Cooper & Headland, 1991). Cook's disregard for the islands' French discovery would benefit South Africa centuries later.

In 1805, the UK took control of the Cape Colony, displacing the Dutch, and Cape Town was the base for the British colony until the discoveries of diamonds and gold in the 1860s and 1870s, respectively (SAHO, 2000-2017). The growing trade at Cape Town required a bigger and more reliable harbour, and by 1860s the Victoria and Alfred basins were under construction using prisoners from the overcrowded Breakwater Prison as free labour. Breakwater Prison held British dissenters, migrants, vagabonds, natives, and slaves as inmates (Bickford-Smith, 2004). The British legacy at the Victoria and Alfred Waterfront (V&A) in Cape Town is present today in traditional buildings, such as the Clock and Time Ball Tower (Figure 6.2), among English-named basins, piers, and quays.

During the 19th century, Cape Town served as a provisioning and trade port for the sealing and whaling industries. Sealing voyages by vessels from the UK, France, and the Cape Colony departed from Cape Town, hunting seals from the Prince Edward and Crozet islands in the Indian Ocean (Basberg & Headland, 2013). Also, throughout this century, Antarctic explorers continued to call at Cape Town on their voyages south, such as James Clark Ross in 1840 (Cooper & Headland, 1991). At the start of the 20th century, whaling became the main industry in the Southern Ocean, with the participation of British and Norwegian companies. Cape Town and the small nearby village of Simon's Town, lying on the shore of the Indian Ocean, offered labour, provisioning, vessels, and winter quarters to whalers (van der Watt & Swart, 2015). South African whaling companies had a modest participation in this industry compared with those from the UK and Norway, and they did not restrict their hunting to the Southern Ocean: the South Atlantic waters provided a profitable, albeit unsustainable, long-term catch (van der Watt & Swart, 2015).

Cape Town was a stopover for the explorers of the Heroic Era of Antarctic exploration (c. 1897-1922) (van der Watt & Swart, 2015). It served the purposes of restocking ships, resting the crews, and much-needed fundraising for the expeditions among the wealthy colonists of the Cape. Also, the mail ship service between Britain and the colonies allowed for expedition leaders and officers to travel faster to these outposts, bringing mail from home and meeting the expedition ship before it continued to the last provisioning stop in Australia or New Zealand on its way south. In October 1901, Robert Scott and the *Discovery* called at the Cape for provisioning, repairs, and comparisons of the ship's magnetic instruments (Scott, 1929). In his book, Scott's passage on the stay at the Cape is quite brief: the authorities greeted the expedition with great generosity and hospitality, and the absence of a magnetic observatory in the colony was rectified with an improvised tent observatory developed with the assistance of scholars from the Cape University (Scott, 1929). The brevity of Scott's stay at the Cape may

have been influenced by the Anglo-Boer War occurring at the time; he interpreted the interest of locals in the Antarctic expedition as a distraction from the conflict: “our peaceful mission was regarded with sympathy and interest by all” (Scott, 1929, p. 79). In 1911, Scott and the *Terra Nova* called at Cape Town, but there is less mention of their stay at the Cape than for Scott’s previous visit (Mountevans, 1953). Regardless, the British colonists were kept informed on the expedition’s progress. In 1916, the tragic fate of Scott and his South Pole party was evoked with a sculpture in Cape Town’s downtown (Cable Press, 1916, p. 6); a replica of the original (which was destroyed in 1948) still stands on Heerengracht Street, Cape Town central (Figure 6.3) (Martinson, 2010). It is important to note that this memorial seems to be the only reference to Antarctic connections within the central city’s public art.

Other Antarctic expeditions captured the attention of the Cape’s elite. In 1929, at the start of the British-Australian-New Zealand Antarctic Research Expedition (BANZARE), Mawson and the ship *Discovery* arrived at Cape Town for coaling en route to Antarctica (Mawson, Jacka, & Jacka, 1988). At the Cape, Mawson was confronted with media questions regarding the presence and activities of Norway in the sub-Antarctic and Antarctica: “he found himself caught up in the nationalistic hysteria whipped up by the press regarding Norwegian territorial intentions in the Antarctic” (Mawson et al., 1988, p. 252). Local newspapers *Cape Argus* and *Cape Times* reported consistently on the danger of Norway’s territorial intentions in Antarctica. The media generated anxieties about Norway’s secret plans to conquer polar lands and how these would impact on the British Antarctic dominions. The newspapers compared the BANZARE and the Norwegian expeditions to those for the conquest of the South Pole: “this interesting possibility recalls the epic race for the South Pole between the same two nations, resulting in the success of Amundsen and tragic deaths of Scott and his companions” (Mawson et al., 1988, p. 252). Despite the media hype, Mawson also reported on the hospitality, gifts, and well-wishes from Capetonians received by the expedition on their departure (Mawson et al., 1988).

In late 1959, South Africa’s first Antarctic expedition departed from Cape Town on the *Polarbjørn*, with a winter-over team under the leadership of Hannes La Grange, a South African meteorologist who had participated in the TAE’s crossing of Antarctica in 1955-58 (McNish, 1971). Although South Africa’s involvement in Antarctica has been critiqued for its lack of vision and poor political drive, and shaped by apartheid condemnation (Roberts et al., 2013), its Antarctic ambitions were manifested in the 1960s with the purchase of a polar ship and the construction of its own base. The ship *R.S.A.* was South Africa’s first polar vessel; it assisted with the transport of materials, stores, and men for the operation of SANAP (McNish, 1971). The *R.S.A.* captain remembered the attention the ship received in Cape Town: “the magic word Antarctic and the bright hull of the *R.S.A.* attracted the attention of many hundreds of

people” (1971, p. 9). In his book *The Eternal Ice*, McNish wrote detailed accounts of his voyages from Cape Town to Antarctica, and, notably, he never called the city an “Antarctic gateway” (McNish, 1971). Nonetheless, this was the beginning of South Africa’s participation in Antarctica, and of Cape Town as the national gateway to the South.

It is interesting to note that modern Antarctic expeditions also departed from Cape Town, but there is little mention of their time at the Cape during voyage preparations. For instance, Mear and Swan’s trek to the South Pole (1985-86) was supported by the ship *Southern Quest*, which stopped for provisioning at Cape Town before sailing to New Zealand and then continuing to Antarctica (Mear & Swan, 1987). In Mear and Swan’s accounts of their expedition, their visit to Cape Town receives little mention compared with the excitement and detail given to the visit to and departure from Lyttelton (New Zealand) (Mear & Swan, 1987). Although Cape Town is a convenient port city that facilitates the logistics to Antarctica, it seems that the association of expeditions with a country under apartheid ruling was not considered desirable for the reputation, sponsorship, and media coverage of the voyages during that period.

6.2.3.2 Contemporary connections

Cape Town is located the furthest away from Antarctica of any gateway, but has no competitor within the African continent. Cape Town’s major advantage is its operative distance from Antarctica’s Dronning Maud Land, an area of interest for multiple NAPs and the high-end Antarctic tourism market. Cape Town promotes having local advantages to attract northern hemisphere NAPs, such as short distances from Europe and working in the same time zone (SANAP, n.d.).

The SANAP headquarters are located in the central V&A, an attractive and busy complex for entertainment, accommodation, shopping, and access to a yachting marina. SANAP’s location at East Pier is convenient for shipborne operations: the South African research vessel sails from this pier or is docked conveniently here when not operating (SANAP, n.d.). As result, the public and tourists visiting Cape Town can observe the Antarctic operations of SANAP and international NAPs that launch their expeditions from here (Figure 6.4). The V&A lacks public information panels, signs, or other visual references to the Antarctic activity that happens at its doorstep, with the exception of a signpost indicating approximate distances from Cape Town to several international locations, including the South Pole (Figure 6.5).

Cape Town’s geographic location at the southern tip of Africa, and the city’s infrastructure, allow access to Antarctica by sea or air. Cape Town’s shipping route relevance continues today and adds value to the Antarctic connection with efficient transport of goods and marine services. The Antarctic vessels that operate from Cape Town are SANAP’s icebreaker and research ship *S.A. Agulhas II* and the semi-retired *S.A. Agulhas*, which serves as a training

vessel and auxiliary transport for Antarctic scientists (SAMSA, 2017). In addition, during the Antarctic summer, Cape Town hosts the logistic operations for other NAPs, such as the German ship *Polarstern* (Alfred Wegener Institute, 2015), the British RSS *Shackleton* (Dinar, 2016), and MV *Ivan Papanin*, which provides transport for the Indian National Centre for Antarctic and Ocean Research (n.d.).



Figure 6.1: Time Ball Tower, Cape Town



Figure 6.2: Robert F. Scott statue, Cape Town

Furthermore, the air-link between Cape Town's modern international airport and Antarctica increases the capabilities of this Antarctic gateway city. The consortium Dronning Maud Land Air Network (DROMLAN) is an initiative of NAPs to provide air connection with Antarctica while sharing resources and efficient logistics. DROMLAN was established in 2002 after the European Polar Board identified the need for long-range air support for its NAPs operating in the polar regions (COMNAP, 2015). DROMLAN serves the NAPs of Belgium, Finland, Germany, India, Japan, the Netherlands, Norway, Russia, South Africa, Sweden, and the UK (COMNAP, 2015). This multinational consortium is operated by Antarctic Logistics Centre International (ALCI), organizing from its facilities in Cape Town the intercontinental and intra-Antarctic air operations (ALCI, 2019). DROMLAN is often referred to as an example of

successful international collaboration between NAPs, with over 100 intercontinental flights transporting thousands of scientists and support staff since its inception (COMNAP, 2015). This effective air-link is an attractive feature for Cape Town, as it offers faster, frequent, and further-inland access to Antarctica, with a cost-effective system for NAPs and associated companies.



Figure 6.3: S.A. Agulhas II, Cape Town



Figure 6.4: Sign with distances, V&A waterfront

6.2.3.3 Economic connections

All Antarctic gateway cities seek to develop economic growth from the Antarctic connection. Cape Town has identified opportunities for economic development within the Antarctic links but has yet to advance with a coordinated plan for growth in this area. In 2010, the governmental agency Western Cape Investment and Trade Promotion (WESGRO) produced a document highlighting the prospects for exports of goods and services produced in the Western Cape to satisfy the demand of the Antarctic business happening within the city. In a recent review of the economic performance of Cape Town, WESGRO calculated that Antarctica, as an export market, represented only 0.01% of the total exports of Cape Town (n.d.). Considering that the main export in this report was refined petroleum (WESGRO, n.d.), it can be interpreted that the low contribution of Antarctic-related business corresponds to fuel and other derivatives, possibly acquired by NAPs for refuelling transport and research stations. The WESGRO report highlights other untapped opportunities on offer at the Cape for the Antarctic market, such as locally grown fresh, tinned, and frozen food products, and an expert workforce with Antarctic experience based in the city (n.d.). For instance, Petrel Engineering built the prefabricated building of the UK's Halley VI research station (2017), and Nolitha (Pty) Ltd refurbishes the country's Antarctic research station SANAE IV (n.d.).

In contrast, highly profitable Antarctic tourism activities take place from Cape Town. ALCI maximises the economic benefits of the shared air-link by commercializing those seats not

taken by NAPs and making these available to other travellers to Antarctica, such as those associated with non-national governmental agencies and tourism (COMNAP, 2015). As such, ALCI's tourism enterprise is The Antarctic Company, which offers day tours to Antarctica; it also organizes and supports private expeditions (TAC, n.d.). The approximately six-hour flight from Cape Town to Antarctica presents opportunities for other commercial ventures: Arctic Trucks, Icetrek, and White Desert are three other Antarctic tour operators to benefit from the Antarctic air-link. Arctic Trucks is an Icelandic-owned company offering tours to the interior of Antarctica using four-wheel-drive trucks especially adapted as transportation and support for private expeditions (Arctic Trucks, 2017). Icetrek is an Australian-based company organizing tours to the South Pole and emperor penguin colonies for active and adventurous customers willing to ski, kite, and cycle in Antarctica, among other activities (Icetrek, 2017). White Desert is a UK-based company marketing tours to an affluent audience who have a preference for luxury camping and adventurous travel, and who expect a "carbon neutral experience" (White Desert Ltd, 2020). Moreover, White Desert increases the air travel options for high-end tourism to Antarctica: they have a fleet of small luxurious aeroplanes to reach the Antarctic from Cape Town and to travel inland to the Pole, or, they offer private jet owners to land their plane in the White Continent (White Desert Ltd, 2020).

The four Antarctic tour companies aforementioned cater for a niche market of high-end tourism, with active lifestyles and pressed for time to travel and yet wishing to visit Antarctica. These four Antarctic tour operators do not keep permanent premises in Cape Town; they operate from shared space within ALCI's building and have little visibility to the South African public.

Regarding Antarctic shipborne tourism, it is unlikely that Cape Town will develop in the near future as an appealing gateway for cruise ships, considering the current characteristics of the industry. Cape Town's longer distance to Antarctica, compared with that of other gateway cities, combined with the complex access to the Antarctic coastline immediately south of Africa, results in difficult, lengthy, and most-likely unprofitable commercial operations for current vessels (Abdel-Motaal, 2016; Roldan, 2015). However, as Antarctic tourism evolves and new trends appear, South Africa has an opportunity to develop a combined fly-cruise alternative including cruise ship travel to the sub-Antarctic islands and package tours flying to Antarctica, with the added value of Cape Town as an established tourism destination for pre-/post-Antarctic voyages. Considering that a sophisticated market for discerning Antarctic travellers is currently operating from Cape Town, it is conceivable that South Africa could support a specialized shipborne tourism in the Southern Ocean. However, for Cape Town (and South Africa as a whole) to advance from the role of hosting foreign-owned tourism enterprises, to leading its own sustainable tourism development and procuring the benefits of

the Antarctic connection for the local business community, domestic policies and regulations on Antarctic tourism are required (Boekstein, 2014). The South African government is reportedly working on this, with a particular interest in the implications for the country regarding liability responsibilities derived from the future implementation of Annex VI of the Environmental Protocol (Sidiropoulos & Wheeler, 2016).

6.2.3.4 Cultural opportunities

Signing the Statement of Interest *Southern Rim Gateway Cities to the Antarctic* (Christchurch City Council, 2009) revitalized the importance of Cape Town's role as an Antarctic gateway within the local government. Officials identified the need for public engagement and raising the profile of the country's participation in Antarctica, and a series of public events were organized, such as open day visits to the research vessel, Antarctic photographic exhibitions, and a street parade featuring the latest Antarctic winter-over team (City of Cape Town, 2012). Also, in 2010 it was acknowledged that having an Antarctic centre in Cape Town to concentrate all things Antarctic would be desirable, and negotiations for this project were announced to start promptly (City of Cape Town, 2012). An "African centre of excellence in Antarctica and the Southern Ocean - an African Polar Institute" would be the catalyst for high-quality African-produced research on topics of current relevance, such as climate change and sea level rise (Sidiropoulos & Wheeler, 2016, p. 52). To date, there has been no progress on the latter project; Antarctic public events do not feature permanently in the city's events and festivals calendar.

Antarctic education, research, and technology developments have been identified among the core priorities to sustain the success of the South African Antarctic research programme in the future (Ansorge et al., 2017; Sidiropoulos & Wheeler, 2016). At the Western Cape, the four public universities in the region, the Cape Peninsula University of Technology, Stellenbosch University, the University of Cape Town, and the University of Western Cape, are organized under the Cape Higher Education Consortium, which facilitates inter-institutional academic collaboration, and shared research funding and resources. Although these universities offer postgraduate degrees and research opportunities to learn and work with renowned South African Antarctic researchers based in the Western Cape, none supports Antarctic undergraduate studies, nor Antarctic-specialist postgraduate degrees. In addition, South Africa's Curriculum and Assessment Policy Statement, which stipulates the policy of teaching and assessment in schools for all children from the age of 7 to 15 years old, does not integrate the study of Antarctica in its learning areas (Department of Basic Education, 2017). Moreover, the many museums available in Cape Town offer comprehensive collections of natural and social history of South Africa but have few or only sporadic displays of the country's

connections with the Antarctic region. The South African Museum offers a permanent exhibition on marine wildlife from the Southern Ocean, such as taxidermy specimens and skeletons of large marine mammals. In addition, the coastal village of Simon's Town, a former whaling town and the main base for South Africa's navy, has a small museum containing logbooks and photographic records of historic Antarctic expeditions, including of Robert Scott's last visit, with his wife, to the Cape (personal observation, Dec 6, 2016).

The National Library of South Africa, Cape Town Campus, has a small collection of Antarctic books and publications available, mostly by European authors despite the prodigious local literary production. Additionally, there are a handful of educational resources for children made available online by the Antarctic Legacy of South Africa (ALSA), and a hardcopy booklet for children during school visits (Louw, 2016). The ALSA Project is an initiative to preserve South Africa's human history in Antarctica and the sub-Antarctic islands, based at Stellenbosch University and funded by the National Research Funding (2015).

The Antarctic education and outreach opportunities for Capetonians are limited, despite the presence of the country's NAP headquarters and a strong regional and national science community. Considering that Cape Town has a literacy index of 92.5% and hosts 97 educational institutes and resources, including three libraries and 12 museums (Koblitz, 2017, pp. 8-9), there is an opportunity to introduce a comprehensive and sustained Antarctic educational and public engagement programme dedicated to the local population.

6.3 Christchurch (New Zealand):

Christchurch is the second largest city in New Zealand, with a population of over 340,000 people living across an area of 1,426 square kilometres (Statistics New Zealand, 2013). Christchurch is the seat of the Canterbury region, a large agricultural province that occupies the central east coast of the South Island; the region is an important contributor to New Zealand's Gross Domestic Product.

Affectionately known as New Zealand's "Garden City" since the mid-19th century, Christchurch has a character that changed from September 2010 when a series of devastating earthquakes began that affected the Canterbury region for several years, with loss of lives and severe damage to city infrastructure, and destruction of multiple homes and iconic buildings (Pickles, 2016). Since then, Christchurch has transitioned from recovery to reconstruction to regeneration, attempting to overcome adversity and reimagine itself; it is now officially promoted as "the city of opportunities" (ChristchurchNZ, 2018b).

6.3.1 Socio-economic views

From its inception, Christchurch was meant to replicate a British agricultural settlement, planned in 1848 by the English Canterbury Association (Rice & Sharfe, 2008). Before its European colonisation, the area was occupied by moa hunters who migrated to New Zealand from Eastern Polynesia around 1300 AD; by the 16th century, Māori groups had migrated from the North Island and ruled the region (Rice & Sharfe, 2008). Since the arrival of the Canterbury European pilgrims in 1850, the English influence in Christchurch has been tangible. Examples are the grid pattern for the city centre, marked by the four avenues named after the forebears of the colony, to building styles, suburbs, introduction of European birdlife and plants, educational institutions and arts, sports, and an Anglican cathedral in the central square. These significant cultural depictions imported from England have perpetuated the representation of Christchurch as “the most English of colonial cities” (Rice & Sharfe, 2008, p. 15).

The Englishness of Christchurch concealed the many interactions that settlers and Māori had throughout history. By the 1980s, Christchurch had a stable Māori population, largely identified with Ngāi Tahu, the largest *iwi* in the South Island. In 1998, Ngāi Tahu’s claims for restitution of *taonga*⁴¹ lost through breaches of the Treaty of Waitangi resulted in public apologies and monetary compensation from the government (Fisher, 2017). Since the legal settlement was recognized, Ngai Tāhu has been a powerful stakeholder and a major economic, environmental, and cultural player in Canterbury (Fisher, 2017; Pickles, 2016). Today, collaborations between Ngāi Tahu and non-Maori organizations are common in Christchurch. For instance, in 2010 a public-private partnership between the Christchurch City Council (CCC) and Ngāi Tahu built the Christchurch Civic Building “Te Hononga” to house the local government’s offices in central Christchurch (Pickles, 2016). Currently, the cultural diversity of Christchurch shows the inclusion of other ethnic groups in the composition of the population, such as Asian and Pacific Islander groups, although the majority of residents continue to self-identify as New Zealanders from European descent (Christchurch City Council, 2019b).

From 2010 to 2012, Canterbury suffered New Zealand’s worst natural disaster since 1931 (Provost, 2017). The Canterbury earthquakes affected the life of Christchurch significantly; the scale of damage (material and psychological) was unprecedented; the extensive destruction of the city’s infrastructure, and damage to residential and business property, resulted in immediate relocation of communities and businesses (Parker & Steenkamp, 2012). By 2012, Christchurch showed a negative population growth of about 9,000 people; the emigrants were

⁴¹ *Taonga*: Maori concept for prized possessions (Moorfield, 2020).

largely in the demographic group of minors to 35–49 years old: these were young families, students, and a large portion of the region’s workforce (Statistics New Zealand, 2013). The Canterbury rebuild required thousands of workers from the construction and engineering industries; migrant workers from within New Zealand and 18 different countries (particularly the Philippines, the UK, and Ireland) brought up Christchurch’s population figures to near pre-quake numbers by the end of 2013 (Bellamy, 2014). Many workers migrated to New Zealand with their families, and some have settled permanently in Canterbury.

The Canterbury population shift added another layer of social, cultural, and economic changes to Christchurch. According to Pickles (2016), the Canterbury earthquakes also revealed the social ruptures that were occurring in Christchurch before the natural disaster. The city’s rebuild offered opportunities to create depictions of Christchurch as a modern and culturally diverse community that no longer represented just the English heritage. Moreover, the Englishness of the city was challenged by the earthquakes with the demolition of and damage to iconic buildings of the colonial plans, such as the Anglican Christ Church Cathedral located in the heart of the city’s CBD. The cathedral, which featured prominently in postcards of Christchurch and the local government’s logo before the earthquakes, was deconsecrated and replaced by a transitional building. The ruins of the old cathedral continue to spark divided arguments; proposals for full restoration are contrasted with community lack of interest in this icon of Christchurch’s Anglican heritage. It was argued that the cathedral had symbolic value for the New Zealand Cantabrian identity, but the local community had other views. In a “Life in Christchurch” survey conducted by the local government, the majority of the participants did not identify the Cathedral among the “features that make the city distinctive and unique” (Christchurch City Council, 2016, p. 16), or agreed that it “contributes to the city identity” (Christchurch City Council, 2016, p. 14). Christchurch is a changing city, adjusting to new urban landscapes post-earthquakes and a multi-cultural society. Meanwhile, official reports emphasize the need for monitoring long-term effects of post-traumatic stress in the Christchurch community (Canterbury DHB, 2016; Provost, 2017), and the underlining social issues, such as ethnic discrimination, that the new migrants are experiencing in their adopted new home (Liu, 2014).

6.3.2 Political views

In spite of its agricultural base and seeming conservatism, Christchurch has also cultivated a radical community of feminists, reformists, and pacifists (Pickles, 2016, September 16). The confronting old-fashioned views against progressive campaigners gave Christchurch the moniker of *The People’s Republic of Christchurch*, a term coined in 1998 by a New Zealand businessman as an insult to the socialist trends of the town (Pickles, 2016, p. 67). Christchurch residents adopted this nickname as sign of non-conformism and independence from the

establishment. In effect, Canterbury has been for decades a stronghold for the New Zealand Labour Party, a centre-left party and one of two major political parties in New Zealand. Presently, the city's government is led by Mayor Lianne Dalziel, who won re-election in 2019 (Christchurch City Council, 2019a). Dalziel is an avid Antarctic supporter, calling herself an Antarctic⁴², who actively hosts the international Antarctic community visiting the city (Dalziel, 2014).

6.3.3 Christchurch's Antarctic connections

6.3.3.1 Historical links

In the 18th century, James Cook's voyages of exploration to the South Pacific and Antarctica included New Zealand. In 1773 and 1774, New Zealand was Cook's expedition's winter base between exploratory voyages south (Søndergård Pedersen & Curtis, 2012). Although Cook never set foot in Canterbury, his voyages are celebrated in Christchurch with a prominently displayed marble statue in the CBD (Christchurch City Council, 2018). Subsequent explorers, such as Russia's Thaddeus Bellingshausen (1819-20), American Charles Wilkes (1838-40), and Norwegian Carstens Borchgrevink (1898-1900) visited New Zealand to provision their ships for their southern voyages. However, Christchurch and its port of Lyttelton became associated with Antarctica from the beginning of the 20th century; Lyttelton played a major role in the support of expeditions of the Heroic Era of Antarctic explorations. Christchurch, with its geographic location and its affluent English population, became a convenient stopover for British-led expeditions to the southern continent. The New Zealand government and the public supported the Antarctic expeditions of Robert Scott (1901-04 and 1910-12) and Ernest Shackleton (1907-09 and 1917). The people of Christchurch showed great interest in these expeditions: they provided financial support, fresh food, coal, a workforce, and logistic support whilst establishing long-term personal and professional relationships with the explorers (Mountevans, 1953; Norris & New Zealand Antarctic Society, 1997). Scott, Shackleton, and their men were a welcome distraction for the rural and isolated English society of Christchurch; they held public lectures, and social gatherings were celebrated in their honour. As result, Christchurch has many sites with Antarctic links associated with these expeditions, which are promoted as sites of significance by the local Antarctic Office (2017).

The success or failure of the above-mentioned expeditions were celebrated or mourned in Canterbury. In February 1913, Christchurch grieved at the news of Scott's death in Antarctica (Lyttelton Times, 1913); soon after, the CCC commissioned a statue of the polar hero sculpted by his widow, Kathleen Scott (Quartermain, 1971). In 1917, the "white as the Antarctic" statue

⁴² *Antarcticar*: An informal term to identify those who have a personal Antarctic experience.

(Evans & Frazer, 1952, 3:02 min) made of Italian Carrara marble was presented to the people of Christchurch in a well-attended ceremony that included Mrs Scott and hundreds of Cantabrians (Christchurch City Council, 2018). Since then, the statue has been the centre point for public gatherings of an Antarctic-related nature. Scott's statue resonates with Christchurch people's cultural representations of Antarctica and the city's Antarctic links: when the statue fell off its plinth during the Canterbury earthquakes, the public pressured the local government to repair and reinstate this symbolic art piece. Public and private stakeholders formed a restoration group to assist the CCC with the repairs, as there were fears that Scott's statue would become another earthquake-related delayed project. In a public ceremony in October 2017, Scott's restored statue was reinstated to its plinth at its original site on the banks of the Avon River (Figure 6.6) (Harvie, 2017).

New Zealand continued to host Antarctic expeditions, this time from a new Antarctic power. From 1928, Wellington and Dunedin were the starting points for the US Antarctic expeditions led by Admiral Richard Byrd (Quartermain, 1971). However, in 1955, Christchurch regained its Antarctic gateway status when the US military task force "Operation Deep Freeze I" (ODF) launched its Antarctic air and naval operations from this city (Peat, 2007). Retired Admiral Byrd was the Officer in Charge of ODF and he suggested Christchurch as the base for the largest US Antarctic programme. Curiously, unlike the other two New Zealand cities that hosted Admiral Byrd's expeditions, Christchurch holds no statues or memorials of this influential explorer. ODF's goal was to enable an intercontinental air-link with Antarctica to land aeroplanes at the South Pole in preparation for the scientific activities planned for the IGY in 1957-58 (Hunt & Quartermain, 1968). ODF was a joint aerial and naval mission: aeroplanes flew from Christchurch to Antarctica and US navy ships provided logistical and safety support, such as the preparation of an ice airstrip at McMurdo Sound, weather reports, radio communications, and safety at sea in case of emergency landings (Ministry for Culture and Heritage, 2014). Christchurch played host and partner to the US Antarctic mission; the Wigram aerodrome, base to the Royal New Zealand Air Force, served as the base for the US navy air squadron. The city's international airport had nearby facilities and barracks used during World War II that were transformed into the headquarters of the US Antarctic military and civil operations (Peat, 2007). The first flights to Antarctica from Christchurch departed in December 1955. Although the aeroplanes were unsuccessful at landing in Antarctica at the time due to adverse weather conditions, the aircraft reached their destination in 14 hours, proving that aerial accessibility to the southern continent was possible (Peat, 2007). From that moment, Christchurch became the Antarctic air gateway for the US and New Zealand.

New Zealand's interest in supporting US Antarctic endeavours had political reasons. Byrd's previous expeditions proved that the American government was planning the establishment of

bases in Antarctica, and possibly laying claims over the recently discovered Marie Byrd Land (Dodds, 1997). The growing tensions between claimant countries over pretended Antarctic territory pressured New Zealand to consolidate its Antarctic interests and move from a modest declaration of sovereignty to properly asserting management of its claimed Ross Dependency (Dodds, 1997). The association with the US provided the logistic support needed and a political ally in Antarctic matters.

Dodd argues that Anderson's concept of "imagined community" (1991) seems fitting for the events that unfolded in New Zealand in the mid-1950s with regard to the country's participation in the TAE (2005). New Zealand provided the TAE's continental crossing support party, led by New Zealander Edmund Hillary, who had recently received a knighthood for the first ascent of Mount Everest (Dodds, 2005). Although since 1923 New Zealand had held an Antarctic claim ceded by the UK, its Antarctic activity had been so far non-existent; New Zealand was seen as "mainly a sleeping partner" in Antarctica (Templeton, 2000, p. 13). New Zealand and Hillary's participation in the TAE produced a frenzy of activity in the country in support of the expeditioners, led by the Ross Sea Committee and by the New Zealand Antarctic Society (NZAS), which was influential in lobbying the government for the country's active presence in Antarctica (Peat, 1983). The TAE support party was New Zealand's first Antarctic expedition, and swiftly the country's first (Antarctic) "home grown expeditioners" (Peat, 1983, p. 26) paraded nationally to raise funds. A national fundraising campaign was launched in 1955-56, appealing to the media and the public for donations (Dodds, 2005). The NZAS set up fundraising targets; the Christchurch Antarctic Appeal Committee promised to secure over 10% from the national amount (Peat, 1983). A series of public activities were organized, such as lectures, screening of movies, the sponsoring of the expedition's dogs by school children, and the printing of certificates and booklets with Antarctic information (Dodds, 2005). The 32-page *Antarctic Appeal Booklet* was a multi-purpose tool used for fundraising, for creating public Antarctic awareness, and as state propaganda. This expedition was New Zealand's Antarctic awakening. The booklet contained messages with a rather nationalistic tone, such as, "New Zealand's special interest in the TAE [since] the route passes through her own territory, the Ross Dependency" (Christchurch Antarctic Appeal Committee, 1956, p. 5). It appealed to the raising of national pride, encouraging people to donate generously so the New Zealand Antarctic Expedition would "be the best fed and best equipped party ever to undertake exploration work in the Antarctic" (Christchurch Antarctic Appeal Committee, 1956, p. 3). It also informed the public on the little-known Ross Dependency as a New Zealand jurisdiction since 1923 (Christchurch Antarctic Appeal Committee, 1956). New Zealand's participation in the TAE was fundamental for the consolidation of a permanent presence and management of the Ross Dependency with the establishment of Scott Base in 1957 (Peat, 2007). The science programme carried out by New Zealand researchers contributed to the international IGY

programme, and earned New Zealand a place in the negotiating table of the Antarctic Treaty. Moreover, the support New Zealand received from the US during this seminal expedition sealed a close relationship in Antarctic affairs between the two countries that still remains today.

If the TAE was the catalyst for the New Zealand government's understanding of the geopolitical importance of Antarctica, the IGY was the opportunity to initiate a legacy of local Antarctic scientists. In 1958, the Minister of Scientific and Industrial Research coordinated New Zealand's science activities in Antarctica, and the Department of Scientific and Industrial Research (DSIR) implemented the programme. Originally established in Wellington, DSIR's Antarctic Division transferred to Christchurch in 1970 and became the precursor of the New Zealand Antarctic Programme (Peat, 2007).



Figure 6.5: Robert F. Scott statue, Christchurch

6.3.3.2 Contemporary connections

In the late 1980s, changes in the Antarctic political scenario threatened Christchurch's gateway role. Some states initiated a demilitarization process in the polar region as science seemed to be the focus of a country's Antarctic activities. The shrinking military presence in Antarctica came with the implementation of the ATS, and, as political tensions of the Cold War receded, many countries reduced their Antarctic budgets and retired their military from their icy posts. ODF withdrew its Antarctic military operations by 1998 and the National Science Foundation became the coordinator of the US Antarctic Program (USAP), while the US Air Force provided the travel logistics (Peat, 2007). The changes jeopardised Christchurch's

comfortable position as the host of a large American base, with the risk of losing business and its reputation as an Antarctic city, along with the much-needed US logistic support for New Zealand's Antarctic operations. The CCC and its co-owned Christchurch International Airport Ltd (CIAL) proposed a multi-million-dollar development, known as the International Antarctic Centre (IAC), built on CIAL-owned land. Once again, the people of Christchurch were exposed to the political and economic interests their city (and country) had with Antarctica. Media headlines calling Christchurch the capital of and gateway to The Ice⁴³ populated the local news outlets throughout the 1988 and 1990s. There was much enthusiasm and support for the consolidation of Christchurch as an essential gateway to the Ross Sea Region. Christchurch also aspired to hosting international Antarctic agencies, such as the secretariat of the recently proposed Antarctic Minerals Commission, agreed at the Convention on the Regulation of Antarctic Mineral Resources, and the AT secretariat (Riddell, 1988). Although neither of these two secretariats eventuated at the time, Christchurch certainly entertained the idea of concentrating the power of international Antarctic agencies at home.

The IAC opened its facilities in October 1990 to house the New Zealand and US Antarctic programmes. Despite the excitement and public attention generated, it appears that without the USAP commitment to lease and financially support this project, the IAC would not have been completed (Peat, 2007). The close relationship maintained since the 1950s transformed the two countries into associates: the US and New Zealand see each other as Antarctic partners with mutual obligations and benefits (Antarctica New Zealand, 2010; Peat, 2007). This partnership entails a standing logistics pool where the US provides the greater part of the air transportation required to conduct science and support personnel in Antarctica for both countries (Brady, 2013a). Some commentators argue that the New Zealand-US Antarctic partnership has favoured New Zealand more, since without the US logistics support it could not sustain its ambitious science programme (Brady, 2011). However, endorsements by US President Clinton on his official visit to New Zealand, and to Christchurch in particular, indicate the US also sees advantages in this partnership. In 1999, Clinton said, "I come here to this beautiful city and to this place to deepen a partnership between the United States and New Zealand that is already long and strong", adding "for the United States and New Zealand, our commitments to Antarctica are based right here in Christchurch" (Clinton, 1999, p. 2). For the US, Christchurch offers the most direct route to its Antarctic area of interest (Ross Island and the South Pole); New Zealand is an ally and the size of its NAP does not threaten the American hegemony in the region. In addition, the strong collaboration between the two countries has now been extended to other NAPs who launch their expeditions from Christchurch, such as

⁴³ *The Ice*: colloquial term for Antarctica.

Italy, Korea, China, and Germany, with Germany expected to operate from this city in the near future (Harrowfield, 2017).

Compared with other Antarctic gateways, Christchurch is unique in offering at the IAC a working campus that concentrates its Antarctic resources and partners. The IAC is strategically located with easy access to Christchurch airport, and currently houses the administration offices for Antarctica New Zealand (ANTANZ), the USAP, and the New Zealand Antarctic Research Institute (NZARI), along with the Christchurch Office for the Korea Polar Research Institute and a seasonal unit from the Italian Programma Nazionale di Ricerche in Antartide. Also, the IAC houses an Antarctic departure lounge to expedite access to safety information before flights and Customs controls for travelling to Antarctica. The IAC premises include workshops and warehouses for the operating NAPs, the administration for the Antarctic Heritage Trust⁴⁴, and a visitor centre (Roldan, 2011). The visitor centre is currently one of Christchurch's most popular tourist attractions. Its interactive exhibits and shows, and the multi-terrain vehicle rides, along with a display that simulates the cold and windy conditions of Antarctica, have gained more popularity as a stand-alone tourism attraction rather than having a role within the IAC campus and the Antarctic partnerships. Despite the global economic downturn of 2008 and the negative impact on the economy of the Canterbury earthquakes, the IAC attraction has continued operating since its opening. In 2015, New Zealand tourism operator Real Journeys bought the IAC attraction and has plans to upgrade the facilities, investing an estimated two-to-three million (New Zealand) dollars to offer visitors a better Antarctic experience and a much-needed update of Antarctic science and cultural information (Saunders et al., 2016). Currently, the IAC attraction is the only Antarctic-themed tourism venture of its kind in the world.

Among the many Antarctic assets that Christchurch claims, one of international significance is hosting the secretariat for COMNAP since 2009. The COMNAP secretariat is based at the University of Canterbury, and its Executive Secretary, Ms Michelle Rogan-Finnemore, is the first woman appointed to the role; her tenure at COMNAP will continue to 2021 (Saunders et al., 2016). The COMNAP secretariat brings Antarctic diplomacy to the city, organizes international meetings, and contributes to community-engagement programmes, raising the profile on Christchurch as a gateway city.

While Christchurch is a busy aerial Antarctic gateway city to the Ross Sea Region, the weakest link to its role as transport facilitator is its port. Despite Lyttelton's historical connections to early 20th century Antarctic expeditions and the critical support provided to the US navy during

⁴⁴ A not-for-profit organization dedicated to the restoration and care for the historic huts located in the Ross Dependency.

ODF, Antarctic maritime activity is reduced to a handful of ships visiting annually. This can be interpreted as a result of the modern reliance on air transport to access Antarctica, the lack of New Zealand Antarctic ships based in Canterbury, and the strong influence of the US Antarctic operations. In effect, US navy Antarctic ships stopped calling at New Zealand as result of the country's anti-nuclear legislation. In the mid-1980s, New Zealand barred nuclear-powered and nuclear-armed ships from its ports and the US government refused to admit which US navy ships were nuclear-armed (Peat, 2007). Consequently, US Antarctic resupply vessels stopped calling at Lyttelton from 1984, using Hobart instead (Brady, 2013a). Only US contractor resupply cargo vessels called in occasionally at Christchurch's port, until February 2017, when the US Coast Guard *Polar Star* was granted permission by the New Zealand government to visit Lyttelton (U.S.Embassy & Consulate in New Zealand, 2017). New Zealand's good diplomatic relationships with other Antarctic states have enabled Lyttelton to host official visits from other NAP ships. Some vessels call annually during the summer months for re-supply voyages, such as the Italian Antarctic expedition vessel *Laura Bassi*, and more recently the Korean icebreaker *Araon* (Figure 6.7) (The Antarctic Office, 2017). Others, such as the HMS *Protector* from the UK and the *Xuě Lóng* from China, schedule a diplomatic visit en route to Antarctica but operate from other gateways (Beggs & James, 2015).

The absence of critical resources and infrastructure for Antarctic vessels at Lyttelton port constrains the role of Christchurch as a maritime Antarctic gateway. These include marine gas oil for refuelling, a dedicated cruise ship berth, and a passenger terminal. It is expected that the Lyttelton Port Recovery Plan (Environment Canterbury, 2015) will bring a necessary upgrade to the port facilities that were damaged during the Canterbury earthquakes, and also improvements to the old infrastructure and services. It should be noted that the Port Recovery Plan acknowledges the Antarctic heritage of Lyttelton, but does not contemplate integrating specialized technology-based services to supply Antarctic vessels to the new developments. The Lyttelton Port Company, a CCC-owned entity, has clearly expressed in its latest annual review that in the next 30 years it will concentrate its efforts on maintaining its leadership as the gateway for international trade for New Zealand's South Island, with no mention of the Antarctic connection in its 42-page report (Lyttelton Port Company, 2020). It appears Christchurch's Antarctic maritime connection might not be as strong as the local government celebrates.

6.3.3.3 Economic perspectives

Christchurch has a committed group of public and private Antarctic stakeholders that complement the connections of the city with the South, representing businesses from the industrial, technology, innovation, education, research, tourism, and governmental sectors. Despite the many attempts to formalize the leadership of Christchurch's Antarctic

stakeholders, it has taken nearly 20 years for a government agency to materialize. The first Antarctic stakeholders regional body, Antarctic Link Canterbury, was formed in 2000 to develop collaborative partnerships and promote the city's Antarctic gateway role (Muir, 2004). In 2004, "Project Antarctica" produced an economic impact study of the Antarctic-related activities in Canterbury, revealing a direct annual contribution of NZD 88 million to the Canterbury economy and a partial estimate contribution of NZD 133 million to the New Zealand economy (Canterbury Development Corporation, 2007, p. 14). The main economic contributors were NAPs, followed by tourism and fishing (Canterbury Development Corporation, 2007). Project Antarctica's report included a set of recommendations for Christchurch to become a competitive Antarctic gateway; the most salient was to create a dedicated Antarctic Support Office to lead the coordination of regular events, assist local organizations, and attract education, research, and business opportunities (Canterbury Development Corporation, 2007). Despite the initial enthusiasm shown by the local government, the Antarctic Office (AO) did not materialize for another decade.

In 2016, the CCC established the AO to design and lead the city's Antarctic Strategy in consultation with stakeholders and the local community. Launched in 2018, Christchurch's Antarctic Gateway Strategy sets a 10-year working plan and priorities for the city. The strategy's principles are underpinned by three themes of Māori culture: (a) *kaitiakitanga*, interpreted as care and respect for the environment, (b) *manaakitanga*, understood as the role of host to the national and international partners and visitors, and (c) exploration, which encompasses the legacy of exploration and search for understanding through science, knowledge, and experiences (ChristchurchNZ, 2018a, p. 5). These themes accompany the four priorities established in this document, which emphasize the city's role as a gateway and its contribution to the national and international Antarctic communities. The priorities in this strategy list goals for delivering excellence in services, logistics, and business, improving community engagement and identity with Antarctica, and supporting the advancement of Antarctic science, knowledge, and education (ChristchurchNZ, 2018a). In addition, the fourth priority is to champion sustainability "for the benefit of the Antarctic region, our city and the world", a priority that fits with the CCC's ambitions of being carbon neutral by 2030 (ChristchurchNZ, 2018a, p. 21). The last priority is the one innovative goal from this strategy that was not present in former iterations of this document. Priority four (champion sustainability), sets aspirations of sustainable living in Christchurch that will transfer to the Antarctic activities originated in the city, and that will ultimately affect Antarctica. The other above-mentioned priorities are a reflection of activities that have been carried out by local and national Antarctic stakeholders since the 1990s, albeit without the coordination of a local agency. The rest of this long-anticipated strategy contains much motivation on maintaining and improving the city's existing Antarctic activities, but the scope for developing further

initiatives is limited. For instance, in 2016 the Antarctic science community identified the needs and challenges that will be faced in the next two decades in conducting robust research in Antarctica, expressed in the seminal report *Antarctic Roadmap Challenges* (ARC) (Kennicutt, Kim, & Rogan-Finnemore, 2016). The immediate future for Antarctic science programmes will require year-round access to the continent and the Southern Ocean, and the development of extraordinary logistic capabilities, among other requirements (Kennicutt et al., 2016). These requirements pose challenges to the future of Antarctic gateway cities and the logistic operations of NAPs to support the science and logistics in the southern region. The above requirements fit Christchurch's aspirations for "being an exemplary gateway city" (ChristchurchNZ, 2018a, p. 11). However, despite identifying the ARC as a guiding document that highlights constraints and opportunities for New Zealand's entrepreneurs and its innovative and technology industries, Christchurch's strategy restricts the scope of its activities, taking a supportive role instead of leading the action.

Christchurch's role as the country's Antarctic gateway creates great economic advantages for the region; it stimulates development and is a generator of employment. A recent economic evaluation calculated that the aggregated economic impact of Antarctic-related activities was NZD 124 million for the Canterbury economy and NZD 178 million for the country's economy (Saunders et al., 2016, p. vii). These figures were estimated on the activities related to NAPs, tourism and Antarctic events, education and research, commercial Southern Ocean fishing, and Antarctic heritage work. Also, this economic impact report estimated that the Antarctic connection generates nearly 4,000 jobs in Canterbury, and close to 7,000 jobs for the whole of New Zealand (Saunders et al., 2016). The report also identifies important Antarctic-related developments for the near future that have the potential to generate greater economic impacts for Canterbury, such as the proposed reconstruction of the US McMurdo Station (estimated at USD 300 million), which opens the possibility of employing a specialized New Zealand workforce and local technology (Saunders et al., 2016). Also, the new infrastructural developments proposed for Scott Base could generate business opportunities and employment for the Canterbury region; holding international Antarctic conferences, such as SCAR Biology 2021, in Christchurch, will bring thousands of delegates to the gateway city. In addition, the participation of other NAPs in the Ross Sea Region with intentions to conduct research and construct a new Antarctic research station, increases the pool of economic investments that will have an impact in Christchurch, and indirectly in the New Zealand economy.

Regarding tourism, Christchurch hosts New Zealand's only Antarctic tour operator, Heritage Expeditions. Since the mid-1980s, this family-owned and -operated company has specialized in sub-Antarctic, Antarctic, and Arctic voyages. Heritage Expeditions organizes two Antarctic

voyages per season sailing from New Zealand: the voyages start or end in Lyttelton, alternating with the port of Bluff (in southern New Zealand) for its Antarctic operations (Heritage Expeditions, 2018). Heritage Expeditions' Antarctic voyages access the Ross Sea, and, occasionally, Commonwealth Bay, which are two sought-after destinations for the discerning polar traveller.

6.3.3.4 Cultural opportunities

Starting in 1965, a tradition developed in Christchurch between members of the local Antarctic community and those from the USAP of gathering in informal social occasions to celebrate the start of the Antarctic season (Harrowfield, 2017). This tradition has now morphed into formal festivities organized by the CCC, where the city's mayor hosts distinguished visitors, diplomats, and members of the Antarctic community in a series of events during the Antarctic Season Opening (ASO), which coincides with the first Antarctic flight of the season. During the ASO, Antarctic managers, policy-makers, scientists, and local Antarticans get together in Christchurch to celebrate the Antarctic connection. The ASO is an opportunity to showcase Christchurch's infrastructure and logistic capabilities, as well as a community of scientists, businesses, entrepreneurs, and creative minds interested in supplying products and services to the Antarctic market. In addition, the ASO organizes outreach activities to improve interest in and understanding of the city's Antarctic connection among the local community. Popular activities for the public are open-day visits to Antarctic ships, and the annual open-air day at the airport, where people have a first-hand experience visiting the military planes that provide transport to Antarctica.

Antarctic community outreach seems to be of importance to Christchurch's government. In 2012, the CCC organized the Antarctic festival New Zealand IceFest, planned as a biennial public event to "highlight New Zealand's leadership in Antarctica and the Southern Ocean" (NZ IceFest, 2014). The festival was a community event and ran for multiple weeks at the start of the ASO, coinciding with the spring school holidays. New Zealand IceFest received a generous investment from the national government, and additional sponsorship and in-kind contributions from major partners, namely ANTANZ, COMNAP, the University of Canterbury, CIAL, and the CCC (NZ IceFest, 2014). In 2014, the second edition of the New Zealand IceFest was meant to deliver bigger goals than its predecessor, such as attracting national and international visitors to Christchurch, and becoming the key outreach programme for the city's Antarctic partners (NZ IceFest, 2014). Despite its efforts, and a state-of-the-art Antarctic Time Travel interactive exhibition created in collaboration with New Zealand scientists, science communicators, educators, and artists, the festival did not deliver on the expectations of the public and the main stakeholders (Dwan & Turkington, 2015). The low number of attendees

(local, regional, and international) left doubts as to the effectiveness of using a public festival as the main conduit to creating public awareness of Antarctica and attracting business opportunities for Christchurch (Dwan & Turkington, 2015). A performance review of New Zealand IceFest concluded that stakeholders' expectations were diverse and undeliverable, due to the lack of a guiding document to lead the objectives of the festival (Dwan & Turkington, 2015). Low public attendance, budget constraints, and the imminent creation of the Antarctic Office postponed the 2016 and 2018 New Zealand IceFest. The future of this festival as a permanent feature in Christchurch's events calendar is uncertain (Cairns, 2015). Since 2014, the festival has been scaled down to a half-week event of Antarctic-related activities for the public (ChristchurchNZ, 2019).

Another aspect that contributes to Christchurch's Antarctic gateway role is Antarctic education and science research. At UC, Gateway Antarctica (GA) is the centre for Antarctic studies and research. GA Antarctic researchers are experts in the fields of remote sensing and glaciology, geology, social sciences and humanities, physics, and marine ecosystems (Gateway Antarctica, n.d.). Since opening in 2000, GA has offered undergraduate courses and postgraduate degrees in Antarctica studies. It organizes a unique Postgraduate Certificate in Antarctic Studies (PCAS), an intensive 14-week course of lectures, academic outputs, and a visit to Antarctica through the New Zealand Antarctic Programme. Also, GA contributes to community outreach programmes, organizing public talks on a wide range of Antarctic topics. UC's extensive Antarctic library holdings include those of the Macmillan Brown Library, which is a specialized collection of literature, maps, and objects from Antarctic and sub-Antarctic collections.

For the wider public, Christchurch has other opportunities to learn about the Antarctic connection. Besides the IAC tourism attraction, the Canterbury Museum houses the longest-running exhibition on the history of Antarctic exploration in the Ross Sea Region. The Antarctic Gallery exhibits include history and objects from the sealing and whaling industries of the 1800s, and an extensive collection from expeditions from the Heroic Era. The largest objects on display are some of the vehicles involved in the traverse to the South Pole from the TAE. The collection of artefacts and memorabilia that the Canterbury Museum holds is notable, with many of the objects donated by the explorers or their families to honour the contributions of the Canterbury Museum and Christchurch to their expeditions (Peat, 1983). The Museum's Antarctic displays are complemented by an exhibit on Antarctic and sub-Antarctic fauna, and a model of life at Scott Base in the 1970s. The Museum has an impressive collection of Antarctic fossils, rocks, and meteorites, as well as an extensive archive of private documents, photographs, and maps available on-demand for research (S. Murray, personal communication, 16 September 2016). Also, for younger audiences, the IAC attraction, the Air

Force Museum, and the Canterbury Museum offer school curriculum-based Antarctic education and holiday programmes.

It is important to mention the dedicated efforts of the NZAS and its Canterbury branch in fostering public interest in Antarctica (New Zealand Antarctic Society, 2017). Its members are loyal participants and volunteer in diverse Antarctic activities that take place in Christchurch, such as the organization of public Antarctic talks and facilitating some of the festivities of the ASO.



Figure 6.7: Korea's icebreaker RV Araon in Lyttelton

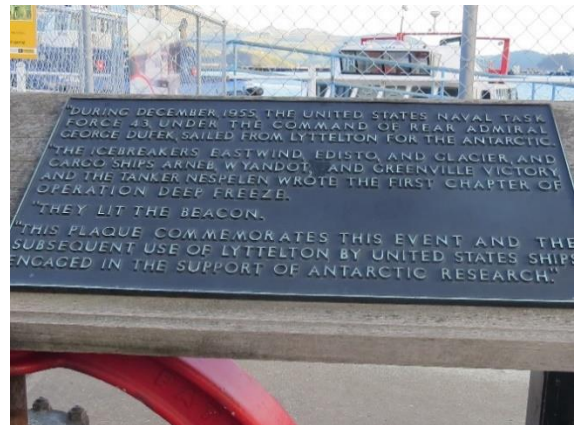


Figure 6.8: Plaque commemorating Christchurch as the USAP's gateway, Lyttelton



Figure 6.9: Friendship Totem Pole, Christchurch



Figure 6.10: Antarctic dog statue, Lyttelton

The streets of Christchurch have objects gifted to the city by Antarctic actors to celebrate the connections with the southern continent. In 1917, an oak tree was planted by Sir Ernest Shackleton as a gift for the hospitality and support received to all his expeditions. Also, there are commemorative plaques in public spaces celebrating the New Zealand-US Antarctic partnership (Figure 6.8). Near the former ODF barracks there is the Friendship Totem Pole, which was gifted to Christchurch by the people of Oregon (US) for the hospitality received during their Antarctic operations (Figure 6.9). At Lyttelton township, the dogs used for travel and companionship in the Antarctic are remembered with a life-size sculpture donated to the city by the NZAS (Figure 6.10). However, despite the many sites of historic interest and modern-day Antarctic connections scattered around Christchurch, these sites are underutilized for creating awareness of the city's Antarctic links. Currently, there is no information brochure, listing, or publication available to the public that could facilitate a further understanding of Christchurch's links to Antarctica.

6.4 Hobart (Australia):

Hobart is the administrative capital of Tasmania, Australia's only island state. Hobart is located on the western shores of the Derwent River and spread along the slopes of kunanyi/Mount Wellington. Hobart is Australia's smallest state capital, covering a surface of 1,695.5 square kilometres, with an estimated population of 240,000 people living within the city and Greater Hobart (Australian Bureau of Statistics, 2019).

Hobart has the appeal of a small but elegant city with a dynamic and beautiful waterfront that dominates the horizon. The city has many heritage areas that are linked to its British past, such as the historic Georgian-style buildings of Battery Point and Salamanca Place, which have been repurposed for the hospitality and entertainment industries. Furthermore, a popular natural attraction of Hobart is kunanyi/Mount Wellington, the tallest mountain in the area, which provided natural resources for native peoples and colonial settlers. Today, it is a recreational area and wilderness experience within the city. Hobartians are fond of their iconic mountain; proposals for commercial developments, such as the installation of a cable car to the top of the mountain, divide the local opinion and create heated socio-political debates.

6.4.1 Socio-economic views

Tasmania's human history is one of the oldest in Australia. Before the arrival of Europeans, Aboriginals had inhabited Australia for more than 50,000 years, arriving in Tasmania approximately 35,000 years ago (Ludeke, 1974). Despite the island being inhabited for millennia by Palawa people, the discovery of Tasmania is credited to the Dutch explorer Abel

Tasman, who in 1642 named the island *Van Diemen's Land* in honour of the Dutch East Indies governor general (Robson & Roe, 1997). The Dutch interests declined by the end of the 17th century, and the new colonists arrived in Tasmania following James Cook's 1773 and 1779 expeditions (Robson & Roe, 1997). In 1804, the British established a convict colony in Sullivan's Cove where Hobart sits today (Alexander & Petrow, 2005).

From its inception, the town of Hobart resembled an English village, with main central streets named after the queen of England, past governors, and places from the colonist mother country (Davison, 2005). Very soon, Hobart developed as a busy port, but despite prosperity the town held onto the stigma of being a place for convicts and outlaws long after the penal colony had finished operating (Alexander & Petrow, 2005). Today, Hobart's attitudes to its colonial past have changed: there is interest in the town's history and better appreciation of the contributions made by the convicts and their families to the culture and identity of the place (Timms, 2012). Moreover, the Englishness of its urban settings is confronted with unconventional art events and freedom of expression; people have embraced the clichés and stereotypes about Tasmanians that once were hurtful, to recreate an appealing eccentricity unique to this place (Timms, 2012).

Hobart city has expanded considerably from its foundational site, spreading along the river and shoreline, and restricted by the hillside of kunanyi/Mount Wellington. Hobart's CBD is considered a symbol of the social divide between the affluent and the lower working class. The northern suburbs are considered within the "flannelette curtain", a regionalist term to refer to the areas where the families live who can only afford to wear low-priced flannel shirts (Booth, 2017), while south of the city centre are the affluent and desirable places to live.

Today, the majority of Hobart's population was born in Australia; only 1.4% of people are of indigenous origin and 24% were born overseas (Council, 2016). Hobartians descend from English, Irish, Scottish, and Germans (Australian Bureau of Statistics, 2019). Since the 1970s, communities of Chinese, Dutch, Greek, and Italian immigrants have also been represented (Council, 2016). In addition, since the 2000s, Hobart has received thousands of migrants and refugees from the most impoverished countries and war-zones, such as Sudan, Sierra Leone, Ethiopia, Afghanistan, and Rwanda, among others (Flanagan, 2007).

Tasmania, like the rest of Australia, is taking steps to come to terms with its cruel past towards Aboriginal peoples. Tasmanian Aboriginals suffered under British ruling from the onset of the colony; people were removed from their land, exploited as labour, forced to move to reserves, or killed (Ludeke, 1974). Acknowledgement of wrong-doing and efforts for reconciliation with the Aboriginal communities reached a legal precedent with The Stolen Generation of Aboriginal Children Bill 2006 and a nation-wide apology from Australia's prime minister in 2007

(Australian Government, 2008). Although it is thought that the last full-blooded Aboriginal from Tasmania died in 1876 (Ludeke, 1974), people of mixed descent claim Aboriginality and continue to fight for recognition of their culture, acceptance, and restitution of land (Shine, 2017).

Hobart's diverse economy is driven by exports of commodities based on natural resource extraction: mining, logging, and fish farming are the main drivers (Tasmanian Government, 2017). Since the mid-20th century, tourism has been a major contributor to Hobart's economy, with the city receiving over one million tourists in the 2016-17 period (Hobart City Council, 2017). However, like the rest of Tasmania, Hobart relies heavily on federal government spending and investment for economic development (Tasmanian Government, 2017). Tasmania is Australia's under-performing state in economic, social, and cultural areas, showing, for instance, the highest unemployment rate in the country (West, 2013). Many Tasmanians rely on government subsidies as sole income, and the government is the main employer (West, 2013). The economy of Hobart does not stray from the state's indicators: the city's government is the largest employer for health care and social assistance, public administration and safety, and education and training (Hobart City Council, 2017).

Hobart is no longer an isolated post in the south, and the unkind stereotypes that Australians had for Tasmanians as rural and unsophisticated now conflict with the new image of "authenticity" (Timms, 2012, p. 85) and the eccentricity that some recent developments have brought to the city. The Museum of Old and New Art, better known as MONA, opened in 2011 to house the private eclectic art collection of the museum owner David Walsh (Booth, 2017). Walsh is a self-made millionaire, a controversial and eccentric personality who is credited with changing the reputation of the city and attracting international tourism to its unconventional museum (Bhole, 2017). MONA's influence seems to be driving Hobart's new found popularity and expansion, both in tourism numbers and with the local business community (Salmon, 2016). This growth might be the incentive younger generations need to stay and contribute to a developing city with an aging population (Council, 2016).

6.4.2 Political views

Hobart concentrates all the political power of Tasmania in one small city. It is the seat of the government of Tasmania and the executive power under the leadership of the premier of Tasmania, Will Hodgman, who leads the Liberal Party locally (Tasmanian Government, n.d.). Furthermore, the state legislative authority, the Parliament of Tasmania, holds sessions at Parliament House, which is found in the heart of the city centre. In addition, Tasmania has a governor, an apolitical role appointed by the queen of England to represent the Crown in official duties (Government of Tasmania, n.d.). The governor resides and works at Government

House, located in the parks of Hobart's Queen's Domains. At the city level, the Lord Mayor, Anna Reynolds, an experienced politician and former Green Party representative, has governed Hobart since October 2018 (City of Hobart, 2018).

Politics in Tasmania have been dominated by the two larger national political parties, Liberals and Labour, but the Green Party is the third strongest political power and considers Tasmania its birthplace (Milne, 2006). Since 1972, the Green Party has challenged the conservatism of governments that favoured a state economy based on high-volume but low value exploitation of natural resources (Milne, 2006). Tasmania's many conservation wilderness areas, which account for about 21% of the state's total land, are an attractive asset for the adventure tourism industry and Tasmania's reputation of unspoiled beauty, albeit that many Tasmanians have a different view and would support exploitation over conservation (West, 2013).

6.4.3 Hobart's Antarctic connections

6.4.3.1 Historic links

As one of Australia's oldest cities, Hobart became the meeting point for travellers, traders, and explorers of the South Pacific. Hobart's port developed as a major centre for the sealing and whaling industry throughout the 19th century, and it was known in the UK not only for its penal colony but also for providing much-sought-after whale products for international markets (Evans, 2006). Whaling ships exploring the Southern Ocean resupplied in Hobart, and the town was first to learn of new discoveries made by European expeditions. For instance, in 1805-06, British whaler Abraham Bristow found the sub-Antarctic Auckland Islands; in 1809-10, sealer Frederik Hasselburg discovered Campbell and Macquarie islands; in 1830-33, John Biscoe, working for the British sealing and whaling company Enderby Brothers, discovered Enderby Land in Antarctica (Riffenburgh, 2007). Hobart evokes the influence of the sealing and whaling industry today with information panels along the waterfront and the presence of whaler's trypots in public spaces (Figure 6.11).

The discoveries and the trade associated with them soon enticed European nations to explore further south. Hobart became the port of choice for Antarctic explorers, and the hub for news: it was the southernmost tip of the known world, and, as Leane suggests, the "means to another end": the Antarctic (2016, p. 34). In 1837-40, French explorer Jules Dumont d'Urville commanded the French Naval Expedition exploring much of the Antarctic coastline and discovering Adélie Land (Riffenburgh, 2007). Dumont d'Urville spent two winters in Hobart while recovering between Antarctic voyages; his description of the colony showed much appreciation for the hospitality received. Also, some crew spent a longer time in Hobart, recovering from their ailments; others died and were buried in Cornelian Bay cemetery (Dunmore, 2007; Kriwoken, 2011). Dumont d'Urville's Antarctic discoveries were significant,

and he announced them to the world through the local newspaper, *The Hobart Town Courier and Van Diemen's Land Gazette* (1840). Dumont d'Urville was aware of the competition from other nations to claim discoveries; hence he did not want to wait until returning to France (Dunmore, 2007). Dumont d'Urville sent a letter to the *Gazette* with a detailed description of the new lands and the perils of the voyage. The news article congratulated the French expedition for its geographic accomplishments, finishing the report saying "although not much will have been gained by this enterprise in point of utility, it will add greatly to our geographical and scientific knowledge" (The Hobart Town Courier and Van Diemen's Land Gazette, 1840, p. 2). France would later claim Dumont d'Urville's discoveries as rights for assertion of Antarctic territory, a claim that disrupts Australia's Antarctic territorial pretention.

In 1839, the British Naval Expedition led by Capt. James Clark Ross sailed from Hobart (Riffenburgh, 2007). Ross had plenty of Arctic experience and the Admiralty had commissioned him to make magnetic observations in the Antarctic to find the position of the South Magnetic Pole (Søndergård Pedersen & Curtis, 2012). For such endeavours, Ross required a magnetic observatory to calibrate instruments from land before heading south. In support of the British expedition, the Van Diemen's Land governor, Sir John Franklin, commissioned the construction of a magnetic observatory, using convict labour (Parrott, 2006). Ross was the most accomplished British polar explorer of his time: in Antarctica, he circumnavigated the continent and reached the sea and the adjacent ice shelf that would bear his name, and he discovered and charted the coast of Victoria Land (Riffenburgh, 2007). The successes of Ross's expedition were celebrated in Hobart with official receptions hosted by the Franklins, and also in ways that were more unusual. The play *Antarctic Expedition* was written, reflecting the British triumphs in Antarctica, and it was performed in Hobart's Royal Victoria Theatre in May 1841 in front of a sold-out crowd, including Ross and his officers (Kriwoken, 1993). These Antarctic expeditions were significant for the small colony; suddenly, Hobart was at the centre of new discoveries and achievements for the British nation: a welcomed change from people's hardworking lifestyles. Today, Ross's expeditions are remembered at Hobart's Maritime Museum of Tasmania: there are permanent exhibits holding artefacts belonging to Sir John Franklin gifted to him by Capt. Ross, such as percussion pistols and a replica painting depicting the men in Hobart at the magnetic observatory (Block, 1841).

The beginning of the 20th century saw a resurgence of interest in polar exploration. The Antarctic expeditions of the Heroic Era created new expectations of polar conquest and new heroes. Hobart was no longer a penal colony, and New Zealand towns, such as Christchurch, had developed as contenders for the polar connections. Also, commercial whaling was dominated by British and Norwegian companies in the Southern Ocean. The Norwegian Tønsberg Whaling Expedition led by Henrik Bull left from Hobart in 1893 and claimed to be the

first to land on the Antarctic continent (Riffenburgh, 2007). Another “first” soon followed: the British Antarctic *Southern Cross* Expedition, captained by Carsten Borchgrevink, claimed to be the first party to winter on the Antarctic continent (1898-1900). Borchgrevink, a Norwegian-born Australian resident, was a scientist and amateur explorer; he organized the *Southern Cross* Expedition with private funding, as the UK government rejected his proposal for financial support since it overlapped with Robert Scott’s Antarctic voyage (Kriwoken, 1993). In November 1898, Borchgrevink’s expedition sailed south from Hobart following Ross’s expedition’s path. They made a landing and established winter quarters at Cape Adare (Victoria Land), where their hut still stands and is now protected through its inclusion on the ATS Historic Sites and Monuments list (Antarctic Treaty Secretariat, 2010b). Borchgrevink’s expedition recruited a young Tasmanian physicist, Louis Bernacchi, to join them. Bernacchi, who grew up in Hobart, became the first recorded Australian to winter in the Antarctic (Kriwoken, 2011). Once again, the people of Hobart greeted the expedition generously, entertaining with garden parties for the expeditioners and becoming more interested in Antarctic science through having one of their own on the expedition (Kriwoken, 1993). A statue of Bernacchi and his Antarctic dogs (this was the first expedition known to use dogs in Antarctica) titled “Self-portrait: Louis and Joe” (Figure 6.12) is located at the popular Franklin Wharf on Hobart’s waterfront, at the site where the expedition ship *Southern Cross* departed for the Antarctic (Kriwoken, 2011). Bernacchi would become the most experienced Tasmanian polar explorer of his time when he joined Scott’s Antarctic expedition in 1901-04 as chief scientist, sailing south from Lyttelton (Swan, 1979).

Hobart’s polar connections strengthened when Norwegian explorer Roald Amundsen arrived in 1912 to communicate his successful attainment of the South Pole. Amundsen was aware that Scott, his rival to the Pole, had a stronger allegiance with New Zealand, so he called at Hobart instead: “the decision now from here is to go as fast as possible to Hobart . . . [W]e must reach civilization before anyone else” (Amundsen, 2010, p. 361). In March 1912, Amundsen first sent a telegram to Norway informing of the expedition’s success, and soon after made his news available to the public and lifted the embargo placed on his ship *Fram* (Kriwoken, 1993). Amundsen was inconspicuous arriving to the town: “booked in at Orient Hotel. Was regarded as a tramp, with my cap and blue jersey, and given a miserable little room . . . Telegraphed the King; then to Nansen and Leon. Spent day quietly” (Amundsen, 2010, p. 367). Amundsen’s important visit to Hobart is remembered in the city with plaques signalling places of interest, such as the post office where he sent his telegrams and the hotel where he stayed.

Hobart’s Antarctic interests rejoiced with the departure of the first Australasian Antarctic Expedition, led by scientist Douglas Mawson. This expedition had been in the planning stages

for many years but lacking official funding, since all support was directed to Scott's South Pole expedition. Mawson had previous Antarctic experience through his joining the science party on Shackleton's *Nimrod* Expedition of 1907-09 (Riffenburgh, 2007). Mawson became the first Australian to lead an Antarctic expedition and the first to use a radio relay party on Macquarie Island (although unsuccessful), to maintain communication between Antarctica and the rest of Australia (Riffenburgh, 2013). Mawson's expedition was highly successful: it conducted the most comprehensive science programme of its time, discovered King George V Land and Queen Mary Land, and explored inland Antarctica (Riffenburgh, 2007). Tasmanians were kept informed on Antarctic news as the expedition's ship, the *Aurora*, spent two winters in Hobart while waiting to return and collect the Antarctic winter-over party (Riffenburgh, 2013). In 1929, Mawson led a second Antarctic expedition; this time it had a political agenda: the claim of Antarctic land for Australia (Kriwoken, 1993). The BANZARE expedition of 1929-31 used Hobart as its port for resupply and refitting of the *Aurora* while winter teams remained in Antarctica (Kriwoken, 1993). The BANZARE expedition carried out numerous scientific works but failed to inspire as much excitement in Hobart (and in the rest of Australia) as previous Antarctic voyages had. The post-World War I recession affected world economies, and aeroplanes became available for exploration long after the war (Leane, 2016). Yet, reports from the BANZARE expedition were the catalyst to declare Macquarie Island a wildlife sanctuary by the government of Tasmania in 1933, as the extensive hunting of penguins and seals had brought the species close to total depletion (Kriwoken, 1993). Also, Mawson reported the large number of Norwegian whaling ships in Antarctica, a highly successful commercial activity benefiting another nation that was infringing on "Australia's birthright" (Haward & Griffiths, 2011, p. 31). The BANZARE expeditions gave the government sufficient information on the land and the resources available in Antarctica to lay a territorial claim in 1933 (Haward & Griffiths, 2011).

The Australian Antarctic Territory Acceptance Act of 1933 formalized the governmental arrangements with the UK, and the Australian government took control of the Antarctic claimed territory (Haward & Griffiths, 2011). In 1949, Australia established in Melbourne the Australian Antarctic Division to oversee the Australian National Antarctic Research Expeditions (ANARE). In the mid-20th century, Australia's Antarctic interests were not centred on Hobart. As a former manager for Antarctic Tasmania acknowledges, Hobart "seemed to fall off the Antarctic map" until the 1980s (Galbraith, 2006, p. 4).

6.4.3.2 Contemporary connections

In 1974, the Australian government, following a decentralization process, took the unpopular decision to amalgamate all Antarctic offices and move the AAD to Hobart (Kriwoken, 1993). Opposed views to the change considered Hobart a pastoral society, an expensive and inferior

choice to the technologically advanced Melbourne, but the government continued with the plan. The purposely built premises of the AAD were inaugurated by Prince Charles of the UK in 1981 (Allen, 2006). The AAD headquarters are located in the Greater Hobart suburb of Kingston. Initially built for 120 employees, it now is operating with over 300 permanent staff working in four different areas: strategies, support and operations, science, and modernization taskforce (Australian National Audit Office, 2016). The AAD buildings house science laboratories; electronics, microscopy, mechanical, and instruments workshops; a krill research aquarium; equipment stores; and communications and support facilities (Australian National Audit Office, 2016). The relocation of AAD to Hobart revitalized the city's Antarctic connections, and, since then, Hobart has received sustained support from the federal government to develop its Antarctic capabilities in logistics, technology, and research, as well as attracting international Antarctic-related secretariats, conferences, and events. Since 1982, Hobart hosts the headquarters of CCAMLR, which boosts the city's Antarctic reputation and collaborates with the local economy congregating hundreds of delegates at the gateway for their annual meeting (Antarctic Tasmania, 2018b). In 1961, Australia had the distinction of hosting the first ATCM in Canberra, and in 2012 Hobart won the bid to be the host of the XXXV ATCM, emphasizing its Antarctic gateway role (Haward & Griffiths, 2011). Moreover, Hobart had aspirations of concentrating further international Antarctic agencies, such as the AT secretariat. In 1997, negotiations were under way to obtain support from AT Parties in backing Hobart's bid, which was contested by Christchurch, Hobart, and Buenos Aires, and later won by Buenos Aires. Hobart was also the home to the COMNAP secretariat before it moved to Christchurch in 2009 (Antarctic Tasmania, 2018b). In addition, since 2005, Hobart has hosted the headquarters of the Agreement for the Conservation of Albatrosses and Petrels, a multilateral international agreement aimed at the conservation of seabirds and safe practices to mitigate bycatch through commercial fishing (Australian Antarctic Division, 2005). Although this is not an ATS agency, it is strongly connected with the Antarctic regime's environmental protection in the Southern Ocean.



Figure 6.11: Trypots in Salanca Square, Hobart

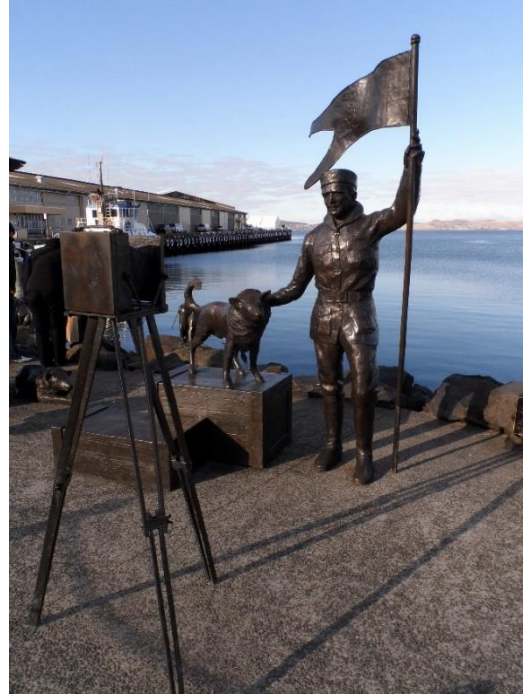


Figure 6.12: Statue of Louis Bernacchi, Hobart

While Australia strengthened its Antarctic activities and infrastructure, attention to Antarctic-related activities grew in Tasmania. The Tasmanian government developed initiatives to attract other NAPs to operate from Hobart and to coordinate all efforts, and in 1993 it created the Office of Antarctic Affairs (OAA) (Antarctic Tasmania, 2018a). Its main objective was to make Hobart the central place for all Antarctic and Southern Ocean related activities that could generate beneficial economic developments locally and regionally (Hall, 2000). Hobart's Antarctic connections were the generator of much-needed local economic progress; they encouraged local businesses to shift from traditional industries to specialized services and manufacture of products to meet the polar demand, generating employment and positioning Hobart as a polar specialist city. The creation of the OAA was timely, coinciding with the development of the IAC in Christchurch, as the two cities competed for the Antarctic-related business generated from large-scale NAPs, such as the USAP. Among other tasks, the OAA focused on identifying scientific research and technological development opportunities, as well as collaborating with local organizations to develop education and training in Antarctic matters (Hall, 2000). Over the years, the OAA was rebranded Antarctic Tasmania (AntTas) and became a business unit from the Department of Economic Development, Tourism and the Arts (Antarctic Tasmania, 2011). Lately, it had another restructure and is now Antarctic Tasmania and Maritime Industries, a dedicated unit under Tasmania's Department of Growth (Antarctic Tasmania, 2018a).

In 1997, the former OAA established the Tasmanian Polar Network (TPN), a consortium that currently represents over 70 public and private stakeholders, composed of research organizations, business and government agencies that provide specialised polar knowledge and expertise, and providers of cold-climate products and services (Tasmanian Polar Network, 2016). This is a unique partnership of all Antarctic-related activity sectors in Tasmania. The TPN concentrates an impressive array of expertise and services, ranging from scientific and technical knowledge, provision of supplies, electrical and waste management services, and legal brokering (Tasmanian Polar Network, 2016). The TPN's secretary offers a single point of contact to those seeking Antarctic expertise and services, promoting this network as "the world's richest resource of Antarctic and Southern Ocean expertise" (Tasmanian Polar Network, 2016, p. 3).

Hobart aspires to be the "leading international gateway port" (Galbraith, 2006, p. 5). With that aim, it requires a robust infrastructure for Antarctic maritime transport and operations. At Sullivan's Cove, a prime site on the city's coastline, Hobart's deep-water port offer a full range of specialized services for Antarctic vessels, such as year-round berths, quarantine and bunkering services, storage facilities, and office space (Tasmanian Polar Network, 2016). Moreover, Hobart's Tasport Company successfully refurbished Macquarie Wharf No. 2, a complex area that houses the AAD's cargo and biosecurity centre and includes a cruise ship passenger terminal and a luxury hotel (Department of State Growth, 2017b). Macquarie Wharf No. 2 is a convenient location for visitors to access the business and entertainment districts of Hobart, including a prime location for polar vessels, which feature prominently in the host city. Hobart is home for Australian's Antarctic research vessel and icebreaker RSV *Aurora Australis*, also known fondly as "the little red ship" (personal observation, July 2017). The *Aurora* is Australia's first purposely built polar vessel; the ship features in almost all Australian Antarctic-related magazines and brochures, and is highly recognized in Hobart by the public (Australian Antarctic Division, 2017). Tourists visiting popular sites, such as Salamanca Place, can also appreciate the *Aurora* when in port (Figure 6.13), as its mooring site is within the area popular to tourists. The *Aurora* will soon be decommissioned, and in 2020 it will be replaced by Australia's new icebreaker, the RSV *Nuyina* (Australian Antarctic Division, 2017). The new icebreaker's name was chosen from a nationwide competition for schoolchildren to create awareness of Australia's interests in Antarctica (Australian Antarctic Division, 2017). *Nuyina* is a palawa kani (the reconstructed language of Tasmanian Aboriginals) word that refers to the southern lights (Australian Antarctic Division, 2017).

Before the *Aurora Australis*, Australia chartered many different ships to support the country's Antarctic science programme and research stations. People in Hobart have fond memories of the ship *Nella Dan*, which served Australia for many years and was based in Tasmania

(Kriwoken, 1993). The *Nella Dan* ran aground in 1987 while unloading cargo at Macquarie Island and was destroyed. A model replica of the ship stands at the entrance of the Maritime Museum of Tasmania in Hobart, honouring the long service of the *Nella Dan*.

Another a familiar ship in Hobart is the French research vessel *L'Astrolabe*, from L'Institut polaire français Paul-Emile Victor (IPEV) (Department of State Growth, 2017b). The French polar programme launches its expeditions to the Dumont d'Urville Antarctic research station every summer from Hobart and the IPEV is a long-standing Antarctic international partner for Tasmania (Department of State Growth, 2017b). Moreover, in 2013 the Tasmanian government signed the Antarctic Gateway Cooperation agreements with both IPEV and the State Oceanic Administration of China, which guaranteed that Hobart will be a hub for services and maintenance of the Antarctic maritime operations of both polar programmes (Department of State Growth, 2017b).

The air-link between Hobart and Antarctica presents another strength in logistic capabilities of the gateway city role. The first non-commercial flight from Hobart to Casey station (Antarctica) was in 1988 by a private enterprise (Kriwoken, 1993). In 2007-08, regular air service began from Hobart to Wilkins Aerodrome, transporting Australian base personnel in chartered passenger aircraft (Galbraith, 2006), and hefty equipment is now transported by the Royal Australian Air Force (RAAF) (Australian Antarctic Division, 2018b).



Figure 6.13: RSV Aurora Australis at Princes Wharf, Hobart

However, the intercontinental air-link is Australia's weakest Antarctic transport link. The flights' schedule is disrupted frequently and the functionality of the aerodrome is at times unreliable, particularly due to the challenging nature of its blue ice airstrip, which is affected by warming air during Antarctic summers (Fogarty, 2011). Frequently, flights departing from Hobart are rerouted to Christchurch and to a Ross Island airfield, and passengers are flown from there to Wilkins in smaller and lighter chartered planes (Bulger, 2013). These disruptions are

expensive and cause delays to the science programmes (Bulger, 2013). Despite the logistical problems that have affected continuity of the direct air-link, the public perception in Hobart is that Australia's Antarctic gateway supports equally air and maritime accessibility to East Antarctica.

The AAD is investigating alternative sites for the construction of a year-round operational Antarctic airstrip, as commentators have identified the unreliability of the current airstrip as a major flaw and a point of disadvantage in Australia's Antarctic strategic plans, particularly compared with the capabilities of other Antarctic gateway cities (Fogarty, 2011). There are other Antarctic countries considering expanding their transport capabilities in Antarctica. For instance, China is planning to build a permanent airstrip at Zhongshan Station to access East Antarctica, which will increase its Antarctic capabilities and leadership in inland logistics (Zhen, 2018). However, as mentioned in Chapter 5, the participation of China as a polar leader creates anxieties, particularly in Australia. Managing a year-round Antarctic airstrip will give China a leadership in inland East Antarctica, and will undermine Australia hegemony on its claimed Antarctic sector, as well as Hobart's efforts to be recognised as "the natural Gateway to East Antarctica" (Department of State Growth, 2017b, p. 5).

6.4.3.3 Economic perspectives

The role of Hobart as the Antarctic gateway to East Antarctica is important to the federal and regional governments. The Tasmanian government set clear goals to promote economic growth from the Antarctic connections, positioning the city's polar maritime expertise as the point of differentiation from other competing Antarctic gateways (Antarctic Tasmania, 2018b).

The lobbying power of the TPN and its members' contributions to the local economy have positioned this network as a major stakeholder in Tasmania. In 2011, an economic evaluation report demonstrated the value of the Antarctic business to the state's economy: the Antarctic sector employed over 1,000 Tasmanians in high-wages jobs (Tasmanian Government, 2014). However, on closer examination of subsequent economic impact reports, during the 2015/16 period the Antarctic sector contributed with 0.4% of the total employment for Tasmania, a much smaller percentage than desired considering the large cluster of Antarctic specialists concentrated in Hobart (Department of State Growth, 2017a). In addition, the report concludes that employment in Antarctic research institutions had increased, but that there was a loss in wages from high-paying jobs, possibly as a result of senior Antarctic staff retirements, state redundancy programmes, and the offer of short-term contracts to the detriment of the hiring of full-time senior management staff (Department of State Growth, 2017a). Considering Tasmania's 6% annual rate of unemployment (Hobart City Council, 2017), it is unlikely that the Antarctic business will generate enough jobs to lessen the employment deficit in the near

future, as government agencies strongly suggest (Antarctic Tasmania, 2011; Department of State Growth, 2017b).

As a leading Antarctic gateway, Hobart requires a concerted effort of policies, politics, and financial investments from local, state, and federal governments and private stakeholders. The latest economic impact report from the Tasmanian Ministry of Growth values the Antarctic-related activities at AUD 186 million per year (Gutwein, 2019). The economic outlook that the Antarctic business brings to Tasmania is positive, considering the history of low economic performance of this state compared with that of Australian counterparts. Hobart, and Tasmania, rely heavily on federal government investment and expenditure to support Hobart's role as Australia's gateway to Antarctica and for the region's general growth. A key development project is Hobart's airport runway extension to allow for the operation of large Antarctic cargo aeroplanes. It requires an investment of AUD 38 million, which has been granted by the federal government (Hobart Airport, 2015). Also, the construction of an Antarctic and Science Precinct in Hobart has been identified as a key development in the country's Antarctic Strategy (Commonwealth of Australia, 2016; Department of State Growth, 2017b).

Recently, the Morrison government signed the 10-year AUD 1.43 billion "Hobart City Deal" to develop infrastructure projects to drive the growing tourism and science industries; the investments will "further enhance Hobart's reputation as the preeminent gateway to Antarctica" (Office of the Prime Minister of Australia, 2019). Back in 2016, former Prime Minister Turnbull announced multi-million-dollar investments to revitalize the Antarctic science infrastructure, as well as to support "Tasmania's status as an Antarctic gateway" (Commonwealth of Australia, 2016, p. 1). The common theme of these announcements is the economic gains associated with the Antarctic connection; maintaining - at the very least, announcing - Hobart's reputation as a leading gateway city to Antarctica seems worthwhile to the government.

However, federal government financial aid announcements have fallen through in the past. In 2016, government budget cuts to Antarctic science and logistics sparked national criticism and created turmoil in Hobart (Hamilton, 2016; Turney, 2016). Commentators and the public's concern and disapproval of the government's decision were not only focused on the negative disruptions to long-term science projects (Press, 2016), or the consequent job losses and downturn of the local economy. Mostly, the argument was centred on Australia's ability to protect its Antarctic interests and territorial aspirations in the near future as "other nations [had] invested heavily in new bases and research programs" (Hamilton, 2016). Budget cuts were interpreted as if Australia's Antarctic interests were declining, and, with that, allowing other nations to overtake the seemingly emptied space in Antarctica. Buchanan (2019b) argues that

the Australian public has been led to believe that the country owns the claimed Antarctic territory, thus the negative reaction to government budget cuts and the perceived tension over China and Russia's activities (and intentions) in Antarctica. Buchanan's (2019b) further arguments on the ATS effectiveness for defending Australia's Antarctic interests in times of changing polar powers are beyond the scope of this section, but they reinforce the discussion of Antarctic territorial nationalistic views embedded in people's representations of Antarctica included in Chapter 4 of this work.

6.4.3.4 Cultural opportunities

Hobart's Antarctic heritage is rich and noticeable in a city that takes advantage of the central location of its port. Alongside the many wharfs, there are plaques, sculptures, place names, and information boards that promote Hobart's long-time maritime history with the Southern Ocean. Furthermore, in 2005 the Tasmanian government appointed Sir Guy Green, a former Tasmanian governor, to be the "Honorary Antarctic Ambassador" for the state (Haward & Griffiths, 2011). Since then, Sir Guy has been an avid participant in all Antarctic-related activities in Hobart and a great advocate for Australia's interests in Antarctica. Hobart is the only Antarctic gateway that has created a role of honorary Antarctic Ambassador.

Hobart concentrates the largest Antarctic research and teaching infrastructure of all Antarctic gateway cities. The University of Tasmania (UTas) offers undergraduate and postgraduate degrees with a strong focus on marine and ecology studies, Antarctic and Southern Ocean policy and management, and Antarctic humanities (University of Tasmania, n.d.). The Institute for Marine and Antarctic Studies (IMAS) (Figure 6.14) is a UTas dedicated research centre, which also houses the Antarctic Climate and Ecosystem Cooperative Research Centre. IMAS shares the wharf with the Commonwealth Scientific and Industrial Research Organization's (CSIRO) ocean and atmospheric research unit. The CSIRO's research vessel, RV *Investigator*, can be seen moored outside the research centre when not undertaking science voyages. Other organizations with polar research interests, such as the Integrating Marine Observing System, the Southern Ocean Observing System, the Australian Bureau of Meteorology's Antarctic and Southern Ocean Weather Office, and the Antarctic Gateway Partnership, are located within these premises too.

The Antarctic science, training, and education capability clustered in Hobart has been noticed by the state and federal governments. The research institutes stimulate local growth, and attracts international Antarctic science partnerships and hundreds of students from all over the world (Commonwealth of Australia, 2016; Department of State Growth, 2017b).

Hobart's opportunity for a vicarious Antarctic tourism experience was "Antarctic Adventure", a failed private venture that opened in 1997 and closed down in 2004 (Muir et al., 2007). Objects

from the former attraction were transferred to the permanent exhibit “Island of Ice” at the Tasmanian Museum and Art Gallery, which is an interactive exhibit containing historical and modern stories of expeditions depicting Australians in Antarctica. In addition, the museum’s education team offers Antarctic learning programmes *in situ* for school groups, and through their itinerant “Ice Box” Antarctic education resource, which is available free to schools in Tasmania (Centre for Learning and Discovery, 2015). The museum’s education programme is complemented by the online teaching resource, *Classroom Antarctica*, a comprehensive collection of lesson and activities plans produced by AAD (Australian Antarctic Division, 2016).

The Mawson’s Huts Replica Museum (Figure 6.15), supported by the eponymous foundation and located across Hobart’s waterfront, is another Antarctic attraction in the city. Inaugurated in 2013, this museum includes a model of the main wooden cabin built by the Australasian Antarctic Expedition (1911-14) at Cape Denison (Antarctica), which represents Australia’s first Antarctic expedition. The Mawson’s Huts Foundation aims to create awareness of Australia’s heritage in Antarctica and to fundraise for the conservation of Antarctic historic buildings (2013). The museum is located in a busy and central area for locals and tourists visiting the town, enticing visitors through sculptures and informative signs surrounding the main building. Enthusiastic volunteers provide a guiding service and share their favourite Antarctic stories with customers, which reveal their personal interest in the polar region and the influence of popular cultural narratives of heroism and survival in Antarctica. The wooden building attempts to recreate the space occupied by Australian explorers and their living conditions in Antarctica’s harsh environment. However, a map of the Australian Antarctic Territory is the first illustration greeting visitors into the museum part of the premises, framing the historic hut into the country’s Antarctic geopolitical discourse. Further, information panels reflect on Australian participation in past Antarctic explorations and give details of the expedition celebrated in this museum. There is an understated nationalistic tone in the information and displays of the Mawson’s Huts Replica Museum, reinforcing familiar national narratives of sovereignty and an Australian Antarctic governance role. These are supported by the abundance of books, maps, and Australian flags among the displays, which are historically inaccurate for the era represented in this replica museum but which reveal expressions of everyday nationalism in the lives of Australians. Moreover, visitors unaware of the existence of legal agreements for the governing of the Antarctic may believe that Australia is the only country with a polar presence, as there is little emphasis on the internationalism of Antarctica. As scholars have pointed out, this museum is a welcomed addition for reinforcing Hobart’s Antarctic identity through heritage, and it presents an opportunity to move beyond nationalism and reproduce international cultural narratives of past engagements with Antarctica “. . . reclaiming the nobler motives that took us to the far south in the first place” (Leane, Winter, & Salazar, 2016, p. 225).

The Maritime Museum of Tasmania offers a modest exhibition on the exploration of the Southern Ocean, from the sealing and whaling commercial activities of the 1800s up to the contributions of locally well-known Antarctic ships, such as the *Nella Dan*. The Botanical Gardens have an original display of sub-Antarctic plants, kept in a purposely built room that simulates the cold conditions of the south, including artificial mist and wind. The Sub-Antarctic Plant House recreates the islands' environments, with sounds of fauna and the sea played against a painted backdrop that resembles Macquarie Island's natural environment.

The plentiful Antarctic cultural connections available in Hobart are summarized in an illustrated self-guided tour booklet, *Polar Pathways*, which includes information on and locations of places of Antarctic interest around the city and vicinity. Although this is an excellent resource for Antarctic education, outreach, and urban entertainment, the 60-page guide is not widely available in Hobart, nor it is promoted at the city's visitor information centres (personal observation, November 2017), and it can only be found for purchase at book stores and some gift shops.

Another addition to Hobart's Antarctic attractions is the biennial Australian Antarctic Festival (AAF), which operates with funding from Hobart City Council, private investors, and the Tasmanian government, and with participation from many local Antarctic stakeholders (Cullen, 2016). The AAF organizes public, free events throughout a week of festivities, involving volunteers from the Antarctic community and local enthusiasts. Activities have included Antarctic public talks, photograph competitions and exhibitions, public visits to Antarctic vessels, and historical tours of the city's Antarctic links (Cullen, 2016). The AAF is organized to coincide with Antarctic pre-season preparations for vessels and expeditioners, and it is timed to overlap with Australia's school holidays, which guarantees public attendance and inclusion in the city's events calendars (Cullen, 2016). Moreover, the AAF was the forerunner of Hobart's Antarctic Midwinter Festival, a small local celebration originally proposed as a one-day event by the AAD in 2001, which resulted in an established winter festival for the city (Hadley, 2007). The Antarctic Midwinter Festival ran for several years, funded by AntTas, and grew in interest, duration, and local collaboration. Eventually, state funding was cut back and the city's winter celebrations were replaced by MONA's project Dark MOFO, which since 2013 has fêted the city's southern latitude during the winter solstice (Delaney, 2018). Dark MOFO's popularity is reported to bring major economic benefits to Hobart during the slow winter tourism season, and is "becoming part of Tasmania's cultural landscape", according to the Tasmanian premier, even though it is costing the city and state governments millions of dollars in funding and in-kind support (Hewett, 2016).



Figure 6.14: The Institute for Marine and Antarctic Studies (IMAS), Hobart



Figure 6.15: The Mawson's Huts Replica Museum, Hobart

6.5 Punta Arenas (Chile)

Punta Arenas is the southernmost city in continental South America, located on the north-western shores of the Strait of Magellan, on Brunswick Peninsula. The area is surrounded by fjords and protected natural reserves of native forest and intricate channels, and is part of the southern portion of the Patagonia region. Punta Arenas is the capital for the XIIth Magallanes and Chilean Antarctic Region, the Chilean southern territories composed of the Magallanes province in continental South America, the west and south portion of the archipelago of Tierra del Fuego, and the Antarctic claimed land (Biblioteca del Congreso Nacional de Chile, 2017b).

“Magallanes”, as locals refer to their homeland, has a population of approximately 167,000 people, and more than 90% of inhabitants live in urban areas on the continental portion of the region. In fact, Punta Arenas is the largest urban centre for the region, concentrating an estimated 130,000 inhabitants (Biblioteca del Congreso Nacional de Chile, 2017b).

6.5.1 Socio-economic views

The history of Punta Arenas as an urban settlement is relatively recent, although humans have inhabited Magallanes for millennia; data suggest that the first people arrived in the region between 17,000 and 14,000 years BP (Perez et al., 2016).

In 1520, Portuguese explorer Ferdinand Magellan discovered the eponymous strait at the south of South America that separates the continent and Tierra del Fuego archipelago. Spanish attempts to establish a settlement failed and the area became known as “Port Famine” (Martinic, 2002). Three centuries later, the newly formed Republic of Chile recognized the strait’s geopolitical importance for controlling the southern lands, and in 1848 established a penal colony at Punta Arenas (Martinic, 2002). The modest beginnings of Punta Arenas were

soon transformed with the advent of the California Gold Rush. The increased demand for transport to North America made the Strait of Magellan the preferred route for the transport of goods and people around Cape Horn. The end of the 1800s was Punta Arenas' golden years. Its port supported international shipping connecting Europe with America's Pacific coastline; it attracted sealers, gold diggers, world travellers, and farmers to settle there (Martinic, 2002). Government granted lands, and the import of sheep from the Falkland Islands transformed the economy of Magallanes: sheep farms multiplied by the end of the 19th century, responding to increased global wool demand (Martinic, 2002). By the 20th century, Magallanes' political power, commerce, and wealth were concentrated in private hands. Two family-owned companies held almost 80% of the land and managed the logging industry, wool business, the meat and cold storage plant, mining, and maritime shipping (Martinic, 2002). Two events ended Punta Arenas' importance for transport and shipping: in 1914, the construction of the Panama Canal offered shorter routes to reach the Pacific Ocean from the east. The second event was the recession that followed World War I; the post-war economic global downturn greatly reduced the demand for products from Chile, and in particular from Magallanes (Martinic, 2002). However, by the 1950s, hydrocarbon deposits were found in the area and oil exploitation was soon underway (Soza-Amigo & Aroca, 2011). Magallanes became again a geopolitical and economically important area for Chile. To date, the region has the only known petroleum reservoirs in the country; hence, the oil industry drives the economy in the region (Soza-Amigo & Aroca, 2011).

The "Indian question"⁴⁵ (Elzinga, 2013, p. 229) warrants special attention. From the 16th century, European expeditions described numerous encounters with the natives of the Magallanes and Tierra del Fuego areas. Prior to European colonization, indigenous groups in southwest Patagonia who inhabited the steppe were known as "Aonikenk", and the nomad canoeing people whose territory included the maritime channels and straits of the region were called "Kawesqar" and "Yahgan" (Bengoa, 2004). In Tierra del Fuego, the Selk'nam were nomads who roamed the steppe (Bengoa, 2004). Colonization reduced the hunting grounds for native groups and competition was rife over natural resources and land. Indigenous groups were persecuted violently to "clean up" the land for farming development (Bengoa, 2004, p. 564); those who survived were assimilated in missions where many died. Currently, there are fewer than a hundred people self-identified as Kawesqar and about 6% can speak some of the traditional language. The rest of the ethnic groups perished (Bengoa, 2004).

⁴⁵ *The Indian question*: The expression used by Swedish explorer Nordenskjöld to express his concerns over the poor treatment of native groups by the governments of Chile and Argentina (Elzinga, 2013).

Today, the population of Punta Arenas is largely Chilean-born. Many migrated from northern parts of the country, particularly farmers and workers known as “chilotes⁴⁶ del sur”, and from Europe, mainly Spain, England, and Croatia (Departamento de Estudios, 2015). Also, 20% of the population identify themselves as belonging to an indigenous group (Departamento de Estudios, 2015). In addition, in the last decade Punta Arenas has attracted Latin American migrant workers, mainly from Peru, Venezuela, and Colombia (Departamento de Estudios, 2015). Magallanes locals have mixed reactions to this modern migration. Some perceive these minority groups as a threat to their culture and to the availability of jobs (Instituto Nacional de Derechos Humanos, 2010).

Scholars argue that there is a distinctive regional identity in Magallanes. However, the expression *ser Magallanico* (to be from Magallanes⁴⁷) is ascribed only to those who descend from 19th century settler families, who see themselves as hardworking pioneers who, against the odds, adapted to live in a land of severe climate and isolation at the furthest south of Chile (Diaz Saldivia, 2009). It appears that birthplace alone does not give a person rights to call themselves “Magallanico”, but family heritage, social trajectory, and working history in the area do (Diaz Saldivia, 2009). Moreover, cultural narratives of the *ser Magallanico* include frequent descriptions of the inclement weather of the region. Winter has a special meaning in Magallanes: the number of winters spent in the region is often seen as a measuring unit between Magallanicos and those not included in this social stratum. For locals, winters spent in Magallanes mean character-building, resourcefulness, and resilience shown by the experienced person; there is no set number of winters lived in the region required to be a Magallanico, but this distinction is often used as a tool for inclusion or rejection of others (Harambour Ross, 2009).

Punta Arenas concentrates the wealth of Magallanes. Magallanes’ rural economy continues to be dominated by sheep farms, which account for 75% of the sheep of the country, while the focus on hydrocarbon extraction has shifted from oil to methane gas and methanol (Soza-Amigo & Aroca, 2011). As a result, the mining and manufacturing industries, along with government administration and public services, are the area’s major employers (Departamento de Estudios, 2015). The Magallanes economy is slowly turning from a low-diversity economy based on commodities, to a manufacturing society, while fishing and aquiculture are replacing sheep farming, and small business services are emerging, particularly in Punta Arenas (Soza-Amigo & Aroca, 2011). To the tourism industry, Punta

⁴⁶ *Chilote*: People from the island of Chiloé. In Chile, *chilotes del sur* described those who lived in Magallanes, far away from the main urban centres, implying the southern lands replicated the isolation of island life (Chenut, 2006).

⁴⁷ “Magallanes” refers to the continental portion of the XIIth Region, does not include Tierra del Fuego and Chilean Antarctic.

Arenas is the gateway to Chilean Patagonia, due to its proximity to popular national parks. Magallanes receives over 800,000 visitors per year, arriving by land, air, and sea, and many of these will visit Punta Arenas in their travels through the area (Servicio Nacional de Turismo, 2017).

However, the wealth of Magallanes is controlled by international and national corporations, and by oligarch families. Although unemployment is slightly lower than the national average, Magallanes has a smaller economic growth compared with the rest of Chile (Soza-Amigo & Aroca, 2011). The economic incentive policies created for “Extreme Zones” in Chile (e.g. Magallanes), such as the creation of a tax-free zone in Punta Arenas and tax exemptions and subsidies for employers, have failed to address the problem of improving human capital. . The government expenditure in subsidies for economically depressed zones is not unnoticed in Chile; fellow countrymen have the common perception of Magallanes as the “land of wellbeing and welfare” (Giusti, 2008).

6.5.2 Political views

Punta Arenas is the hub for the politics of the southernmost region of Chile. This remote and relatively small city concentrates the headquarters for the federal, provincial, and regional governments’ representatives. The Magallanes and Chilean Antarctica Region is led by the Intendant (Administrator) who is appointed by the President of Chile and resides in Punta Arenas (Biblioteca del Congreso Nacional de Chile, 2017b). As a second-tier administration division, Magallanes includes four provinces, each administered by a governor (also appointed by the country’s President): Magallanes, Ultima Esperanza, Tierra del Fuego, and Antártica. The governor of Magallanes works and resides in Punta Arenas. Finally, the Magallanes Province is divided into four communes, and Punta Arenas is one of these. The Punta Arenas City Council is led by a mayor who is the only regional authority elected democratically by the city’s inhabitants (Biblioteca del Congreso Nacional de Chile, 2017b).

Similarly, the small town of Puerto Williams in Tierra del Fuego also hosts a number of regional and local officials. With only 2,400 inhabitants, it is the seat for the Province of Tierra del Fuego and the Province of *Antártica Chilena*, each represented by a governor. In addition, the Province of *Antártica Chilena* also includes the subdivision of two communes, namely Cabo de Hornos and Antártica, which are administered from Puerto Williams by a mayor (Biblioteca del Congreso Nacional de Chile, 2017b). According to the last national census, the commune Antártica had a population of 138 people, concentrated in VLE (Gobierno Regional de Magallanes y Antartica Chilena, 2016), a place often identified as an example for place-making in Antarctica (O’Reilly & Salazar, 2017; Salazar, 2013a).

For a relatively small city, Punta Arenas hosts many different political actors, which seems to have little positive impact on people's participation in democratic election processes. For instance, during the last presidential and parliamentary elections in Chile (December 2017), Magallanes recorded a turnout of 36% of voters (Lagos, 2017). A recent report indicates that many Chileans, particularly those living away from the metropolitan area, feel misrepresented by the two main political coalition parties, and highly mistrust parliament representatives (Rios, 2017). However, the current political apathy was not always present in Magallanes. Since 1932, the Magallanes Regionalist Party (MRP) has advocated for greater autonomy for the southern area, while still pledging allegiance to the Chilean nation (Martinic, 2002). The intricate topography of Magallanes creates a physical barrier that separates it from the rest of Chile. Traveling within Chile, Magallanes can only be accessed by sea or air; if traveling overland, one must traverse through Argentina to reach the Chilean south. This geographic separation, combined with the distinctive natural settings and history of the region, has fostered a strong sentiment of political and social seclusion from the rest of Chile. Regionalism in Magallanes as a social and political ideology has facilitated the construction of the regional identity expressed in the social imaginary commonly referred to as "The Independent Republic of Magallanes" (Bascopé, 2015). The sought-after autonomy for the region is supported by everyday banal expressions of the imaginary, particularly with a regional flag that represents the sentiment of uniqueness and separation of this region. The Magallanes flag has been unofficially adopted, often seen flying alongside the national flag in official buildings and households in Magallanes. Moreover, in 1997 the regional government officially adopted the "symbols of expressions of regional identity", which include the Magallanes flag, the crest, a regional anthem, a tree, a flower, and a rhea (Res 42, Gobierno Regional de Magallanes y Antartica Chilena).

6.5.3 Punta Arenas' Antarctic connections

6.5.3.1 Historic links

Centuries before Punta Arenas became an urban settlement, the search for a mythical southern continent brought many expeditions to the Magallanes and Tierra del Fuego areas. After Magellan's discoveries, other nations followed in search of new routes to the Pacific and the East Indies. Their discoveries would revolutionize the understanding of the southern hemisphere and imagined maps were filled with new names and illustrations of the findings. During the 16th century, Spain's dominance over South America was challenged by England. In 1578, Francis Drake spent the winter surveying the Strait of Magellan and Tierra del Fuego. His three ships became separated in a storm, and the ship commanded by Drake, the *Golden Hind*, drifted southeast, making a discovery that challenged the assumption that Tierra del Fuego was connected to Antarctica (Boothe, 2011). Drake found open seas south of Tierra

del Fuego, the meeting of the Atlantic and Pacific oceans that today is known as Drake Passage (Boothe, 2011). In the centuries that followed, and still today, Drake's discovery was significant for accessing the Antarctic Peninsula. Another important geographical landmark added to the maps was Cape Horn, discovered in 1616 by Dutch merchants in their quest to find alternative routes to the East Indies that were not dominated by Spain (Boothe, 2011). Since the mid-1600s, the south end of South America has been a geographic marker for navigators.

The sealing expeditions that took place in the South Atlantic and the Antarctic Peninsula also contributed to the Magallanes' connection with Antarctica. It is estimated that sealing started in the South Atlantic in 1766, and the intensity of the activity drove sealers further off the known map in search for the targeted species (Avango, 2017). Cook's confirmation of the location of South Georgia Island and the plentiful seals sighted in his voyages attracted sealers from the UK and the US to the periphery of Antarctica. Sealing captains were experienced in sailing around Chile on their way to the trading ports of Buenos Aires or Valparaiso to offload their cargo. The UK's commercial ties to southern South America warranted the presence of government representatives and businessmen in the capitals of Chile, Uruguay, and Argentina, who provided support for nationalistic voyages of discovery and funded further sealing expeditions. Antarctic expeditions such as those led by Bransfield (1820) and Weddell (1821) benefited from the South American-British connection, and frequently these expeditions would include surveying the Magallanes and Tierra del Fuego areas before heading south (Riffenburgh, 2007). Both expeditions contributed to the knowledge of Antarctica and to support an early land claim for the UK, as well as profiting from sealing to repay their benefactors (Boothe, 2011). In addition, France was eager to conquer the Antarctic too, and sent Jules Dumont d'Urville south. In the summer of 1837-38, Dumont d'Urville spent weeks exploring the Strait of Magellan before heading to Antarctica; the narratives of his voyage were complemented with collections of botanical and zoological species, and ethnographic observations of the natives they encountered (Boothe, 2011). Dumont d'Urville's instructions were to explore further south than his British counterpart James Weddell, and to reach the South Magnetic Pole, claiming new discoveries for France (Boothe, 2011). While in Antarctica, Dumont d'Urville's crew suffered badly from scurvy and had to return to Chile to recover. In 1840, sailing from Hobart, Dumont d'Urville successfully executed the plan of his Antarctic expedition (Boothe, 2011).

The first US government-funded Antarctic expedition took place between 1838 and 1842 (Boothe, 2011). The US South Seas Exploring Expedition, better known by the name of its leader, Charles Wilkes, was also the first of its kind to be based in Orange Bay, in Tierra del Fuego (Søndergård Pedersen & Curtis, 2012). Wilkes' expedition had many setbacks, but

returned home with large amounts of information on Tierra del Fuego and the Pacific, while its exploration and discovery extended the knowledge of East Antarctica's coastline, today known as Wilkes Land (Boothe, 2011).

All above-mentioned expeditions freely explored these lands and waterways, and compiled volumes of information of the area and the natural resources found in Magallanes and Tierra del Fuego. This knowledge provided plenty of incentives for both emerging nations (Chile and Argentina) to mobilize their military south and claim their *inherited rights* to the southern lands.

Explorers of the Heroic Era of Antarctic exploration also visited Punta Arenas to launch or return from their polar expeditions. A pioneer of this period was Baron Adrien de Gerlache, who organized the first Belgian Antarctica Expedition, from 1897 to 1899 (Headland, 1989). De Gerlache's plans were to sail to the Antarctic Peninsula and explore as far as the Ross Sea, where a party would winter over in Victoria Land, trying to reach the South Magnetic Pole (Boothe, 2011). Like with many expeditions of this kind, budgets were strained, and the expeditions relied on financial and in-kind support from many allies. Chile and Belgium had a friendly relationship, and the cosmopolitan community of Punta Arenas offered an unquestionable appeal to de Gerlache's expedition. This included potential funding and support from European expatriates, transoceanic transport and postal service from Europe, a meteorological observatory,⁴⁸ medical and sanitary assistance, and the provision of coal (Jara, 2013). In the voyage's account, de Gerlache could not ignore the fast developments happening in Punta Arenas, and the diversity of people and commercial activities he encountered. De Gerlache and his officers remembered fondly the warm welcome they received from the local multinational community, meeting equally sheep farm millionaires and penniless gold miners who had gathered to welcome the Antarctic explorers. However, Punta Arenas was far from the metropolis de Gerlache had expected: ". . . in short, Punta Arenas is by no means the 'hole' you might imagine it to be. It would be an exaggeration, however to suggest that it is an attractive city" (de Gerlache, 1998, p. 30). Other officers also reported their perceptions on Punta Arenas life:

. . . five large ocean liners were at anchor, and many small coasting steamers with a host of lighter and smaller crafts were scattered about on the unruly waters; but the town from its distant appearance was a disappointment. One hears so much about this

⁴⁸ The meteorological and astronomical observation stations in Punta Arenas were built during the first IPY (1882-83) by Brazil and Germany, to observe the Transit of Venus in collaboration with other international science programmes (Solar, 2013).

settlement, its rapid growth, and marvellous development, that one naturally expects to see a substantial city . . . (Cook, 1900, p. 80)

The *Belgica* sailed south and explored Tierra del Fuego too, before entering the Antarctic Peninsula area late in the summer of 1898. The *Belgica* became embedded in pack ice for almost 13 months, drifting with the ice, becoming the first known expedition to spend a winter in the Antarctic (de Gerlache, 1998). Once freed, the *Belgica* sailed north towards Punta Arenas with some hesitation; the settlement was the closest postal service from where to send news of their survival to the world, and to receive much-yearned-for mail from home. But Punta Arenas had become so busy with interoceanic traffic that other ships could spot them first and report their presence, spoiling the profits of the news (de Gerlache, 1998). Although de Gerlache did not remark on it, by the end of the 19th century Punta Arenas was performing the role of South America's Antarctic gateway.

Other Antarctic explorers also experienced the generosity of the authorities and people from Punta Arenas. The local media documented with great interest these expeditions, and, in return, Punta Arenas appeared prominently on the world map. European allegiances were strong in this polyglot port town, and scientific knowledge was needed by Chile and Argentina to understand waterways, the location of sought-after minerals, and border demarcations. The scientific work done in southern South America by Antarctic naturalists such as Racovitza, Arctowski, and Nordenskjöld was instrumental for drawing accurate maps and settling boundary disputes (Elzinga, 2013).

At the beginning of the 20th century, Southern Ocean whaling was an active industry. In 1906, Punta Arenas' businessmen, encouraged by Norwegian Adolf Andresen, established a short-lived but successful whaling company, the Sociedad Ballenera de Magallanes (Quiroz, 2011). Sociedad Ballenera had a fleet of 11 vessels operating from Punta Arenas, providing regular connectivity between South America and Antarctica, which benefited whalers and explorers alike (Quiroz, 2011). Antarctica's Deception Island was the hub for the Sociedad Ballenera; Andresen kept on the island a floating factory and lived there with his wife Wilhelmine during summers supervising the business (Boothe, 2011). By 1916, the Sociedad Ballenera's activities in Antarctica were discontinued as a consequence of the over-exploitation of whales (Quiroz, 2011), but Andresen's contributions to Magallanes (and Chile) are celebrated today in Punta Arenas. Although Andresen died in indigence in 1940 (Solar, 2013), his grave at Punta Arenas cemetery holds a plaque with a posthumous recognition for his work in Antarctica (Figure 6.16). Similarly, his name is listed alongside the names of famous local businesspersons in a monolith located across Punta Arenas' waterfront. Both plaques allude to Andresen's whaling activities allowing Chile to have a presence in Antarctica from the beginning of the 20th century.

The Sociedad Ballenera was one of several Antarctic whaling companies operating from Deception Island. In 1908, French explorer Jean Charcot documented his visit to the inner harbour of the island, filled with whaling boats and whale carcasses. His expedition delivered mail to the Norwegian and Chilean whalers stationed there and in return Charcot benefited from the whalers' hospitality and the coaling station (Charcot, 1911). Charcot remarked on meeting whaling ships during his explorations in Antarctica:

. . . although it was expected, yet for those of us who had already visited the Antarctic in 1904 (when we knew we were the only human beings here) the meeting with vessels quietly carrying on their work in this region had something impressive . . . as though in some busy Norwegian port . . . (Charcot, 1911, p. 32)

The semi-permanent presence of whalers in the Antarctic Peninsula offered to explorers such as Charcot local information on sea ice conditions, weather patterns, and mooring sites, as well as crucial supplies, communication opportunities, and possible rescue if needed. On his return from Antarctica in 1910 Charcot visited Punta Arenas, where he was greeted with full honours by the French consul, Mr Blanchard, also a shareholder of the Sociedad Ballenera (Elzinga, 2013). Charcot returned the generosity received by the Chilean-French connections by placing their names on newly explored Antarctic sites (Elzinga, 2013). Aptly, Blanchard's mansion (Figure 6.17) is today the headquarters for Chile's NAP.



Figure 6.16: Capt. Andresen's grave in Punta Arenas cemetery



Figure 6.17: Blanchard Mansion, today INACH's headquarters

The influential British presence in Punta Arenas played a significant role in the support of the UK's Antarctic expeditions of the 20th century. In 1904, on his return from Antarctica, Robert Scott sailed on the *Discovery* from New Zealand to Punta Arenas for coaling and to mail post to Europe (Scott, 1929). Although Scott had intentions of stopping at Cape Town first, bad weather prevented him from reaching South Africa, and he diverted to South America and the

Falkland Islands. Although Scott made no remarks on his visit to Punta Arenas in his voyage's accounts, the British Association of Magallanes and the British consul to Punta Arenas, Capt. Charles Milward, hosted the Antarctic explorer on this occasion. Scott's signature and those of his companions are registered in the British Club's guest book and proudly exhibited on request (INACH, 2013). The British Association maintained unconditional support to Scott's second Antarctic expedition (1910-13), expressed in the biased coverage of the local media in support of the British on the so-called "Race to the South Pole" between the expeditions led by Scott and the Norwegian Amundsen (Vasquez & Cabrera, 2016). The unreserved support to Scott's expedition in Punta Arenas highlights the influence of the British media in these far-away emigrant posts, particularly when considering that this community had hosted Amundsen twice as the second officer of the *Belgica* only 14 years before.

Moreover, the British Association of Magallanes proved to be instrumental once again. In 1916, Ernest Shackleton called at Punta Arenas requesting assistance to rescue the men of his ill-fated Antarctic expedition marooned on Elephant Island (Shackleton, 2004). Punta Arenas' British community acted quickly in support, aided by the English-written weekly newspaper *The Magellan Times*, which reported all events concerned with the explorer's visit and fundraising efforts (Leon Wöppke, 2016). Shackleton received assistance from the Chilean navy through Second Officer Luis Pardo, who volunteered along with his crew for the mission on the steamer *Yelcho* (Leon Wöppke, 2016). All men marooned on Elephant Island were rescued, and the *Yelcho* returned victorious to Punta Arenas: "we were given a welcome none of us is likely to forget. The Chilian [sic] people were no less enthusiastic than the British residents" (Shackleton, 2004, p. 246). Shackleton and his rescued men were greeted with joy in the southern town. The public met the explorers in lectures, and, more privately, in parties at the British Club and the British School where selected guests were invited (INACH, 2013). Once again, Punta Arenas was the centre of Antarctic-related news and the local media documented these events amply for Chile and the rest of the world. Scholars Wöppke and Jara (2016) noted that the media reported Shackleton's heroism and persistence in rescuing his men, leaving little acknowledgement of the bravery of Pardo and his crew. This is particularly significant considering Pardo's was the first Antarctic expedition for Chile. Scholars argue that Shackleton's alluring story-telling abilities, and the pressing financial commitments with the international media to sell the chronicles, overshadowed Pardo's modest and professional approach to a mission he was appointed to do (Leon Wöppke et al., 2016). However, there seems to be a renewed interest in Chile in celebrating polar heritage connected to the Heroic Era. The centenary of the *Endurance* expedition sparked celebrations worldwide, and, in 2016, multiple events were organized in Punta Arenas to highlight the participation of Chile in the rescue mission, and in particular the heroism of Capt. Pardo. In 2016, INACH coordinated the events titled "Commemorations in honour of Luis Pardo Villalon,

100 years of the rescue of the *Endurance* castaways”, with the presence of notable guests, such as the Hon. Alexandra Shackleton, granddaughter of the Antarctic explorer, as well as members of Capt. Pardo’s family (INACH, 2016). The photographic exhibitions, concert, movie screening, book launch, seminars and public talks, education programmes, and theatre play organized for the occasion were focused on constructing cultural narratives around Capt. Pardo and Chile in Antarctica, rather than perpetuating the survival stories of Shackleton and his men (INACH, 2016).

By the end of the 1920s, Antarctic exploration had changed, facilitated by the advancement of technology. Aeroplanes and radio communications across the continent were the new challenges, and Punta Arenas was visited by new explorers, such as Australian Sir Hubert Wilkins (in 1934) and American Richard Byrd (in 1940). Byrd included Chilean military among his Antarctic team for training in polar regions (Mericq, 1987). The Ronne Antarctic Research Expedition attracted much attention in Punta Arenas for nationalistic reasons. In 1947, the expedition, led by Norwegian-born US Naval Reserve Capt. Finn Ronne, arrived in Punta Arenas for provisioning (INACH, 2013). Two women, Mrs Edith Ronne and Mrs Jennie Darlington, unexpectedly joined the expedition, and they acquired warm clothing and last-minute supplies to spend a winter with their spouses in Antarctica (Ronne, 2005). In Punta Arenas, they bought Chilean wool and locals lent them knitting needles that would keep them entertained for a year (Ronne, 2005). While in town, Capt. Ronne informed the international media that his expedition was novel in taking women to winter in Antarctica, but soon he was forced to withdraw the comments made regarding his female companions being the first women to live in Antarctica. The Chilean government reminded Ronne that Mrs Andresen, Norwegian-born Chilean resident, had lived on Deception Island in the early 1900s with her whaler husband (Boothe, 2011). Countries with Antarctic interests had laid their territorial claims by the mid-1940s and any declaration of “first in Antarctica” was considered an endorsement to land assertion.

In 1940, Chile declared the boundaries of its Antarctic claimed territory, and soon after Chilean military expeditions headed south to explore the claimed area. In the words of Mericq, “to guarantee sovereignty, Chile also began to settle armed forces bases in 1946” (1987, p. 97). In 1947, Chile’s President Gabriel Gonzalez Videla became the first head of state to visit Antarctica (Mericq, 1987). Another “first in Antarctica” event claimed by Chile is the flight from Punta Arenas to Deception Island by the Chilean air force in 1955 (Mericq, 1987). The geographical closeness of Punta Arenas and the geopolitical agenda of Chile’s Antarctic commander-in-chief Cañas Montalva to popularize the narrative that the country extended to the South Pole (Leon Wöppke, 2012) bolstered the role of Punta Arenas as Chile’s Antarctic gateway. In 1977, President Augusto Pinochet made a visit to Antarctica and witnessed the

presence of other claimant countries, Argentina and the UK, within the Chilean claimed territory (Romero, 1985). Moreover, the strained relationship with Argentina over the boundary conflict in the Beagle Channel exposed that Chile's military power was centred around the main capital, Santiago (Gorostegui & Waghorn, 2012). Hence, there was an urgent need to mobilize it south (including Antarctica). As result, Pinochet ordered the construction of the Marsh aerodrome at Frei Station on King George Is (KGI), considering this an essential investment for his vision of consolidating Chile's power and sovereignty in Antarctica (Gorostegui & Waghorn, 2012; Romero, 1985). The aerodrome opened in 1980, enabling an Antarctic airlink with Punta Arenas, which has been operated since by the FACH and the Civilian Aviation National Agency. Connected to the aerodrome was the construction of the civilian settlement; in 1984, VLE received the first six Chilean families, who lived in Antarctica for two years as part of the country's territorial assertion strategy (Llanos, 2019). The "Chilean town in the middle of Antarctica" encompassed small houses for ten families, a grocery shop, a bank, and a primary school (Velez, 2017). VLE and its people were closely connected with Punta Arenas: communication providers (Internet and mobile phones), a postal service, commercial radio programmes, and a bank branch in Antarctica were supplied by Magallanes businesses. Moreover, the school at VLE, the "southernmost in Chile" (Velez, 2017), was administered by Magallanes' Ministry of Education, under the rural district school (Ministerio de Educacion, 2017b). As indicated before in this chapter, since 2018 VLE has no longer been operating as a civilian town (Martinic & Gonzalez, 2018).

6.5.3.2 Contemporary connections

Punta Arenas' active role as Chile's Antarctic gateway materialized when INACH headquarters moved to the city in 2003 (Barticevic, 2013). The decision had been strongly resisted since 1995; many argued that little could be accomplished decentralizing the political power of Santiago (J. Retamales, personal communication, 23 August 2016). This controversial move was backed by the revised Antarctic policy (2000), in which Chile formulates ambitions for Antarctic leadership within the ATS through the strengthening of international collaborations, improving the country's scientific contributions, and consolidating Punta Arenas' Antarctic capabilities and services (Ministerio de Relaciones Exteriores, 2000). Since 2003, INACH has led instrumental changes on behalf of Chile's Antarctic programme, with an emphasis on managing the Antarctic territory from Magallanes. National Antarctic authorities meet regularly in Punta Arenas and in Antarctica to discuss the national Antarctic policy, stressing the geopolitical importance of the gateway city and perpetuating the imaginary of the extension of the nation's territory towards the Pole (Gorostegui & Waghorn, 2012). According to Retamales, former INACH's director, the country's Antarctic science programme needed a different approach to stay relevant in the 21st century (2016). Chile implemented peer-reviewed

competitive funding for its Antarctic research projects, improved laboratory facilities, and created incentives to entice early career researchers to study Antarctica (Retamales, 2016). Since the changes, Chile's international collaborations with other NAPs have increased substantially: in 2016, 20 countries operated from Punta Arenas to access the Antarctic Peninsula region (Retamales, 2016).

The air connection with KGI revitalized Punta Arenas' interests with Antarctica. It provides an efficient and fast connection with the northern part of the Antarctic Peninsula that appeals to different operators besides NAPs, such as those in the Antarctic tourism business. Punta Arenas concentrates a range of Antarctic tour companies, and their commercial operations have been growing considerably over the years. Since the mid-1980s, the British-American owned company Adventure Network International (ANI) has operated commercial flights to blue-ice runways in the interior of Antarctica, setting up Patriot Hills at the Ellsworth Mountains as their inland Antarctic base (ALE, 2018). ANI offers adventure tourism, such as Antarctic inland trips for mountaineering and skiing expeditions, tourist visits to the South Pole, Antarctic marathons, and camping trips to non-coastal emperor penguin colonies, creating high-end products for specialized and affluent customers (ALE, 2018). In addition, since 2003, ANI has been purchased and merged with Antarctic Logistics & Expeditions (ALE), expanding its services to include support to NAPs, inland traverses, and better intercontinental Antarctic air-bridges (ALE, 2018). Like its predecessor, ALE continues to operate from Punta Arenas, where it maintains a permanent office and warehouse staffed in winter by a skeleton crew, many of which are Magallanicos, and in summer these are joined by over a dozen international staff (ALE, 2018). Although ALE has a long-standing presence in Punta Arenas, most of the equipment, food, aircraft, and vehicles, as well as the specialized staff to run the Antarctic expeditions, come from overseas (Ramon Vera, ALE warehouse manager, personal communication, 2018).

In addition, two other local companies diversify Punta Arenas' Antarctic tourism offerings. One of these is Aerovias DAP, a Magallanes family-owned company, a pioneer in commercial aviation in southern Chile. DAP organizes tourism flights to KGI through its tourism branch, Antarctic Airways, offering visits ranging from five hours in length to overnight camps in Antarctica (DAP Airlines, n.d.). DAP maintains a strong commercial relationship with FACH and INACH, as without their support the tours could not take place (Catalina, DAP officer, personal communication, 2019). In return, the Chilean Antarctic agencies get logistic support, publicity, and gratis exposure for their programmes, strengthening Chile's presence in Antarctica. Tourists are guided around Frei Station and learn from Chilean scientists about Antarctic research; they visit VLE and learn from locals about the perils of living in Antarctica (DAP Airlines, n.d.). Although DAP clients will experience only a small part of Antarctica, these

tours cater for those who have an interest in the polar region but are time-poor. Since the 1990s, DAP tours have been popular and have allowed the company to expand its services (DAP Airlines, n.d.). For instance, DAP operates medical evacuation and emergency flights to Antarctica through its subsidiary Aero Rescate, and their latest commercial development is Antarctic Logistics. The latter has incorporated a cargo vessel into its fleet of planes, helicopters, snowmobiles, and Hägglunds, expecting to supply the demand for transport of people, cargo, and fuel from NAPs' stations located on the Antarctic Peninsula (DAP Airlines, n.d.). DAP is an integral stakeholder of Chile's Antarctic connection: it is a reputable locally known company, it dominates the air services of the whole of Magallanes and *Antártica Chilena*, and it employs local staff for its Punta Arenas and Antarctic operations, who, during the tourism season, live at Frei Base (DAP Airlines, n.d.).

The other Antarctic tour operator based in Punta Arenas is Antarctica21. Since 2003, this company has offered the novel travel combination of fly-cruise to Antarctica. Tourists fly from Punta Arenas to Frei Station, avoiding the sailing days across the Drake Passage, and board a cruise ship at KGI to sail south exploring the Antarctic Peninsula. This is a shorter cruising voyage than others, with the addition of the flight to Antarctica. Antarctica21 is largely a Chilean-owned company, employing local and international staff, and is in partnership with DAP for the air-link component of its tours (Antarctica 21, 2019). Antarctica21 owns the ship *Magellan Explorer*, which was built in Chile and launched in 2019, and leases two other cruise ships during the Antarctic season (Antarctica 21, 2019).

The above-mentioned tour operators found a niche in the polar tourism market, and have taken advantage of Punta Arenas' air and maritime networks. Also, Punta Arenas-owned and -based companies have benefits over their international competitors, such as a closer relationship with Chilean Antarctic operators (i.e. FACH, INACH), which facilitate negotiations and consolidate the polar logistics required for their commercial ventures. Additionally, there are legal and taxation advantages for local companies operating within the Magallanes and Chilean Antarctic Region (Gorostegui & Waghorn, 2012). It appears that business and geopolitics reward those basing their Antarctic operations in the southernmost region of Chile.

6.5.3.3 Economic perspectives

In the last two decades and under INACH's leadership, the government initiated actions to leverage Punta Arenas' gateway role to generate economic opportunities for the region and for local businesses (Retamales, 2016). Punta Arenas' Antarctic air-link is the strongest transport capability on offer to reach Antarctica via South America. The KGI aerodrome is a strategically important infrastructure in Antarctica for Chile and its international collaborators; it dominates the transport access to the Antarctic Peninsula and supports Chile's geopolitical

interests. Currently, the Marsh aerodrome is operable year-round and KGI can be reached in about two hours from Chile mainland (DAP Airlines, n.d.). Also, aerial access to the interior and southern Antarctic Peninsula is possible from KGI in summer, offering an alternative for further access to inland areas (INACH, 2018). KGI is also a popular place for tourism, and is the most densely populated island within the South Shetland Islands, housing research stations from nine different countries, including Chile. In the 2015-16 summer, over 700 flights landed at Marsh: one third were FACH operations, another third involved aircraft from other NAPs (i.e. Argentina, Brazil, Colombia, Peru, and Uruguay), and the rest were for tourism (Dirección de Antártica, 2016). In addition, the aerodrome complements Chile's Antarctic search and rescue (SAR) obligations, and it is the centre for medical evacuation operations from the Antarctic Peninsula. Chile's strategic vision for Antarctica report (Dirección de Antártica, 2015) recognized the importance of KGI for the country's leadership within the ATS, but the same report warns the government of aging facilities and inadequate digital connectivity for such a busy aerodrome.

In contrast, the maritime Antarctic logistic operations, which had been the means of transport for Chile in the past, have not developed to the same degree as the aerial capabilities. Economic impact assessments commissioned by the government over a decade ago identified opportunities for generating business for Magallanes from Antarctic-related activities, but also noted many of the constraints that prevent the generation of lucrative business for the region. In 2008, it was estimated that USD 56.4 million were spent annually by NAPs operating from Punta Arenas, and an added USD 10 million from the Antarctic tourism industry, but only a small fraction of this expenditure contributed to the local economy (Vidal, 2008, p. 5). The main reasons identified for the loss of Antarctic business in Punta Arenas were inadequacies from the local market for supplying the demands of the polar operators. For instance, the quality of the non-perishable food and extreme weather clothing was inconsistent, and the quantity available was insufficient for the demand; there was a need for scientific equipment that was unavailable in Chile, and similarly there was a lack of trained personnel in the city for maintenance and repairs of specialized equipment (Vidal, 2008). Furthermore, unlike other gateway cities, Punta Arenas' port imposes hefty taxes on ships from other NAPs, which result in expensive logistic operations, and, in consequence, shorten the stay of foreigners in the region. Also, there were bureaucratic and administrative obstacles identified that restrained NAPs from spending in Punta Arenas. For instance, national regulations on value-added tax on locally purchased products (including fuel) that would be consumed in Antarctica are applied in *Antártica Chilena* to nationals and foreigners, considering that these goods were consumed within the borders of the country (Carcamo, 2018; River Logic, 2012). To date, Punta Arenas does not have an industrial waste management service to provide for Antarctic

waste; NAPs operating from Chile have the added cost of transporting such waste elsewhere (Cifuentes, 2018).

Chile has improved its transport infrastructure, modernising the existing maritime facilities. The port in Punta Arenas was extended to allow for additional mooring spaces for Antarctic and non-Antarctic ships, and a passenger terminal with modern services for the tourism industry was added. Cruise ship passengers arrive at the “International Antarctic Centre arrivals”, where they are reminded of Punta Arenas' southern links. Large signs and multiple art forms in the shape of whale tails and penguins are very popular with tourists. The port is within walking distance of Punta Arenas' Plaza, allowing easy access for tourists to the heart of the city. Similarly, visiting ships can be seen from the CBD, creating a distinctive backdrop to the city's views. In addition, in 2010 Punta Arenas' international airport expanded its airstrip and improved facilities to accommodate a larger tourism demand to Patagonia and Antarctica; there are plans for the construction of a dedicated Antarctic terminal but the timeline for this infrastructure is yet to be confirmed (AGUNSA, n.d.).

Another value to Punta Arenas Antarctic capabilities is the newly formed network of suppliers, Antarctic Punta Arenas Logistics (APAL) (APAL, 2018). APAL is a joint lobby group for public and private stakeholders (APAL, 2018), and the brainchild of former INACH director Dr Retamales (J. Retamales, personal communication, June 2019). Similar to its previous iteration, the Chilean Antarctic Information Network (CHAIN, 2013), APAL contributes to the understanding of the Antarctic suppliers' market, running public seminars and promoting the services of its members.

Two major projects will give Chile, and Punta Arenas, a favourable advantage over its South American competitor. Chile has commissioned the construction of a new icebreaker, with an investment of USD 225 million (Garcia, 2018). The new vessel will be built in Chile and it is expected to be in operation by the end of 2020 (Garcia, 2018). Also, a dedicated international Antarctic centre (CAI) is planned for Punta Arenas. This is an anchor project for the economic development of Magallanes that will support science, education, and tourism, and will enable better international collaborations from Antarctic partners (INACH, 2017; Ministerio de Relaciones Exteriores, 2000). The CAI is intended as a multipurpose building and will concentrate Chile's Antarctic knowledge under one roof (scientists, science laboratories and specialized equipment, policy-makers and Antarctic managers), while offering modern interactive exhibits and a museum for the public. It aims at invigorating the Chilean public interest in the polar region, while providing a place for Antarctic education, and a tourism attraction (Dirección de Antártica, 2015; INACH, 2017). In 2014, CAI's planning was integrated into the National Plan for Development of Extreme Zones (PEDZE) policy, an economic growth programme aimed at improving the infrastructure and connectivity of disadvantaged areas,

such as Magallanes, and at offering equal opportunities to attract new markets (Gobierno de Chile, 2014). CAI's proposal has been discussed for a decade, and so far the progress has been slow; the design project was approved in 2017 and the construction of the facility was expected to be finished and operational in 2022 (INACH, 2017). However, the Magallanes intendant informed the public that for financial reasons the project has stalled again for the foreseeable future (La Prensa Austral, 2018a). Although CAI is identified as the flag project for national and regional Antarctic stakeholders and fits with the review of Chile's Antarctic policy (Dirección de Antártica, 2015), it seems to be disadvantaged by being included in the PEDZE funding package. The CAI competes with other regional community (and more pressing) projects, such as basic road systems and improvements of the aerodrome in Puerto Williams⁴⁹ (Gobierno de Chile, 2014). Puerto Williams has geopolitical relevance for Chile as the seat of the *Antártica Chilena*; it has been predicated as the rival port to Ushuaia for Antarctic tourism, calling itself an Antarctic gateway port (Gobernacion Provincia de Antartica Chilena, 2018). However, past government promises to enhance the connectivity of Puerto Williams (and the rural community on Navarino Island) with the rest of Chile have failed, competing with other critical projects within Magallanes. Currently, the modest infrastructure of Puerto Williams cannot support the tourism industry demands, nor those of its inhabitants. It appears that Chile's political leaders are confronted once again with budget cuts for anchor projects that support the country's Antarctic ambitions of leadership, against much-needed infrastructure in the southernmost posts of the nation.

6.5.3.4 Cultural perspectives

In Punta Arenas, the offerings of Antarctic research and tertiary education opportunities are limited. However, the city concentrates places with rich Antarctic heritage, and government efforts have produced an array of activities for locals to engage with Chile's Antarctic interests.

Antarctic research based in Punta Arenas is concentrated at INACH's first dedicated Antarctic science laboratory, opened in 2011 to assist with the growing science programme and to enable international cooperation (INACH, 2018). The Antarctic laboratories are equipped to support research on microbiology, molecular biology, and paleobiology; the facilities include a lecture room and working spaces for visiting researchers (INACH, 2018).

The offerings for Antarctic studies and postgraduate degrees in Punta Arenas are modest. The University of Magallanes Centre for Research Gaia Antártica promotes an undergraduate

⁴⁹ Puerto Williams is a Chilean settlement strategically placed on the southern shores of the Beagle Channel that emerged as a navy outpost during the 1970s conflict. Two-thousand people live in this town that relies heavily on government subsidies and tourism (Gobierno Regional de Magallanes y Antartica Chilena, 2016).

minor degree in Antarctic Studies and a master's degree in Antarctic Sciences (Glaciology) (Universidad de Magallanes, n.d.). Currently, Gaia Antártica is undergoing a review process to obtain certification to offer a doctorate degree in Antarctic and sub-Antarctic Sciences in the near future (Universidad de Magallanes, n.d.). In addition, the Antarctic Affairs Diploma focuses on a general introduction to Antarctica, aimed at those involved in Antarctic matters, such as members of the armed forces or people with an interest in the southern region (Universidad de Magallanes, n.d.).

Furthermore, INACH responsibilities include promoting Chile's activities in Antarctica, such as its science programme and the development of education and outreach opportunities (INACH, 2012). INACH has a dedicated department of communications and education that leads these initiatives, in "attempts to 'Antarcticize' Chile" (Vega, 2018, p. 47). For over three decades, the magazine *Boletín Antártico Chileno* (BACH) produced by INACH, has communicated Chile's Antarctic activities to the wider public. In addition, INACH produces Antarctic educational resources available to the community, such as posters of Antarctic fauna and flora, history, children's stories, maps of the continent, and an online Antarctic encyclopaedia; all resources employ attractive images and modern designs, and some include augmented reality enhancements to entice a technology-driven audience (INACH, n.d.).

In addition, INACH runs a popular education programme, the Antarctic School Fair (FAE). This is an annual science competition for secondary schools countrywide. The FAE is an atypical school competition, since the prize for the winning teams is a trip to KGI (Vega, 2018). The students spend a week in Antarctica interacting with researchers, exploring the island, and visiting neighbouring research bases, getting a first-hand Antarctic experience (Salazar, 2013b). This programme is expected to spawn interest in Antarctica and science in Chile's younger generations; so far the interest in participants is growing: in 2004, the first FAE received only a handful of proposals, while in 2018 there were over 140 submissions (Vega, 2018). Salazar argues that the FAE surpasses nationalistic interests to become a novel "consciousness-making process" for the construction of a citizenship connected intellectually and emotionally with Antarctica (2013a, p. 68).

INACH coordinates multiple community activities to assist with the construction of a local and regional Antarctic identity, and to consolidate the role of Punta Arenas as Chile's Antarctic gateway city (Gallardo, 2013). For instance, the *Traces of Antarctica* booklet (INACH, 2013) is a self-guided tour containing 50 sites with Antarctic historical and cultural significance, to showcase the Antarctic connections of Punta Arenas (and surroundings). It is aimed at locals and visitors to Punta Arenas to explore at leisure places of interest of a bygone era, highlighting the city's relevance for past Antarctic expeditions. *Traces of Antarctica* is available online in Spanish and English versions and is free to download. Another initiative supported by INACH

is “Antartikanos”, a cultural project established in 2017 to connect the local artisan community with an interest in Antarctica, creating a collaborative network of scientists and artists to enable science communication to a wider audience (Vega, 2018). The latest of INACH-led projects was TEDx Punta Arenas, held in August 2017, with the aim of assisting the construction of a community identity with Antarctica. Fourteen local speakers entertained the audience with their Antarctic experiences and thoughtful messages on the future of Antarctica, aiming at inspiring Magallánicos to think about their polar linkages and to embrace responsible environmental actions (TEDx Punta Arenas, n.d.).

Punta Arenas has a selection of monuments and public statues that reflect an Antarctic connection. At the waterfront, there is an Antarctic monolith representing *Antártica Chilena* and the names of those who contributed to the early history of Chile in Antarctica, such as the founders of the Sociedad Ballenera de Magallanes (INACH, 2013). In addition, the city has murals depicting moments of Antarctic history that are connected with Punta Arenas. For instance, the outside walls of INACH’s laboratories are decorated with pictorial depictions of Antarctic science events, such as the discovery of the Antarctic dinosaur *Cryolophosaurus ellioti* (Figure 6.18). Also, the murals on the waterfront walkway depict the ill-fated *Endurance* expedition, with portrayals of Shackleton and Worsley in South Georgia near a whaling station, and another art piece represents Capt. Pardo at port with the *Yelcho* (Figure 6.19). The Costanera walkway also contains representations of the area’s maritime history, including memorials for the sealing and Antarctic whaling activities.

Although Punta Arenas has held Antarctic international conferences in the past, such as the RAPAL in 1995, 2001, and 2006 (RAPAL, 2017), COMNAP (2009), and the International Association for Antarctica Tour Operators (2013), the city was not considered for hosting the 2016 ATCM. Commentators considered a missed opportunity and a political error from Chile in giving hosting responsibilities to Santiago instead of supporting the role of the country’s gateway city (Mancilla, 2015). To date, Chile has hosted the 1966 and 2016 ATCMs, both in Santiago (Antarctic Treaty Secretariat, 2018a).

Punta Arenas has a selection of museums but none are Antarctic-specific. The Salesian Regional Museum, known for its extensive collection of the natural and human history of the region, also contains a modern, yet eclectic, display on Antarctic fauna, including taxidermy birds and mammals, a historic reference to Capt. Pardo’s rescue of Shackleton’s crew, and a map and images of the Chilean Antarctic stations. The Naval and Maritime Museum pays homage to the maritime history of Chile and has a dedicated section for Capt. Pardo and the *Yelcho*. Likewise, the Military History Museum contains references to the military involvements in building Chile’s first Antarctic bases, along with some artefacts used for travelling on ice.

The Chilean government leverages on the city's past and contemporary Antarctic connections with the aim of influencing public engagement with Antarctica and the construction of an "Antarctic spirit" among fellow nationals (Vega, 2018, p. 47). INACH drives these governmental goals, including the planning and execution of a much-anticipated anchor project: the CAI. It is expected that the CAI will cement the city's Antarctic gateway role and bring together national and international Antarctic actors. To date, there are no further updates on when this project will materialize.



Figure 6.18: Mural on INACH's laboratory, Punta Arenas



Figure 6.19: Mural of Capt. Pardo, Punta Arenas

6.6 Ushuaia (Argentina):

Ushuaia is the administrative capital of the province of Tierra del Fuego, Antarctica and Islands of the South Atlantic (TdF), located in Argentina's far south. This is the only provincial capital in Argentina set on an island. Also, and most distinctively, it is said (as enacted by national legislation) to be politically and administratively responsible for a contested area, the Malvinas/Falklands and other South Atlantic islands, and for the Antarctic claimed sector. Excluding the arguments for the validity of the aforementioned territorial claims, the province's name exposes the geopolitical importance of the region for Argentina, and the role of Ushuaia at the centre of the country's ongoing territorial ambitions.

Ushuaia spreads over the northern coast of the Beagle Channel and its growth is restricted by topography and politics: the city is nestled between mountains and the sea, flanked by the waterway in the south and a national park to the west; both mark the borders with Chile. In the latest national census of 2010, Ushuaia registered a population of over 56,900 people (Gobierno de Tierra del Fuego, 2016). However, locals estimate that the current population has reached one-third more since 2010, continuing with the upward trend since the 1980s as

result of geopolitical and economic strategies implemented by the Argentine government to stimulate migration to the far south.

Ushuaia promotes itself as “the southernmost city in the world” (InFueTur, 2016), a brand name that highlights geographic remoteness, allowing the city to trade as an exotic tourism destination and to create cultural imaginaries of solitude and uniqueness. However, this narrative deliberately ignores the existence of Chile’s Puerto Williams, located a few miles southeast of Ushuaia. Moreover, Isla Grande Tierra del Fuego’s sovereignty has been shared between Argentina and Chile since the arbitrary international border was established in 1881; the bilateral agreement partitioned Isla Grande with a vertical line running north to south at meridian 68°34’W (Infante, 1995) to the Beagle Channel. Argentina represents its sovereignty in Tierra del Fuego in a triangular-shaped cartographic depiction that allows for obscuring the other lands outside the triangle, and, therefore, creating representations of Tierra del Fuego as distinctively Argentine.

6.6.1 Socio-economic views

The development of Ushuaia as a provincial capital is fundamentally linked to its geographic location for Argentina’s geopolitical interests in the South Atlantic and Antarctica. Comparatively, Ushuaia has the youngest modern history of all Antarctic gateways.

Before becoming the urban sprawl of today, the area was home to the Yahgan people, who inhabited the southern area of Tierra del Fuego for more than six millennia before the first contacts with European explorers in the 17th century (Piana, Alvarez, & Rua, 2007). Collectively known by Europeans as “Fuegians”⁵⁰, the Yahgan⁵¹ lived in the area where Ushuaia is today located; these were the southernmost people in the world known to date (Bengoa, 2004). From the late 18th century, exploratory and sealing expeditions in the Beagle area, followed by the Argentine government’s territorial reclamation, resulted in the demise of the Yahgan by the end of the 19th century. It is thought that the only remaining representative of the Yahgan group lives in Puerto Williams (Bengoa, 2004).

Ushuaia’s modest beginnings as an Argentine settlement started with a penal colony that functioned from 1902 to 1947 (Edwards, 2017), which was established as a government response to the presence of other countries (mainly the UK and Chile) in the Beagle area. Ushuaia experienced a dramatic change from the 1970s as result of the government’s creation of special fiscal areas to stimulate economic growth and promote internal migration to the southern corners of Argentina. The growing tensions with Chile over the international borders

⁵⁰ “Fuegians” was the collective name given to the four nomad groups of Tierra del Fuego (i.e. Selk’nam, Haush, Kawesqar, and Yahgan) (Bengoa, 2004).

⁵¹ The Yahgan are also known as “Yamana” and “Yagan” (Bengoa, 2004).

in Patagonia stoked fears that the neighbouring country would expand its dominion from Punta Arenas into the desolate Tierra del Fuego (Elzinga, 2013). Argentina's National Territory of Tierra del Fuego was a neglected border area lagging behind the rest of the country, until it acquired the status of Special Customs Area and Free Trade Zone in 1972 (Van Aert, 2013). Tierra del Fuego's Special Customs Area radically changed the social, political, and economic environments in the region, attracting industries to settle in the Territory. The tax-free zone offered exemptions on commodities, free levies, and freedom from value-added tax for production of goods in the region, and businesses and individuals alike could take advantage of the exclusion of taxes on imported goods and personal income (Van Aert, 2013). The tax-haven applied to all products manufactured (or assembled) in Tierra del Fuego and generous state subsidies aided industries to open textile and electronic factories in Tierra del Fuego.

Since the 1970s, Tierra del Fuego has attracted an influx of domestic migrants (particularly in large numbers during the 1980s and 1990s), to become the fastest growing territory in Argentina. In 40 years, the population grew from 13,527 people in 1970, to 127,205 in 2010 (Nahirnak, 2017, p. 42). The population dynamics in Tierra del Fuego indicate that the geopolitical strategies implemented were successful, and today over 90% of the population is Argentine-born (Gobierno de Tierra del Fuego, 2016). Furthermore, the population is predominantly of working age, with over 67% being 15 to 64, and nearly 30% are children (Gobierno de Tierra del Fuego, 2016, p. 9).

Locals called themselves "Fueguinos", but not only those born in the province can adopt this demonym; over two thirds of the current population of Ushuaia have migrated from elsewhere. Research suggests that the longer people consider Ushuaia as their hometown, the better their chances to be called "Fueguino" (Herbert, 2014; Hermida, Malizia, & Van Aert, 2016). Hermida et al. (2016) found that local residents describe the characteristics of a Fueguino as someone who has a positive outlook on living in Ushuaia and its scenic surroundings, valuing a good-quality lifestyle, having family and career success, fostering a supportive network of friends and colleagues, and having empathy to the place and its environmental challenges.

Housing has been the most significant and continuous problem in Tierra del Fuego since the 1970s. The fast population growth experienced in Tierra del Fuego, coupled with slow policies for state housing, and private land ownership in the hands of a few, resulted in chaotic social, political, and urban structures: in a matter of decades, the sleepy village at world's end turned into a boom town⁵² (Braumann & Stadel, 1999, p. 43). Consequently, there is a proliferation of

⁵² A *boom town* is a community experiencing above-average economic and population growth, which results in strain on existing community and societal institutions (Braumann & Stadel, 1999).

informal settlements in Ushuaia. Their residents do not have a strong place attachment as they feel excluded and marginalized in the Ushuaia society (Herbert, 2014). Concurrently, Fueguinos believe their city has changed for the worse, alluding to environmental problems associated with the arrival of new migrants, such as the clearing of woods for squatting, waterways pollution, untreated and accumulated waste (Chiari, 2013). Fueguinos oversimplify the concept of rootedness, believing that those who are firmly established, like them, are environmentally caring and aesthetically connected with Ushuaia, whereas the rootless are neither (Chiari, 2013).

Tierra del Fuego's economic performance compares favourably with that of other provinces, in a country with a long history of economic instability. However, its geopolitical significance for Argentina suggests that the federal government will continue to support special customs policies and economic subsidies to maintain the strength of this province. Since the mid-1990s, Argentina's economic liberal greatly affected the manufacturing industries settled in Tierra del Fuego, which could not compete with low-cost products made in Brazil (Mastrocello, 2008). Nevertheless, the *fábricas* hold the local myth of being a major driver of the Tierra del Fuego economy, initiated by labour unions and sustained by politicians in exchange for electorate support. Currently, the manufacturing industries employ over 10,000 people in the province, and create another indirect 5,000 jobs (Rebossio, 2016, 8 Dec). The public administration and services sectors are the major employers in Ushuaia. Provincial and municipal employment is sought after by many, since wages and salaries for the civil service in Tierra del Fuego than anywhere else in the country (Nahirnak, 2017). Moreover, hydrocarbons and fishing are the pillars of the Tierra del Fuego economy, and a substantial part of the money collected by the federal government for the extraction of crude oil and natural gas is passed along to the provincial government. (Mastrocello, 2008).

Finally, tourism is another important contributor to the economy of Ushuaia. Since the 1990s, government-led promotional campaigns have branded the region as the "end of the world" (Figure 6.21), associating it with imaginaries of wilderness, mountain-sea scenic beauty, sense of adventure, and extreme isolation (Mosti & Sallies, 2016). Moreover, the brand *Ushuaia, gateway to Antarctica* reconstructs imaginings with Argentina's polar ambitions and bicontinental country for locals and nationals visiting Tierra del Fuego, and emphasizes the role of the city as the portal to the polar world (Ushuaia Bureau, 2017). Locals perceive that Ushuaia benefits from tourism, but it has limitations as a tourism destination. A survey conducted by the local Tourism Board indicated that nearly 92% of participants believed that Ushuaia receives many tourists but does not behave as a tourist city (Secretaria de Turismo, 2016). Survey participants believed locals have a poor understanding on how to be a tourist host, indicated by the general dirtiness of the city, poor traffic circulation, broken footpaths,

and inadequate transport infrastructure (Secretaria de Turismo, 2016, p. 10). In addition, survey participants indicated that the tourism season has negative impacts on locals, such as higher food prices and tourists crowding their favourite spots (Secretaria de Turismo, 2016).



Figure 6.20: Ushuaia's busy port



Figure 6.21: The popular “End of the World” sign on Ushuaia’s waterway

6.6.2 Political views

The core of TdF’s political activity occurs in Ushuaia. This small city holds the power for the southern regions of Argentina, both legitimate and imagined lands. Ushuaia is home for the the governor of the province, the provincial legislature and judiciary system. Also, the city’s mayor and related municipal agencies have a strong political profile in the city.

Two emerging politicians lead the governments of Ushuaia and the TdF; their parties are from different centre-left alliances that have joined forces to support a new Peronist coalition that won the 2019 presidential elections, the Frente Para Todos⁵³ (FPT). Despite the apparent cohesion in the political leadership of Tierra del Fuego, other actors influence the community support for the government. The FPT maintains a strong membership, represented by trade unions, the working class, beneficiaries of government subsidies, and, associations of veterans of the Malvinas/Falklands conflict (Perochena, 2016). The veterans associations developed as an influential political force associated with human rights activism during the former Kirchner administrations (Perochena, 2016).

It is important to note that the concept of *Malvinas*⁵⁴ holds a special place in the political imaginaries of Argentina, and Ushuaia in particular. For Argentina, the Malvinas/Falklands

⁵³ “Frente Para Todos” is a newly formed political coalition that integrates different left-wing political groups under the leadership of former president Cristina Kirchner and associates; FPT is often considered a new form of Kirchnerism (Londoño & Politi, 2019).

⁵⁴ The 1982 armed conflict between Argentina and the UK over the Malvinas/Falkland Islands has produced abundant scholarly literature. The work focused on geopolitical motivations and Antarctic territorial nationalism is of particular interest to this thesis (Benwell, 2017; Dodds, 2012; Dodds & Hemmings, 2013).

conflict represent painful and humiliating moments of the nation's history: memories of war, military dictatorship, and the revelations of crimes against the civilian population committed by the Junta. Argentina's political leaders have consistently employed the Malvinas/Falklands dispute to perpetuate nationalistic narratives of *loss* and *dispossession* that government rhetoric has historically captured as a national cause that unites the nation (Escudé, 1995). Ushuaia is at the core of the islands' sovereignty dispute as the capital of TdF. In 2012, President Cristina Kirchner, hundreds of war veterans, and a large crowd gathered in Ushuaia to commemorate the 30th anniversary of the war. In her speech, Kirchner urged Fueguinos to continue fighting for "memory, truth and justice" of the Malvinas, seeing the islands as a British colony in an era of decolonization (Fernandez de Kirchner, 2012). Kirchner's speech intended to recreate the Malvinas as a social construct rooted in the community of Ushuaia and in the consciousness of Tierra del Fuego. Following the commemorations, expressions of banal nationalism connecting the region to the Malvinas multiplied in Ushuaia: the streets were decorated with banners celebrating the 30th anniversary, and an increasing propaganda of hatred speech towards the UK was manifested in response to the Kirchner rhetoric of *usurpation and colonialism*. A large placard⁵⁵ was placed at Ushuaia's port with an unwelcoming message to visitors: "Mooring forbidden to British pirate ships" (Figure 6.22). It should be noted that in Argentine jargon a *pirate* is derogatory term to refer to a British person. Although no organization assumed authorship for this banner, it occupied a prominent place in a governmental facility for many years, which indicates that it had no less than official blessing. . Moreover, in 2018 the government of Tierra del Fuego created a *Provincial State Secretary for the official representation on the Malvinas question* (Legislatura Provincial de Tierra del Fuego, 2018), predicated as an agency to ". . . represent the interests of Fueguinos . . ." before the Ministry of Foreign Affairs of Argentina. The provincial agency has no political influence over the federal government's actions besides reminding the federal government of Ushuaia's place as the capital of the disputed territory.

⁵⁵ The placard at the entrance of the port of Ushuaia was in support to the local government's refusal of entry to two cruise ships arriving from the Falkland Islands in February 2012 (MercoPress, 2012).



Figure 6.22: Banner unwelcoming towards British ships, Ushuaia

6.6.3 Ushuaia's Antarctic connections

6.6.3.1 Historic links

The discoveries of important waterways and landmarks in southern South America, such as the Strait of Magellan and Cape Horn, discouraged further exploration of Tierra del Fuego in the 17th and 18th centuries (Luiz & Schillat, 1998). Hence, Europeans would not find the Beagle Channel, central to the area of Ushuaia, until the 19th century. European expeditions explored for alternative oceanic waterways to the Pacific Ocean, instead of sailing through the Spanish-claimed Strait. Many explorers came relatively close to sailing into the Beagle, demonstrated by the place-naming of nearby lands. For instance, in 1775 James Cook spent New Year's Day exploring Staten Island off the southeast part of Isla Grande, and naming smaller islands after the celebratory holiday; Cook was only 150 kilometres away from discovering the Beagle (Danza & Aguero, 2000). At the beginning of the 19th century, the British Admiralty was interested in controlling the commerce from emerging sealing and whaling industries in the South Atlantic. Ships were sent to Patagonia and Tierra del Fuego for hydrographical surveys and to find suitable places for small settlements to aid future British expeditions (Luiz & Schillat, 1998). In 1826, the British ship the *Beagle*, led by Capt. Fitzroy, entered the channel that was initially thought to be a large bay, and named it after the expedition's vessel (Bridges, 1948). The discovery was significant as the Beagle provided sheltered waterways to connect the Atlantic and Pacific oceans, without the perils of sailing around Cape Horn. In addition, descriptions of abundant wildlife in the area, and Fitzroy and Charles Darwin's ethnographic

descriptions⁵⁶ of the natives of Tierra del Fuego, inspired many to travel south. Further expeditions to sail into the Beagle were motivated by commerce, science, acculturation of the Fuegians, and territorial sovereignty assertions. In 1867, a modest Anglican mission was established in the bay of Ushuaia, managed by the Reverend Thomas Bridges, bringing Christianity to the Fuegians (Bridges, 1948). The Ushuaia mission grew to have about 300 people living between the main houses and the natives' huts (Bridges, 1948). Bridges recorded traditions, the language, and changes in the numbers of the Yahgan population; the Ushuaia mission also recorded the expeditions that visited the Beagle, before the mission was disestablished by the foundation of an Argentine sub-prefecture in 1884 (Bridges, 1948).

In its formative years, Argentina expanded rapidly through the Pampas, and the integration of Patagonia and Tierra del Fuego was the next step. The extensive Argentine Atlantic coastline was an attractive prospect for commercial exploitation, and passenger shipping between the Falkland Islands and Punta Arenas had increased considerably, with the new route through the Beagle instead of around Cape Horn. Punta Arenas was a dominating force in the south and Argentina had no authorities or settlements in the region. Concerns over foreigners illegally occupying Argentine land and profiting from its natural resources (i.e. gold miners, missionaries) were mounting, and the border conflict with Chile was still unresolved (Elzinga, 2013). As result, in 1881 the Argentine Geographic Institute launched the Argentine Austral Expedition to explore Patagonia and Tierra del Fuego, led by Luis Piedrabuena and with the Italian Giacomo Bove as the science leader (Borla & Vereda, 2005). Bove had Arctic experience and was interested in organizing his own Antarctic voyage, for which he was seeking support from Argentina while acquiring knowledge of the south (Headland, 1989). Bove's reports on Tierra del Fuego impressed the government, and in 1884 he led another expedition to Tierra del Fuego, which determined the location for the future sub-prefectures. One was to be placed in Staten Island and another in Ushuaia, which was the origin of the permanent settlement for the city (Luiz & Schillat, 1998). Bove also suggested that a penal colony would solve the problem of colonization of southern Argentina. He had met Bridges in Ushuaia and was impressed by the work of the missionaries with the natives, remarking that the latter were instructed in English, which raised suspicions of British encroachment in Argentine lands (Bridges, 1948). Moreover, Bove reported that the Yahgans would not resist the establishment of another white men settlement along the Beagle Channel, and Ushuaia was chosen as the ideal harbour for an Argentine urban development (Luiz & Schillat, 1998). In 1882-83, the first IPY sent scientific expeditions to high latitudes of the globe, driven by scientific curiosity on meteorology, geomagnetism, and astronomy (Barr & Luedecke, 2010).

⁵⁶ Darwin published the accounts of his voyages in the popular book *The Voyage of the Beagle* in 1839, where, among other descriptions, he narrated encounters with the Yahgans (Darwin, 1997).

The IPY was mostly centred on the Arctic, with only two expeditions launched for the southern hemisphere: a German expedition was based on South Georgia Island, and the French International Polar Expedition, led by Louis Martial, conducted scientific work in Tierra del Fuego (Headland, 1989). Martial's expedition was based at Orange Bay (Hoste Island, Tierra del Fuego) for a year, and produced maritime charts and multiple reports on zoology, botany, and meteorology, along with a comprehensive photographic collection and ethnographic observations of the Yahgans (Barr, 2007). Also, Martial participated in astronomic observations of the Transit of Venus over Tierra del Fuego, joining the international efforts of other nations, such as Brazil and Germany, who established astronomical observation stations in Punta Arenas in 1882 for this purpose (Solar, 2013). Martial's expedition visited the Ushuaia mission multiple times to gain insights into the area and the natives' lives. Moreover, the physician of the expedition, Dr Hyades, diagnosed tuberculosis as the main fatal illness affecting the natives; he suspected that the change to a sedentary lifestyle along with confinement in wooden cabins and wearing European-styled clothing kept them cold and damp, and made their weakened immune system susceptible to bacterial diseases (Piana et al., 2007). The many scientific contributions of the French expedition to this region are symbolized in the abundant toponyms that appear in maps of the Beagle to Cape Horn, and in the mountain range that silhouettes Ushuaia.

Hyades was not the only European to have concerns over the survival of the Yahgans. Adrian de Gerlache, leader of the Belgian Antarctic Expedition, had stern remarks about the success of the Anglican mission in Tierra del Fuego after the rapid decline in numbers of the Yahgan population (de Gerlache, 1998). The men of the *Belgica* had seen the sad prospects of the natives surviving at the Dawson Island mission while provisioning the ship in Punta Arenas, and the Ushuaia counterpart seemed no different.

In December 1897, the *Belgica* spent several weeks in the Beagle Channel; de Gerlache had accepted a generous donation of coal from the Argentine government, which was loaded on board in Lapataia Bay near Ushuaia. The village of Ushuaia did not impress the Belgium explorer: “. . . despite its title as capital of Argentinian Tierra del Fuego, nothing more than a straggling village of some twenty houses and a wooden chapel . . .” (de Gerlache, 1998, p. 35). De Gerlache describes a gloomy picture of Ushuaia, isolated from the urban centres and lacking citizens:

. . . to balance the shortage of people to be administered, there is quite a respectable number of administrators at Ushuaia [sic]: a governor, secretaries, clerks, chief of police, harbour-master . . . there is also even a schoolmaster and a schoolmistress . . . but they are . . . lacking in any pupils, for the English missionaries have their own

school. As for the Argentine officials, since they treat their time in Ushuaia as a kind of exile . . . they generally leave their families in the metropolis. (de Gerlache, 1998, p. 38)

The *Belgica* visit to Ushuaia had several incidents that could have halted the expedition, including the crew starting a fire in the forest (which they helped to extinguish), and almost running aground while delivering mail to Harberton, the new home for the Bridges family near Ushuaia (Bridges, 1948).

In 1901, the Swedish expedition led by Dr Otto Nordenskjöld, a geologist who had extensively explored the south of Chile and Argentina in the 1890s and shared his knowledge with the surveyors of the international borders' commission (Elzinga, 2013), found support for his Antarctic expedition among his academic friends and the Argentine navy (Lüdecke, 2004). Argentina had Antarctic ambitions, but, at the time, did not have the scientific expertise to undertake such exploration. Nordenskjöld offered an ideal partnership; in return for financial and in-kind support, Argentina would gain expertise and scientific training in geomagnetism, which was critical for the creation of better navigational charts for commerce, safety at sea, and defence. Nordenskjöld accepted an Argentine navy officer as part of Antarctic scientific party, which would later prove to be fundamental to the expedition's rescue mission. Argentina built a meteorological and geomagnetic station at Observatory Island near Staten Island to support Nordenskjöld's science programme (Ballve, 1900). In early 1902, Nordenskjöld and his winter party were deployed in Antarctica to continue with their scientific work for a year. Meanwhile, the expedition's ship *Antarctic* headed north to spend the winter conducting scientific observations in the Falklands, South Georgia, and the islands of Tierra del Fuego before returning south to collect the Antarctic explorers (Nordenskjöld & Andersson, 1905). Andersson, the science leader for the South American portion, extensively explored the outskirts of Ushuaia while the crew did maintenance work on the ship, loaded provisions and coal donated by the Argentine government, and left two letters for the mailboat to collect in Ushuaia (Elzinga, 2013). Carl Larsen, the captain of the *Antarctic*, was pleasantly surprised by the support given to the expedition by Argentina, saying, ". . . it was extraordinary that a foreign government would give us so much help . . . as much as we needed . . ." (in Hart, 2001, p. 23). In the letters sent from Ushuaia, Larsen indicated his travel intentions, the sailing route, the location of Nordenskjöld's Antarctic campsite, and an approximate return date. If they failed to return, the instructions were to send a rescue mission (Nordenskjöld & Andersson, 1905). Larsen's foresight resulted in the Argentine government launching a rescue expedition in 1904 when the *Antarctic* did not return from Antarctica. The navy ship *Uruguay* made its maiden voyage to Antarctica in search for Nordenskjöld and his party, who were found unharmed but marooned (Nordenskjöld & Andersson, 1905). On their way north, the *Uruguay* stopped at

Ushuaia to send news of the successful rescue, including a stop at Observatory Island station to collect the data that would later be compared with the Antarctic findings (Nordenskjöld & Andersson, 1905). The rescue of Nordenskjöld's party ignited Argentina's interest in the Antarctic and in consolidating a maritime presence in the South Atlantic. Further, the *Uruguay* and its captain Juan Irizar became the pioneers for Argentina's Antarctic knowledge, and polar heroes (Capdevila & Comerci, 2013).

The generosity of the Argentine government towards Antarctic expeditions, providing coal, ship repairs, a postal service, and a meteorological observatory, made Ushuaia a modest witness of the polar activity happening from South America. In November 1903, French explorer Jean B. Charcot arrived in Argentina to assist with the rescue mission of the Nordenskjöld expedition, and soon learned that the Swedish party had already been rescued (Capdevila & Comerci, 2013). Charcot obtained information from Nordenskjöld and Irizar, and received support from the Argentine government for his ill-suited ship, the *Français*, such as repairs, coal, and rescue if needed (Boothe, 2011). The *Français* called in at Ushuaia for coal and provisions. Charcot's accounts of "la ville la plus Sud du monde" (Charcot, 1906, p. 36), speak of the kindness received, from fuel and local bread (*galletas*), to a mass celebrated to bless their expedition and a modest dinner party at the governor's house (Charcot, 1906, p. 37).

The arrival of whalers and whaling stations at Deception Island and South Georgia reduced the attention paid to Ushuaia as the last coaling and provision service for the international Antarctic expeditions that occurred during the first half of the 20th century. The Sociedad Ballenera de Magallanes operated on Deception Island from 1906 to 1916 (Quiroz, 2011), and in 1904 Antarctic veteran Carl Larsen established a whaling station for Compañía Argentina de Pesca in Grytviken on South Georgia, operating successfully for over a next decade (Hart, 2001). Both commercial enterprises could provide communications and supply coal and provisions to Antarctic expeditions, including valuable whalers' expertise and first-hand knowledge of Antarctica that precluded the need for stopping in Ushuaia to refuel.

World War I (1914-18) halted Antarctic expeditions, and during this time Ushuaia saw only an occasional ship provisioning Orcadas Station (South Orkney Islands), since much of the annual crew relief was done from South Georgia (Capdevila & Comerci, 2013). Ushuaia relied on maritime transport until the 1960s when a road was built to connect it with the rest of Isla Grande. Tourism had invigorated the former penal colony and efforts were made to continue ship visits. The pier was expanded and a passenger terminal and custom house was built by 1942 (Jensen & Daverio, 2008). Transportes Navales, the government's commercial transport agency, maintained scheduled voyages between Ushuaia and the rest of the country. In 1958, the ship *Les Eclaireurs*, and other vessels from Transportes Navales, started a series of

voyages to Antarctica transporting tourists and the relief staff for Orcadas Station (Jensen & Daverio, 2008). The Antarctic voyages sailed from Ushuaia to the Antarctic Peninsula, stopping at places of interest for both tourists (largely Argentine residents) and the National Antarctic Commission, which was delivering supplies to the country's Antarctic outposts (Genest, 2006). These voyages proved to be popular and served multiple geopolitical purposes: wealthy Argentines and foreign tourists travelled to the southernmost corners of the country, including Antarctica, while the voyages gave service to the Antarctic outposts that the navy's aging ships could not provide (Capdevila & Comerci, 2013). Passengers on these pioneering Antarctic tourism voyages flew south to Ushuaia on a navy aircraft, before boarding a ship leased by a naval agency (Capdevila & Comerci, 2013). Unexpectedly, Ushuaia took an early role as an Antarctic tourism gateway, benefited by its maritime history and geographical proximity to Antarctica. In addition, the creation of the Tierra del Fuego Maritime Directorate in 1943, furthered by promoting the area to the "National Territory of Tierra del Fuego, Antarctica and Islands of the South Atlantic" (1957), increased the local government's power in decision-making and building critical infrastructure, such as the naval airport to support the role of Antarctic hub (Borla & Vereda, 2005).

Argentina's forceful Antarctic policy of the 1940s to 1960s gained international attention when in the 1965-66 summer Transporte Navales and American company Lindblad Travel organized from Ushuaia the "First International Survey Voyage to the Argentine Antarctic Sector" on board the ship *Lapataia* (Jensen & Daverio, 2008). The national and international media coverage of the voyage increased public awareness, encouraging the Argentine government and tour operators to continue with similar ventures. Lindblad Travel, and more specifically its owner Lars-Eric Lindblad, regarded as the pioneer of Antarctic tourism (Boothe, 2011), continued to rent Argentine and Chilean vessels for Antarctic shipborne tourism, alternating the port of departure of these voyages between Ushuaia and Punta Arenas (Jensen & Vereda, 2016). The 1970s are referred to as the "first Antarctic tourist boom" by scholars Jensen and Vereda (2016, p. 83), due to the large number of voyages, ships, and tour operators engaged during this decade in Antarctic cruising, many of which involved Ushuaia as the preferred port of departure. The 1982 Falkland/Malvinas conflict deterred many from travelling to the area and Antarctic cruising declined, but local tour operator Antartur SRL pursued Antarctic tourism. Owned by Antarctic veteran and retired Argentine Lieutenant Giro, Antartur was a modest family-owned business established in the Ushuaia community. Giro organized Antarctic voyages, renting Argentine vessels with the blessing of Argentina's Antarctica programme; one of these Antarctic voyages included old settlers and school students from Ushuaia (Jensen & Vereda, 2016). However, Antartur would be infamously remembered for being the tour operator of the ship *Bahia Paraiso*, which sank in Antarctica in 1989 (Jensen & Daverio, 2008).

6.6.3.2 Contemporary connections

Ushuaia is recognized as the most active gateway for shipborne Antarctic tourism (Jensen & Vereda, 2016). The city's geographic proximity and its sheltered port offer ideal conditions for reaching the Antarctic Peninsula in shorter sailing times than from its closest competitor, Punta Arenas.

Ushuaia's Antarctic maritime links developed for over half a century, but its air connection has lacked the same official endorsement. Argentina's Antarctic National Policy law ascribes the lead role for the air-link to the Patagonian city of Rio Gallegos, home to a large air force base (Poder Ejecutivo Nacional, 1990). Occasionally, Ushuaia's airport is used to link Antarctica to Argentina's mainland. President Menem's administration (1989-99), characterized by its neoliberal political-economic plans, had an ambitious foreign policy and Antarctica was at the forefront of its diplomatic negotiations, in particular to bridge differences with Chile and the UK (Colacrai, 1998). The development of Ushuaia as a gateway city was a priority for the federal government (Colacrai, 1998). Argentina's Antarctic policy endorses the cities of Ushuaia and Rio Gallegos as strategic transport hubs for the country's Antarctic interests, and stresses that the transport infrastructure of these cities *must* be developed and strengthened to support the NAP and to create business opportunities from their Antarctic logistic capabilities (Poder Ejecutivo Nacional, 1990 art. 2). The choice of the above-mentioned cities was not casual; it was shaped by military influence and geopolitical factors, and for the economic opportunities that the Antarctic connection would bring to these far-away regions. Besides their Antarctic experience, Ushuaia and Rio Gallegos are strongholds for the military in southern Argentina: Ushuaia was developed by the navy base, which has responsibilities for SAR in Antarctica (Sanchez, 2017). Rio Gallegos hosts within its large base the Air Force Division for Antarctic Affairs, an agency responsible since 1950s for the air travel to Antarctica (Capdevila & Comerci, 2013), and which was a critical garrison for aerial attack operations and the defence of the Argentine coast during the Malvinas/Falklands conflict of 1982 (Middlebrook, 1987). The Menem administration inherited a hostile relationship with the Armed Forces of the Argentine Republic (McSherry, 1997), and any changes to the status quo (including modifications to Antarctic logistics' operations) would have been interpreted as a threat. Moreover, it was expected that Rio Gallegos and Ushuaia could provide logistic support to the Malvinas/Falklands and attract foreign NAPs to base their Antarctic operations from these cities (Colacrai, 2013). Hence, the Menem administration negotiated the stop-off flights to the Malvinas/Falklands, improving diplomatic relationships with the UK (Corbacho, 2005). Although the government's ambitions of combining business opportunities with Antarctic logistics did not fully develop, for reasons that are beyond the scope of this research it did set up Ushuaia to plan a strategy to consolidate its role as a polar gateway.

In 1993, Ushuaia organized an Antarctic science and policy symposium, inviting international guests speakers and representatives from Hobart and Christchurch to share with the local community their Antarctic gateway development plans (Portela, Leguizamon, & Madoni, 2004). The outcomes of these meetings identified the need to improve access to the city and transport infrastructure. In 1995, the Malvinas Argentinas international airport initiated operations with capacity for large and multiple aircraft for the city (Jensen & Vereda, 2016). Also, in 1999, the port of Ushuaia received an overdue upgrade that saw the solo pier strengthened and extended to allow for simultaneous operations of passenger ships and cargo operations (Consejo Federal de Inversiones, 2012).

Transport infrastructure developments were not the only advantages created to secure the international tourism market. Tierra del Fuego's province has its own Antarctic policy, which includes the growth and support of Antarctic tourism activities from Ushuaia (Poder Legislativo, 2003, art. 10). Also, Tierra del Fuego offers tax exemptions to scientific and tourism activities developed in the sub-Antarctic and Antarctic regions. In support of this policy, the Tourism Board of Tierra del Fuego (InFueTur) created a fully dedicated Antarctic tourism information centre, the Antarctic Unit, which offered specialized information on traveling to Antarctica, promoted awareness on Antarctic matters to the public, and assisted Antarctic tour operators and Antarctic guides during their stays in Ushuaia (Jensen & Vereda, 2016). The Antarctic Unit pioneered the production of an annual statistical report on the activities undertaken by tourists and ships in the Antarctic Peninsula (Barrio & Roldán, 1997). These reports assisted the Argentine delegation to the ATCMs in providing an insight into the growing trend of Antarctic tourism.

The policies championed by Tierra del Fuego attracted foreign tour operators and reactivated business in Ushuaia. The transport infrastructure upgrades coupled with economic incentives for Antarctic tour operators, such as reduced mooring fees, priority to operate passenger loading and provisioning at the pier, facilities for bunkering, and tax-deducted cost of fuel, among others, has since the mid-1990s attracted the industry to operate from Ushuaia (Daverio et al., 2008). Concurrently, other external factors have influenced the growth of Antarctic tourism since the 1990s, such as availability of small-size research vessels with polar-experienced crew, which benefited the *Lindblad* model of eco-tourism expedition cruising (Lamers, 2009, p. 13). Since the late 1990s, Ushuaia has captured the Antarctic tourism market, holding over 90% of all shipborne operations (InFueTur, 2016). The unprecedented growth and diversification of Antarctic tourism and its impact on Antarctica have been explored extensively by other scholars (Lamers, 2009; Liggett, McIntosh, Thompson, Gilbert, & Storey, 2011; Schillat, Jensen, Vereda, Sanchez, & Roura, 2016; Verbitsky, 2013), and fall outside the scope of this work.

Currently, the only Argentina Antarctic tour operators is Antarpplly Expeditions, which operates its own ship, the *Ushuaia*. Antarpplly is based in Ushuaia and made its maiden Antarctic voyage in 2002 (Jensen & Vereda, 2016). The *Ushuaia* offers expedition-style voyages in dual languages (English and Spanish), which attracts a selection of customers of Spanish-speaking origin, as well as bilingual expedition staff, many of the latter based locally (Vereda, Cardenas, Jensen, Galdames, & Rubio, 2016).

As indicated previously, Argentina's responsibilities with SAR in Antarctica are performed from Ushuaia. The navy base is the headquarters for Argentina's Joint Naval Antarctic Patrol (PANC), a safety operation shared with Chile to monitor Antarctic waters (Sanchez, 2017). Since 1989, the PANC has patrolled for illegal and unregulated fishing operations, assisted ships in distress, and attended emergencies in the Antarctic Peninsula area, which is a busy zone for tourism, fishing, and science support (Sanchez, 2017). This bilateral collaboration has strengthened the countries' relations, enabled joint naval exercises, and supported both countries' Antarctic interests. The naval patrol exercise starts in November of each year with ships from one of the two countries patrolling the Southern Ocean for a month, and alternating each month with the other until the end of the summer (Sanchez, 2017).

It is important to remark that, unlike the other gateways, Ushuaia does not host Argentina's NAP, nor any national or international agencies involved in Antarctic management. Moreover, in contrast with its gateway counterparts, there are no international NAPs operating regularly from Ushuaia. This contravenes the Antarctic provincial policy for Tierra del Fuego, which dictates there should be a concentration of Argentina's Antarctic expertise and activities in Ushuaia (Poder Legislativo, 2003). The presence of Argentina's Antarctic scientists would encourage international partners to work from Tierra del Fuego, and Ushuaia would fulfil the role of Antarctic gateway for other activities besides tourism. Despite the Argentine government's initial support of this initiative, no changes have happened to date. The arguments against these changes in the NAP denote a highly centralized conception of the management of Argentina's Antarctic interests, and the parochialism from Antarctic actors resisting change to traditional systems (Guyot, 2013). Furthermore, it appears that for the national government, Ushuaia's title of *Antarctic gateway* is only symbolic, as is the incorporation of *Antartida Argentina* in the name of the province. As Scott argues, ". . . the primary reason for Argentina and Chile promoting tourist activity on the Antarctic Peninsular [sic] is that it provides support for their territorial claims" (2001, p. 970). In addition, Guyot (2013) argues that Ushuaia is in an unbalanced competition with Buenos Aires, where Argentina's Antarctic power and decision-making are centred, and it is unlikely to change without federal political will to support the consolidation of the gateway city.

The provincial government of Tierra del Fuego counteracts the absence of national Antarctic authorities in Ushuaia with its own local agency, the Secretariat for Affairs Related to Antarctica, Malvinas and South Atlantic Islands and Surrounding Maritime Spaces (Poder Legislativo, 2015, artículo 28). Primarily, this agency coordinates activities between the federal Antarctic agencies and Tierra del Fuego. Other priorities include the promotion of Ushuaia as the South American Antarctic gateway, and to *promote and defend* Tierra del Fuego's sovereignty over the Malvinas and other South Atlantic islands (Poder Legislativo, 2015, artículo 28, incisos 3, 4, 5, 11, 12). This secretariat encompasses two deputy secretaries: Antarctic management, and the Malvinas and South Atlantic management. The creation of this secretariat and the nationalistic tone to its role and priorities demonstrate the continual rhetoric of power and sovereign rights sustained by the government of Tierra del Fuego. The secretariat for Antarctic affairs is also the link between Tierra del Fuego and the Argentine Antarctic stations, and since 1997 has coordinated the maintenance and running of the Provincial School N° 38 at Esperanza station (Antarctica) (Ministerio de Educacion, 2017a). Two teachers are selected from the pool of Tierra del Fuego educators to provide primary and secondary education in Antarctica; couples with children at school age are the preferred candidates. This posting lasts for one year, serving to increase the local population at Argentina's Antarctic settlement (Ministerio de Educacion, 2017a).

6.6.3.3 Economic perspectives

While tourism to Antarctica seems to be the key activity of Ushuaia's gateway role, there is no economic impact assessment available to reveal the industry's contribution to the local and national economy. Hence, it is unclear whether the government investments in infrastructure and promotion of Ushuaia as an Antarctic gateway have generated positive results.

Since the mid-1990s, Ushuaia has attracted the highest number of shipborne Antarctic tourism operations in the industry (Jensen & Vereda, 2016), and government agencies compile statistics on ships and passengers involved in Antarctic voyages, comparing percentiles between seasons. These public reports seem to serve other purposes besides compiling information in numbers, as figures reaffirm that Ushuaia is the preferred option for Antarctic tour operators every year. Government reports on Antarctic tourism attempt to validate Ushuaia's leadership as a gateway city, using expressions such as "Ushuaia has consolidated its role as the maritime gateway to Antarctica", and "leader in Antarctic tourism", the "chosen", and "Ushuaia, the most active gateway to Antarctica", which perpetuate the representation of a place that competes successfully with others (InFueTur, 2016, pp. 31-32). Ushuaia's leadership in Antarctic tourism does not seem to transfer into favourable economic impact for the region. Vereda (2008) argues that Ushuaia is the most convenient port for Antarctic

shipborne tourism, but it is not an integral part of the Antarctic experience by tour operators' standards. The average stay at port for Antarctic cruise ships is half a day, resulting in fast-turnaround operations for loading provisions, refuelling, and changeover of passenger groups. These operative times coincide with the cheaper port fees bracket (Daverio et al., 2008). Moreover, Ushuaia does not feature as a complementary destination to Antarctica for tour operators; unless tourists willingly want to extend time in the region, the inbound-outbound passengers' logistics happen within hours of departure to, or arrival from, Antarctica (Vereda, 2008).

Moreover, the International Association for Antarctica Tour Operators has held meetings with Argentine authorities to solve rising conflicts during the Antarctic season, such as sudden changes of tariffs due to devaluation of the local currency, and the unsafe and inefficient operations during passenger exchange because the port is beyond operational capacity (International Association of Antarctica Tour Operators, 2017). Currently, the size of the port of Ushuaia is too small; it has not kept pace with the growth of the cruising industry, nor with the demands for NAPs' operations (InFueTur, 2016). In addition, it is TdF's only port, hence all of the province's economic maritime activities (including tourism), happen from this facility. The multiple uses of the single pier in Ushuaia pose inconveniences and potential risks to people visiting and working in a crowded facility. It is expected that the operational problems in Ushuaia will improve under the supervision of the new national directorship for Antarctic cruises (Ministerio de Transporte, 2018). The extension of the Ushuaia pier and improvement to the port services are expected to be completed in 2020; fuel price reductions and waste management best practices are promoted to begin in the 2019-20 season (Ministerio de Transporte, 2018).

Notwithstanding the absence of key facilities, Ushuaia has an established logistic platform to assist Antarctic ships' operations. Local private and public stakeholders offer a specialized workforce of harbour pilots, maritime agencies, ship supplier services, fuel facilities, medical evacuation assistance, generic stowage and cargo transport, and hospitality services to assist with passenger exchange, tours, and accommodation (Vereda et al., 2016). Moreover, local researchers indicate that there is little local promotion of the expertise of the workforce available in Ushuaia to cover hospitality and guiding services on board ships (Vereda et al., 2016). The availability of a skilled workforce seems to be another untapped Antarctic-related resource that the local government overlooks in the promotion of the gateway city.

The local provision of goods and services to the Antarctic tourism industry is another business area that requires policy support. Local researchers found that economies of scale and casual attitudes from local producers deter international cruise ship operators from buying locally to resupply their ships. Recent research indicates that there is demand for locally produced

goods in the cruising industry, including the following food items that are particularly popular with tour operators: king and ice crab, Tierra del Fuego-grown lamb, craft beer, goat cheese, artisan chocolates, and breads (Paredes, 2017). However, these products are not always available, resulting in sporadic purchases from the tourism industry, which limits revenue streams of producers (Paredes, 2017). In addition, cruise ship operators indicated frustration with the provisioning of food items in Ushuaia. The most common complaints are: the high price of locally produced goods, the inconsistency in the quality of the products, that the production is smaller than the demand, and hence never sufficient, and that there seems to be a casual attitude from local producers to fulfilling their obligations once the purchase order is confirmed (Paredes, 2017). Paredes (2017) argued that local producers are missing business opportunities because of the small scale of their enterprises and the seasonality of the cruise ship industry. Also, Paredes (2017) maintains that provincial policies such as *Sello de Calidad Certificada Tierra del Fuego* (seal of quality, produced in Tierra del Fuego) have little promotion internationally and are not supported by other strategies.

It is worth mentioning that the provincial Antarctic policy includes the provision of a registry for local Antarctic operators and service providers, but this has not yet been created (Poder Legislativo, 2003 art.15 and 16). A provincial registry would build a network of Antarctic-specialized stakeholders, which would enable sharing of experiences and collaborations, and could leverage for better government support and business growth.

6.6.3.4 Cultural opportunities

Ushuaia's Antarctic connections appear limited for a city considered the administrative centre for Antártida Argentina. Conversely, images of penguins and maps of the Antarctic-claimed sector are often available in public spaces, as popular representations of the city's Antarctic imaginary.

Antarctic and sub-Antarctic scientific research is undertaken at the Austral Centre for Scientific Research (CADIC) (Centro Austral de Investigaciones Científicas). Since 1969, CADIC has contributed to the scientific understanding of Tierra del Fuego and Antarctica, and of the connection between these southern regions (Centro Austral de Investigaciones Científicas, 2017). CADIC is equipped with working spaces, laboratories, specialized equipment, and accommodation for researchers in disciplines such as biology, geology, ecology, oceanography, and anthropology, among others (Centro Austral de Investigaciones Científicas, 2017). Since 1994, CADIC has contributed to international studies on the ozone layer in the Antarctic and sub-Antarctic regions with its specialized spectrometers; data collected from the ozone station in Ushuaia are collated with those from Belgrano station (Coats Land, Antarctica) and other atmospheric study sites around the world (Dirección

Nacional del Antártico, n.d.-a). Also, CADIC contributes to science outreach activities and community education with its six-monthly magazine for the general public, *La Lupa*, which is distributed for free to all schools in the province (Centro Austral de Investigaciones Científicas, n.d.).

Furthermore, Ushuaia hosts the main campus for the National University of Tierra del Fuego (UNTDF). The UNTDF offers undergraduate studies with a polar focus through the Institute of Polar Sciences, Environment and Natural Resources (ICPA) and the Institute of Economic Development and Innovation (Instituto de Ciencias Polares, n.d.). Recently, UNTDF obtained the certification required to offer a master's degree in Antarctic affairs (Universidad Nacional de Tierra del Fuego, 2019). UNTDF works closely with CADIC and many of its lecturers conduct Antarctic research too. Also, the UNTDF hosts an Antarctic Data Centre, a repository of Antarctic printed publications and a philatelic collection available to the public (Reporte Austral, 2019)

Museums in Ushuaia offer modest Antarctic exhibits. The Maritime Museum has an Antarctic Hall, the Museo Antártico Ushuaia Dr Jose Maria Sobral, which contains a collection of Antarctic ship models that portray the history of exploration in Tierra del Fuego and Antarctica (Vairo, 2017). Also, there are exhibits illustrating moments of the Heroic Era of Antarctic exploration, and a collection of Antarctic fauna taxidermy. The provincial museum, Museo del Fin del Mundo, also has exhibits with Antarctic fauna taxidermy, but its most notable contribution to Antarctic knowledge is the private collection of first edition polar books of its library (Museo del Fin del Mundo, 2018).

In addition, visitors and locals can reconnect with the city's past polar connections at the Antarctic Pioneers Lane, located in a pedestrian zone of the waterfront. In 2008, this lane was inaugurated with the first sculpture honouring Belgian explorer de Gerlache (Figure 6.23) (Lujan, n.d.). Currently, there are seven busts on this walkway; all of the other six are to remember Argentine military officers who participated in significant Argentine Antarctic expeditions. Additionally, the Ushuaia City Council recently created a memorial to celebrate those residents who contributed to Antarctic endeavours. The "Civilians Antarctic Pioneers" memorial is located within the Fuegian Pioneers monument, in Ushuaia's Civic Square (Diario Prensa Libre, 2019).

Finally, the former premises of the city's only Antarctic tourism information service have been repurposed to offer visitors an entertaining and interactive experience employing audio-visuals, holograms and virtual reality material on Antarctica (Gobierno de la Republica Argentina, 2018). The "Antarctic Experience" (Figure 6.24), is a joint private and public project near the entrance to the port of Ushuaia, accessible to tourists arriving by sea.



Figure 6.23: De Gerlache's bust looking south, Ushuaia



Figure 6.24: Ushuaia's virtual reality "Antarctic Experience"

6.7 Concluding words

The five cities identified globally as Antarctic gateways are Cape Town, Christchurch, Hobart, Punta Arenas, and Ushuaia; all these are located in AT signatory countries, which are active contributors to the ATS regime.

Primarily, the cities' convenient locations and relative proximities to Antarctica made them useful to past Antarctic expeditions. Over time, their geopolitical significance to the host countries, the polar knowledge acquired and the international connections maintained with other Antarctic actors warranted the title of *Antarctic gateway*. The governments of South Africa, New Zealand, Australia, Chile, and Argentina each profess their support to the city's gateway role with investments in infrastructure and multi-year development plans. However, many of these government strategies are yet to be implemented. Maintaining a solid presence in Antarctica is an important and expensive affair for Antarctic states, and budgets also have to stretch to the periphery of Antarctica where the gateway cities lie. Notwithstanding the deferred promises of governments, the gateways continue to hold political significance to their countries. These cities are bastions of the states' Antarctic pretended sovereignty (with the exception of Cape Town), and the facilitators of international Antarctic partnerships with states who wish to access the southern continent. In addition, hosting transnational Antarctic agencies seems to reflect on a country's own perception of its leadership in Antarctic matters.

Antarctica matters to the gateways. The Antarctic connection offers the city a point of distinction within national borders, and an admission to a select cluster of the *world's five* gateways to Antarctica. Their international reputation as polar specialists is complemented by the role of safeguarding the country's interests in Antarctica, whether these are sovereignty-driven ambitions, and/or aspirations for science leadership and environmental stewardship. In

addition, the Antarctic connection attracts business and has an impact in the regional and national economies.

For Cape Town, the city's Antarctic connections are scattered and disconnected, yet it serves as a transport hub for private, national, and international stakeholders. The government is slowly rediscovering the potential benefits of this polar association, but official efforts for fostering further Antarctic engagement lack consistency and continuity. The Antarctic association could develop further in Cape Town in the future. However, the lasting legacy of race politics and inequalities continues to trouble the Cape and the country.

In contrast, Christchurch celebrates its Antarctic links and continues to work towards developing novel initiatives and new partnerships with Antarctic stakeholders interested in working in the Ross Sea Region. However, political indecisions and a natural catastrophe have slowed down Christchurch's ambition to become the leading Antarctic gateway. The implementation of the city's Antarctic strategy is expected to reactivate interest in the Antarctic association at the local and national level.

Overall, Hobart seems to leverage well its role as an Antarctic gateway city. The city's infrastructure, the concentration of Antarctic knowledge, scientific pursuits, conservation, and management give a point of distinction from its counterparts. Also, historical links with the South are emphasized by local and federal governments to assert the city's polar leadership that justifies the financial investment in supporting Australia's Antarctic political agenda.

Punta Arenas seems to be progressively working to stay relevant and be the leading South American Antarctic gateway. Still, the challenges ahead are embedded in the country's nationalistic policies and competing regional interests, such as the strong influence of the military in Chile's Antarctic decision-making. In addition, the development of Punta Arenas as a gateway city is largely driven by the country's Antarctic programme, INACH, which pursues national ambitions while grappling with sustaining public and private engagement and support to the activities at a regional level.

The position of Ushuaia as an Antarctic gateway is divergent from those of its counterparts. Ushuaia's political ambitions of the 1990s to concentrate Antarctic science, polar expertise, and business development stalled once the tourism industry increased its operations and bypassed the local transport infrastructure. Although Ushuaia is recognized as a popular Antarctic gateway, this title is valid only for shipborne Antarctic tourism operations. The political and economic vicissitudes of Argentina have prevented strategies to further advance Ushuaia's potential as an Antarctic gateway. The city's associations with Antarctica are limited to nationalistic rhetoric and narrow business opportunities for the local community. Ushuaia

has yet to determine the extent of the costs and benefits of being the most popular gateway for Antarctic tourism.

The study of the socio-political and economic perspectives of the five cities and their Antarctic connections presented in this chapter has highlighted the extent of facilities, services, policies, and actors involved in the gateway role. This research does not attempt to compare the five cities, as it considers them fundamentally different. However, this chapter exposes the similarities and diversity of the choices made regarding policy, public investment, and developments to fit the Antarctic gateway role. It poses the question of whether there is a need for a unified understanding and updated Antarctic gateway concept, and, if so, whether this model applies to any of these cities. How are the intrinsic values assigned to Antarctica represented in the Antarctic gateway concept? As Antarctica and the ATS face new challenges, the gateway cities may need to adapt, evolve with the changes, and cooperate with one another to remain important to the international polar community, or run the risk of being replaced or becoming irrelevant. So far, none of the cities appear to have made provisions for the future.

7 Interviews results and discussion

This chapter presents the results of the interviews, and discusses the data that support the evaluation of the cultural identity influenced by Antarctica that has been constructed at the gateway cities.

As indicated in Chapter 2, the interviews aimed to collect research participants' viewpoints on the meaning of Antarctica and their understanding of the role their city plays as a portal point connecting to the southern polar region. A complete description of the interview guide is available on Chapter 2. I explored with the participants how place and politics influence in shaping people's Antarctic identity. The interviews were critical to assessing the complex process of identity construction with a distant place such as Antarctica; this research could not have taken place without the contributions from interview participants. Respondents' perspectives help to reveal the drivers that motivate, and the issues that hinder, the construction of an Antarctic identity at the gateways. Throughout this research, I conducted 36 interviews between January 2014 and December 2016, during my visits to the five Antarctic gateways. A list of the research participants' profiles is available in Chapter 2.

The second section of this chapter includes the systematic analysis of the interviews presented under the core categories constructed for this research. The core categories, and the breakdown of these into their respective focus codes, offer a deeper understanding of the interpretation of the data, to seek out evidence for theorizing the social phenomena studied here. The five core categories and their respective focused codes are examined in detail further in this chapter.

The last section discusses key findings of this thesis in the context of the scholarly literature on the construction of identities, place attachment, community-making, political and imagined boundaries, cultural representations of Antarctica and values ascribed to the Antarctic.

7.1 The stakeholders' voices

This section conveys the salient expressions, ideas, and meanings that research participants shared during the interviews, including rich quotes from the protagonists, which informs about the multiple layers of relations established at the Antarctic gateways with the southern polar region.

This section is organized in subsections, one subset per city, to present a complete representation of each gateway and its connections with Antarctica. The findings are structured following the broad interview guide, which is available in Appendix BB. Each

subsection finishes with a paragraph that summarizes the most salient themes found at each gateway.

7.1.1 Cape Town

The opening question concerning personal experience and interest in Antarctica was received with a wistful smile by research participants. Many required some time to elaborate their answers: “That’s a simple question but implies so much!” (SA06). Participants with Antarctic experience had a practical approach on how they thought about Antarctica: it was a place for science and work, and a catalyst to advance a professional career (SA04, SA05, SA06). The working relationship they had with Antarctica also allowed for the creation of a special bond with the place, and with the people in this place. One respondent spoke about the camaraderie experienced in the Antarctic, noting there was a sense of fairness and dependability in others: “We are all the same down there, we depend on each other, and we have fun” (SA05). The personal experience in Antarctica also inspired thoughts on equality and gender politics:

I did not think about this before my trip, but your question makes me think on how important was for me to see my gender and my race represented in positions of power and leadership on the ship, and in places that really matter [. . .], it was great to see the mix on board. (SA06)

Nouns were chosen to emphasize Antarctica’s physical qualities and wilderness: *the beauty of the place, the whiteness, the snow, the whales, the ocean, the sea ice, the sastrugi*,⁵⁷ the open spaces. Participants ascribed meaning to Antarctica, often repeating these words in their conversation. These descriptions were accompanied by emotions that connected people and their expectations about Antarctica: “it was more beautiful than what I thought it would be” (SA05); “I will never forget how white was the ice! I’d never seen anything like it!” (SA06).

Participants were amused to think of a personal connection with Antarctica. Antarctica was perceived as too far away and contrasting to Africa (SA01, SA02, SA04). Hence, the Southern Ocean had a meaning of boundary and separation from the homeland. The ocean was considered exceptionally different from the seas that participants felt familiar with, those of the Indian Ocean: “it takes days to get there [Antarctica], and the ocean turns cold suddenly, and blue, deep blue, and beautiful [. . .] but *so* cold” (SA06); “ There was quite the storm, and some pancake [ice] was thrown up on deck [. . .] I thought I’d never seen anything so fragile but that was stopping us from sailing; we didn’t move for hours” (SA05). Some research participants had worked previously in South Africa’s sub-Antarctic Islands, affectionately known as “the

⁵⁷ *Sastrugi*: complex, fragile shapes of snow on top of sea ice or land ice that resemble sand dunes; they form parallel to the prevailing wind direction; can also form on snow cover over land (National Snow & Ice Data Center, n.d.).

islands". Hence, they had experienced rough weather, common in the southern latitudes. However, Antarctica's ocean presented new challenges and singularities: winds, storms, heavy seas, sea ice, all of which had extraordinary qualities: "I still don't know how we made it, the ship rolled from side to side, we were inadequate in those waves" (SA04); "I didn't know what was pancake ice, I was ashamed of my ignorance . . . but, how would I know?" (SA05).

In addition, one respondent said he felt connected with Antarctica via "the islands". Memories from childhood were affectionate towards the annual support that the South African Navy carries to Tristan da Cunha in the South Atlantic. As a child, the participant travelled once to "Tristan" to accompany his father who worked in the maintenance of the island's church. Descriptive words such as *enchanting*, *adventure*, *isolation*, *intense cold*, and *Nella Dan* (the ship), populated this narrative (SA03). "The islands" featured repeatedly with South African respondents. Marion and Prince Edward islands inspired affective memories: happy times, adventure, admiration for those who worked on the islands, and pride for the longevity of the work carried there by fellow South Africans (SA03, SA04, SA05). Also, the wilderness of "the islands" was present. The sealers⁵⁸ were remembered with affection, the penguins were colourful but silly and noisy, the stinkers (giant petrels) were unpleasant to watch and their scavenger diets were frowned upon (SA04). All but one respondent talked about the *Agulhas*⁵⁹ as the binding element of their memories, some referring to it by the vessel's name, others as "the ship" (SA01, SA03, SA04, SA05, SA06).

Participants without a personal polar experience also commented on the physical attributes of Antarctica when asked how they imagined the place. Antarctica was white and blue, pristine, the home for penguins, with vastness and splendour found nowhere else: "it seems surreal, so beautiful, so big, and there is nothing there, nothing at all" (SA01). Two respondents who work in the tourism industry felt that Antarctica was only for rich people (SA01, SA02); their jobs connected them with those who travel south for adventure tourism.

Antarctica's links to commercial interests were also explored. The exploitation of Antarctica's natural resources seemed possible and currently happening. There was reference to fishing activities (SA04, SA05, SA06), and to the potential of towing icebergs to supply the demand for fresh water for the city (SA01, SA03). Ideas on how to capitalize on the abundance of natural resources were discussed too (SA03).

With regard to engagement and community participation in Antarctic activities, participants referred to the occasional open visits to the ship *SA Agulhas II* as the only activity available to the public (SA05, SA03). These open visits are popular but did not happen often enough in

⁵⁸ *Sealers*: affectionate name for scientists working on seal-related research.

⁵⁹ The former South African Antarctic research vessel was named *SA Agulhas* and the current ship is named *SA Agulhas II*.

their views. Public awareness of Antarctic activities happening at the city seemed to be low, and the activities were considered poorly advertised by the government (SA02, SA03, SA04). There was no consensus on which was the official agency that organized outreach events; “the government” was the most common answer.

Antarctic education was a repeated theme connected to community participation and awareness related to Antarctica. None of the participants recalled learning about Antarctica at school, and their first connection with the region was through work or a personal interest in pursuing a science degree (SA03, SA05, SA06). One participant remembered that once at school the children asked the teacher where Santa Claus lived and someone suggested it was Antarctica. That sent the children onto a fact-finding path that was recalled as “fun” and “insightful”, but frustrating too, as there were limited resources available and the teacher did not know much about the Polar Regions (SA06). One participant commented that the education system in South Africa would struggle to include Antarctica in the curriculum: “we are the Rainbow Nation, as they say, multicultural and yet we don’t know enough about our own people . . . How can we teach our children about Antarctica if we don’t know [it] well ourselves?” (SA01). One respondent had a hobby from his school days, philately that connected him to Antarctica:

When I was a boy, my dad would bring me to the port to see the ships. I collected stamps from all the South African expeditions since I was young; now, it's getting very difficult to find someone going on the expedition that wants to take your envelopes. I don't think they have the stamp at base anymore. (SA04)

Antarctic heritage and polar legacy themes inspired contrasting thoughts. Connections with explorers from past eras were vague (SA02, SA06); only one participant could name the year of South Africa’s first Antarctic Expedition (SA04). Also, no participant could name a public space or landmark in the city that conveyed the relationship with Antarctica, finding it difficult to consider an answer. The immediate reaction to learning that there are such places such places generated an understanding that the public needs to be reminded of these important associations, and that monuments are important for community engagement (SA05). One respondent said that reading accounts of Cook’s voyages inspired admiration for the courage of the explorers. She read the book during her voyage to Antarctica (SA06). Two participants mentioned a legacy project connected to Stellenbosch University,⁶⁰ but were concerned that this endeavour would focus only on Afrikaners’ narratives and would exclude the rest of South Africans: “Have you ever heard who were the crew on the ship taking people to the islands

⁶⁰ In reference to the Antarctic Legacy of South Africa project (2015).

and Antarctica? All black and coloured; yes, many coloured, but no one seems to have noticed; they are not part of the history” (SA04). Moreover, one response connected polar legacy with race politics: “Antarctic heritage? No, that’s white people’s thing; why should we celebrate white people?” (SA05).

Discussions on the role of the gateway city were varied. The term *gateway* did not have the same meaning to all study participants and only one asked for a clarification of the concept (SA06):

I never imagined my city had a connection with Antarctica; we look up to Europe, so the Arctic is more important to us, isn’t it? [. . .] In fact, my trip to Antarctica happened because I intended to go to the Arctic and couldn’t [. . .] Then I sought for a place on the ship with a research team, and that’s how I went to Antarctica. (SA06)

All participants indicated that most, if not all, people of Cape Town would not know their city is considered an Antarctic gateway. The long distance separating Antarctica and South Africa negated Cape Town’s title as a gateway: “Maybe in Cape Town we are just a little too far and thus nothing happens from here . . . we have other things to worry about, we don’t have that money to spend” (SA01). Some participants related the word *gateway* to the presence of foreign Antarctic programmes in Cape Town (SA04, SA05), the South African icebreaker (SA03, SA05, SA06), and adventure tourism opportunities (SA01, SA02, SA04). The last activity sparked memories of celebrities who travelled to Antarctica through Cape Town, such as the His Royal Highness Prince Harry of Wales (SA01, SA02, S06), and comedian and writer Michael Palin in the 1990s (although his trip was cancelled after he arrived in Cape Town and he then travelled from one of the South American gateways) (SA04). Most respondents could name at least one country host to a gateway city, and the South American gateways were the most identified (SA01, SA03, SA04, SA06).

In contrast, one participant conveyed that long distances were not a disadvantage for Cape Town because it worked mostly with European Antarctic programmes; there were direct flights from Europe and they all operated in the same time zones (SA05). For him, the biggest disadvantage was the lack of policies for the development of the gateway infrastructure and services industry, which resulted in poor relationships, misunderstandings, and frustration between the Antarctic international operators and the South African government (SA05):

. . . the government does not realize that [going to] Antarctica is not like going to another country [. . .] You explain this to them and they say they understand, but every time that ALCI flies back from Antarctica, they have to renew their permit! I mean, every time!

They are our air connection to Antarctica but they are treated as an outsider; just ridiculous. (SA05)

The Antarctic gateway role was also discussed from an economic perspective. Rumours that the South African government was looking at “adding an economic value” to Cape Town’s gateway role created some excitement among local Antarcticans but no further details were known about that study (SA04, SA05). Respondents identified as a major shortcoming that the local government did not understand the economic benefits of being an Antarctic gateway, such as having an experienced workforce to supply skilled services (SA04, SA05, SA06) and waste management facilities (SA05). In their view, these were easy solutions for tackling unemployment and capacity building in the region, but the main constraint was the government’s employment policy.⁶¹

The racial setup in this country is complicated [. . .] you can’t employ the right person for the job, but you can appoint someone on race [. . .] you don’t have the right skills for it, but you may have the potential for the job. Antarctica is no place to trial someone’s skills; the trial could end up badly, harmful for someone, if not worse. (SA05)

Antarctic tourism was another topic of debate connected to the gateway role, particularly from the economic benefits associated with it. Cape Town seemed unsuited for attracting Antarctic cruise ship operators:

The government wants to be like Ushuaia or Punta Arenas, and I told them to forget it [. . .] Cape Town will never attract tourists that will pay good money to come here for a longer trip to Antarctica. (SA05)

Study participants also remarked that the revenues from tourists travelling to Antarctica from Cape Town seemed unnoticed by the local government, and that an economic impact assessment from the gateway was overdue (SA03, SA04, SA05). There was a negative social aspect identified with Antarctic tourism too: it was considered expensive and unaffordable for most South Africans. It was likened to the high-end tourism attractions that South Africa has to offer to the international market, which most residents cannot access: “Why would my people spend so much money to see Antarctica when they can’t to go to places here and enjoy their own country?” (SA06).

⁶¹ The Broad-Base Black Economic Empowerment Act of 2003 readdresses the inequalities of apartheid, creating a framework for the incorporation of black people into employment and the South African economic sectors (Department of Trade and Industry, 2018).

Finally, the definition of the role of South Africa in Antarctica was varied: to carry out a science programme was the top answer, followed by the country's presence in the continent and maritime activities (SA01, SA03, SA04, SA05, SA06). Only two participants mentioned South African had a research station in Antarctica (SA05, SA06), but most included Marion Island in an Antarctic context (SA01, SA03, SA04, SA06). Once again, "the ocean" occupied the imaginary; a significant number of comments conveyed the importance given to the marine patrol roles, particularly to control illegal fishing (SA01, SA03, SA04, SA05, SA06). The seafaring legacy of South Africa was manifested through comments regarding the work of *SA Agulhas II* transporting scientists and Antarctic personnel. For most participants, climate change was the top priority issue to solve by the government and scientists; climate change was a concern associated with droughts (SA01, SA02, SA 03, SA05, SA06).

7.1.2 Christchurch

The question on the personal connection with Antarctica was an absorbing theme that remained in the mind of the participants throughout the interview, and was brought back in later conversation without prompting. Descriptive and emotive words identified this theme: *a lifetime experience, fabulous, unforgettable adventure, a dream come true, exhilarating, special, spiritual* (NZ01, NZ02, NZ03, NZ05, NZ07). Most participants remarked that New Zealanders had a love for the outdoors (NZ01, NZ03, NZ05, NZ07), hence the reason to feel "at home" in Antarctica (NZ02). Another frequent association between Antarctica and New Zealand was the peacefulness of both places (NZ02, NZ05, NZ06).

The meaning of Antarctica also connected respondents with their understanding of New Zealandness. Antarctica was linked to conservation and a sense of environmental stewardship, the natural environments of New Zealand, the geographic closeness; Antarctica was described as "New Zealand's backyard" (NZ01, NZ03, NZ05, NZ07), a legacy to carry and to look after (NZ01, NZ02), the closest neighbours, and an obligation to conserve for future generations (NZ03, NZ07, NZ08). As a place, the Southern Ocean was not a barrier but a conduit connecting the two places (NZ03, NZ06, NZ08). "It's like this conveyor-belt that keeps us bound up, together" (NZ03).

Another important connection with Antarctica was weather events that added a meaning of physical proximity between the two places. Antarctica was seen as the source of cold and windy weather affecting New Zealand (NZ01, NZ03, NZ05, NZ07); it was described as "the barometer of the world" (NZ07). In association with extreme weather, cold was not suffered but accepted: "The southerlies come straight from Antarctica, don't they? What other country can say that, eh?" (NZ07).

The Erebus aeroplane crash⁶² was conveyed too as a New Zealand connection with Antarctica. It was described as one of the saddest and most significant moments in the history of the country (NZ01, NZ03, NZ05, NZ07). “I was young then and I remember my parents listening to the news, very worried . . . everyone was worried [. . .] and sad; everyone knew someone on that plane . . .” (NZ07). In addition, Mount Erebus is a dominant feature on Ross Island and for those who had been in Antarctica the mountain inspired conflicting meanings of magnificence, curiosity, and loss (NZ07, NZ08).

The wilderness of Antarctica attracted much attention. Ice was an important component in people’s experiences; it that embodied Antarctica which is commonly known as “The Ice”. Moreover, ice represented a practical surface where planes can land and people can walk; ice meant adventure and endurance, and a changing habitat for wildlife. Ice provided a sense of size and scale (vastness), it gave a meaning of purity to a pristine environment, and it provided shape, texture, and colour (white pressure ridges, white snow, ice landscape, the snow-capped mountains) (NZ01, NZ02, NZ05, NZ07).

Participants expressed plenty of interest when asked about their engagement with Christchurch’s Antarctic community. The city seemed to have many activities to engage with and to spark community awareness of Antarctica (NZ01, NZ02, NZ03, NZ06, NZ07, NZ08), but only a few admitted being active participants (NZ01, NZ03, NZ07). All respondents identified the IAC and the Canterbury Museum as places that offered opportunities to connect with Antarctica year-round. However, the former was remarked on as being expensive for locals and more focused on attracting tourists. Others argued that Antarctic festivals and community talks were inconsistent and discontinued, and were disappointed that the festival would not be re-established (NZ05, NZ06, NZ08). The open-day visits to the Antarctic aeroplanes and ships were seen as a good government initiative for community awareness of the Antarctic connection (NZ03, NZ07, NZ08). These were popular and seemed well attended. In contrast, one participant expressed discontent with the local government’s efforts on community engagement with the city’s Antarctic connections: “there was a lot of enthusiasm in the 90s; people were more in tune with the Antarctic back then . . . there is nothing new to show now” (NZ06).

However, participants had opposing views regarding the value and functioning of local community groups with an Antarctic focus; some said local organizations were very active (NZ02, NZ03); others disagreed, expressing disappointment at the difficulties in engaging and recruiting younger members to stay relevant (NZ01, NZ05, NZ07, NZ08). “The Antarctic

⁶² The Erebus disaster occurred in 1979, when 257 people died on a plane from New Zealand that crashed on Ross Island (Brady, 2013b).

Society is a dying beast; what do they have to offer the young ones?" (NZ07). The only participant without Antarctic experience was unaware there was a local Antarctic community, although the question generated some curiosity (NZ04).

Respondents remarked how difficult it was to maintain and further their Antarctic interests when family members were not as engaged with Antarctica as they were. This theme was explored in different ways: participants felt they were failing their "sense of duty" to Antarctica (NZ07, NZ08), and there was a sense of frustration for being unable to share their knowledge and experiences with children in their families (NZ02, NZ03, NZ06). Participants believed that a lack of education on Antarctica was the main factor affecting engagement.

Most participants were familiar with Christchurch's Antarctic gateway role, but they had mixed thoughts when evaluating whether the local community was aware of the links to Antarctica. One person was emphatic, asserting that Antarctica was second nature to Christchurch's community: "you scrub a Cantabrian and you find an Antarctic! It's real, the connection is tangible" (NZ03). Others doubted the local community was aware of the polar link and its relevance for Christchurch (NZ01, NZ02, NZ05, NZ07). For the study participants, the images that illustrated the gateway function were the IAC, the aeroplanes, "the Americans", the scientists. The transport and logistic operations seemed central to the concept of gateway: "Everybody knows we are a gateway; that's why the Americans are here" (NZ03). However, one participant without Antarctic experience was confused when asked about her city and its role in the Antarctica context: "Christchurch, really? I lived here all my life and I never heard of that . . . When I see Antarctica on the telly, I don't see Christchurch . . . Aren't we 'the Garden City'?" (NZ04).

The Antarctic gateway role was assumed stronger by the presence of international relationships in Christchurch. Participants recognized the value of having an international agency (COMNAP) established in the city (NZ07, NZ08). Others saw the long-running operations of the USAP from Christchurch as a symbol of respect and friendship between the two countries (NZ01, NZ03, NZ06, NZ08). Moreover, these international relationships developed further connections between the host city and its frequent travellers:

Christchurch is like a playground for those scientists that come back from The Ice.

They have friends here, they visit, travel and stay in New Zealand . . . If they have another contract (in Antarctica), they'd spend their money here until they go back South again. (NZ02)

The role of the gateway city was strongly associated with Christchurch's heritage. Respondents remarked that the city had a historic association with Antarctica, which was

identified as a distinctive attribute for a gateway. However, the polar legacy seemed poorly displayed in the city for the local community to notice (NZ02, NZ06, NZ07). One respondent remarked:

Everybody must know the Antarctic Centre is there, right? But to find the other things [landmarks, public art], you have to know where they are . . . There are no tours or even a webpage to tell you where to find these Antarctic relics. (NZ02)

In contrast, another participant felt that the promotion of the Antarctic link was not needed: “I think the nature of Antarctica is more subtle; you have to tell a story, not just put signs everywhere [. . .] and stick to that narrative” (NZ03).

Participants identified the Heroic Era of Antarctic exploration as Christchurch’s most relevant historic connection with Antarctica. Lyttelton township and port were emphasized with pride for being essential to the British explorers of the past (NZ01, NZ03, NZ05, NZ07, NZ08). Christchurch’s Antarctic-related memorial statues and the collection of historic artefacts at Canterbury Museum added meaning and value to the gateway status (NZ03, NZ05, NZ07).

Politics and policy seemed important to assert the role of Christchurch as an Antarctic gateway. One participant saw political tensions between local and national governments regarding the role of Christchurch: “There is no political drive here to make it work [the gateway role]; Antarctica matters too much to Wellington to let little Christchurch do what it needs to do” (NZ06). Another participant revealed insights into the personal interests within the city council in maintaining the gateway role: “it’s all driven by the mayor . . . Garry during his time, then Bob and now Lianne⁶³ . . . It’s an expensive exercise for the council if they don’t get something out of it” (NZ05). The benefits referred to in this comment were summarized in obtaining a trip to Antarctica, emerging opportunities for international relationships with Antarctic partners, and cultivating a popular personal reputation (NZ05).

Participants identified that Christchurch did not have a guiding policy for furthering its Antarctic affairs, and, as a result, it was difficult to attract business and compete with Hobart (NZ01, NZ05, NZ07, NZ08). Hobart was recognised as a prominent gateway (NZ05, NZ07), and as Christchurch’s main competition for business (NZ01, NZ02, NZ05, NZ08). Some participants engaged in long discussions regarding the political rivalries they perceived existed in Christchurch between members of the local and national governments regarding resolving other critical issues, such as the rebuild of the city after the Canterbury earthquakes. Participants perceived the Antarctic gateway role was compromised while these political

⁶³ These names refer to past and current Mayors of Christchurch, Garry Moore, Robert Parker and Lianne Dalziel (Christchurch City Council, 2020).

conflicts continued (NZ01, NZ02, NZ05, NZ08). The Canterbury earthquakes were a common theme in all interviews, but it is only reported in this thesis in context with the city's Antarctic connection and disruptions to ordinary life in Christchurch.

The theme of Antarctic education was explored as another component of the gateway role. Participants remembered reading books at school about Antarctic explorers; Scott's expeditions seemed very popular for boys (NZ03, NZ07, NZ08). However, the topic of Antarctica did not feature in the schools' learning programmes. In contrast, participants recognized that today, children have multiple opportunities to learn about Antarctica, although they would like to see the topic incorporated formally into the school curriculum (NZ01, NZ03, NZ04, NZ06). Moreover, respondents agreed the city had a good offer of Antarctic educational activities for children, but they were often expensive, which was seen as a barrier to lower-income families (NZ07, NZ08), or the programmes had an entertainment character to them instead of an educational purpose (NZ05, NZ07, NZ08): "I can see this with my own children; they think Antarctica is fun and nothing else; they don't grasp how important it is and why it is important for us" (NZ07).

Concerning New Zealand's role in Antarctica, the primary reason identified by participants was to keep Scott Base functioning, followed by science. Climate change and protection of marine wildlife were the top priorities revealed as result of the science carried out by New Zealand in Antarctica. The legacy of past polar explorers was interpreted through a narrative of responsibility, environmental stewardship, and conservation of the historic huts located on Ross Island that was assumed as an obligation after New Zealand had inherited them (NZ01, NZ03, NZ05, NZ06, NZ08). In addition, two participants suggested that New Zealand's role in Antarctica was to "observe the Americans" (NZ03, NZ06).

7.1.3 Hobart

Hobart participants explored the theme of personal experience in Antarctica, employing expressive words: *excitement*, *amazing*, *blown away*, *senses overload*, *fascinating*, *speechless* (AU01, AU02, AU04, AU06, AU07). Those who had Antarctic experience indicated some form of engagement with Antarctica before they had travelled south. These experiences varied from childhood dreams after reading books about explorers (AU06), to fascination with the colonial history of Tasmania and the expeditions that sailed from Hobart (AU02, AU04), to memories of Antarctic ships while growing up in Hobart (AU01), and to academic life and a professional career that led to an involvement with Antarctica (AU01, AU02, AU04). Only one respondent indicated not finding any direct connection or personal interest in Antarctica, despite being born and raised in Hobart (AU05).

Most respondents commented on the influence of Antarctica on Hobart's weather. Weather events, observation, and descriptions were recurrent during the interviews, including references to kunanyi/Mount Wellington and its snow cape, or cloud cape, which were indicators for local inclement weather (AU02, AU03, AU06). The weather provided a link with the southern region and a sense of nearness: "something to do with the polar front, because, you know, it's down there" (AU07).

In addition, Hobart's geographic and coastal location provided connectivity with Antarctica and the Southern Ocean: "you look at a map and look at what's below you . . . there is nothing else but the Southern Ocean, and then, Antarctica" (AU03). Moreover, the ocean was predicated as being part of the Tasmanian identity (AU10, AU02, AU04). The presence of the Southern Ocean at "Hobart's doorstep" (AU01) represented opportunities for local economic development and scientific endeavours. The ocean was described as "immense", "powerful", "deep"; it was the conduit for commerce (shipping, tourism, and fishing) as well as entertainment (recreational sailing and yacht racing) (AU01, AU03, AU04, AU05, AU06). These meanings were coupled with the acknowledgement that science takes place in the aquatic environment: marine and krill research, the presence of sea ice, and the research vessels were listed as influential in building a connection with Antarctica (AU01, AU02, AU04, AU06). Moreover, the presence or absence of the R/V *Aurora Australis* at the wharf on the day of the interview warranted information and discussion on the whereabouts of the vessel (AU02, AU04, AU07). "The ship" was referred to as "the red", "the iconic", and "the loyal" ship (AU01, AU02, AU06). Ships used in the past by the AAD, such as the *Nella Dan*, were also remembered fondly (AU02, AU06, AU07). In addition, there was a strong affinity with the sub-Antarctic's Macquarie Island, affectionately known as "Macca". Tasmanians felt this "isolated paradise" (AU04) was worth protecting, and it was left to them to care for it: "it's a UNESCO site but the Tassie government looks after it because Canberra didn't want it, made a mess of it" (AU07). Moreover, for some, a visit to Macquarie Island was comparable to travelling to Antarctica (AU02, AU07).

Concerning individual engagement with the local Antarctic community, all respondents perceived it was easy to interact with Antarctic-experienced people since these seemed to be "visible" and "everywhere" (AU02, AU06, AU07):

I came from [another city] to go to Antarctica for my PhD. A research technician said to me, "Make the most of your excitement here, because once you get to Hobart every second person, every cousin, uncle, sister has been down to Antarctica. You stop being special here." (AU01)

Moreover, participants with no polar experience also noticed the presence of an Antarctic community in Hobart, but remarked that this group seemed tight-knit and somewhat unapproachable for outsiders (AU05, AU07). Antarcticans were perceived as thinking of themselves as an elite; their experiences and stories of adventures, the use of a peculiar jargon in conversations, and boasting about sailing the Southern Ocean, were limitations for those who lacked such experiences (AU05). Moreover, non-Antarctic participants recognized there were public talks and activities often taking place in the city and surroundings with an Antarctic focus, but these were professed too specific or highly academic for the general public (AU05, AU07). Conversely, local Antarcticans argued it was difficult to estimate what activities were better suited to engage the community with Antarctica since most organizers were volunteers and not professional event managers (AU02, AU04). The absence of a coordinated event action-plan from the local government was proposed as the problem (AU02). The topic of promotion and planning for the gateway city is discussed in further paragraphs.

Concerning the role of Hobart as an Antarctic gateway, respondents acknowledged that it was one of the great reasons for living in Tasmania (AU01, AU02, AU04). “Everyone in Hobart wants to go there [Antarctica] . . . Everybody knows someone who has been there” (AU01). It was agreed that Antarctica was important to Tasmania (AU1, AU2, AU6, AU7): it placed Hobart on the map for international visitors and for fellow Australians (AU1, AU7). Respondents added that many Australians connected Antarctica and Macquarie Island, but overlooked Tasmania as the link between these places (AU03, AU04). However, in the last decades views seemed to have changed, and fellow Australians “have the perception of Tasmania as an unspoiled wilderness” (AU03), where Antarctica appears to fit naturally. Yet, some participants felt that Tasmania’s recent acquired reputation as an adventure, culinary, and wilderness tourism destination could outshine the interest in Antarctica (AU01, AU02, AU06). The influence of the MONA seemed significant in changing the perception the country had about Hobart: “MONA changed the way Australians see Tasmania . . . we are quirky and sophisticated now; I don’t think Antarctica will ever have that effect” (AU03).

A repeated narrative connected the gateway role with business prospects that Antarctica offered to Hobart. The impact of this association was not measured in dollar figures but through the growth in numbers of public and private organizations that made this sector and the different NAPs that operated through Hobart. Proudly, participants recognized the Tasmanian Polar Network as a successful initiative of multiple partnerships that encompassed all that Tasmania had to offer to Antarctic partners (AU02, AU04, AU06, AU07):

The TPN is a great idea, although it was resisted at the beginning. I think the government wanted to control everything to do with Antarctica but they just couldn't, they couldn't take it (the Antarctic business) off the ground [. . .] Having TPN helped a lot. (AU02)

Research participants referred to "the government" multiple times when referring to the agency that drove the local Antarctic gateway actions. Respondents were unclear whether the city council had a dedicated office for this matter, but they were emphatic in indicating that Antarctic Tasmania had worked very well thus far. The perception was the city council had little interest or not enough budget for leading these actions but were gaining this desirable gateway status through the actions of the Tasmanian government (AU02, AU04, AU07).

Science and education were considered drivers for the economic prospects of Hobart's gateway function. When the conversation veered towards science, the specialist Antarctic research institutes were brought to the fore. Acronyms such as *ACE CRC* and *IMAS* were quickly intertwined with the comment that these world-class facilities attracted many academics to move to Hobart. As result, the local community was aware of the exciting discoveries made by "their" scientists, and there was a general perception that knowledge on Antarctica and the Southern Ocean was abundant and tangible in the city (AU01, AU02, AU04). Moreover, participants identified that Antarctic education was a profitable sector for Hobart (AU02, AU03, AU07), which expanded beyond the educational facilities. Students' year-round expenditure helped the local commerce, and brought a vibrancy to the city during the quiet months for tourism. However, the Antarctic education business represented gains and losses too. On one hand, hundreds of students move to Hobart every year to study Antarctica; on the other hand, highly educated and trained Antarctic specialists left after finishing their training because there were not enough competitive jobs to retain the best candidates (AU02, AU04, AU07). A Tasmanian-born participant conveyed a different approach to Antarctic education. She claimed not having education on Antarctica while growing up in Hobart, which she perceived as a disadvantage for children of her generation, since, as adults, they felt outsiders in their own city (AU05): "I suppose Antarctica was always there, but we just didn't see it as part of our town" (AU05).

Polar heritage was seen as relevant but not completely essential to the gateway concept. Hobart was considered a central port in the history of Antarctic exploration. Australian Douglas Mawson was the all-time favourite explorer (AU06, AU07), and was found responsible for instigating the role of Antarctic gateway to Hobart: "Mawson envisaged this would be good for Tasmania, because we are small but we get things done" (AU06). Respondents identified many Antarctic-related buildings and art distributed in Hobart's public spaces; these objects were perceived as important reminders of past and present Antarctic connections. However,

participants remarked there was no overarching theme for these objects and places: these elements were scattered around the city without a storyline that joined them together (AU01, AU03, AU04, AU07):

Polar pathways is great, but you need to know it's there; you need to buy the guide and enjoy finding the places [. . .] I feel there is no coordinated effort to show how important Antarctica is for us. (AU01)

In line with the missing overarching theme for the Antarctic connection, respondents commented that, in general, community engagement with outreach activities in Tasmania was low. Public activities, such as the polar ship's open day visits attracted many people, but these were usually from within the Antarctic community.

The community acceptance and awareness of Hobart's gateway role were compared with those of other gateway cities: "the public here is not connected with the idea of a gateway or Antarctica. It is not like you see in Ushuaia or Christchurch" (AU04). No reasons were provided. Also, unlike what was observed in other cities, participants from Hobart did not see any of the other gateways as potential competitors to their hometown.

Australia's role in Antarctica was perceived as "necessary" (AU02, AU4), "important" (AU03, AU5), "a legacy to carry on" (AU01, AU06), "leadership" (AU02), "for control" (AU02, AU07). Science was identified as the main activity carried out in Antarctica by Australia; science was seen to be of high quality (AU01, AU02, AU04). Ocean research and climate change were the top priorities for Australian science (AU01, AU02, AU04), and associated with the theme of ocean was the term *control*. *Control* was interpreted as SAR activities (AU02, AU04, AU06), but also control on fishing and other countries' ships and activities in the region (AU04, AU07). Participants were concerned about the current state of Australia's Antarctic funding and described the axing of the budget as "problematic" (AU02, AU04), a national embarrassment (AU02, AU04, AU07), "ridiculous" (AU04, AU07), and "devastating" for the continuity of science (AU01, AU04).

There was one contrasting view regarding Australia's Antarctic presence. Although the participant agreed that Australia was conducting a sound science programme in Antarctica, she also remarked that every year the national programme seems to employ more people to run the bases; the stations were getting bigger while the scientists struggle to do their work with limited resources. The participant sensed that the priorities had overturned and science seemed to be the excuse and not the main reason for the country's presence in Antarctica (AU1).

7.1.4 Punta Arenas

Personal connection with Antarctica had a distinctive meaning in Punta Arenas. Participants agreed that people *can* experience Antarctica without leaving Magallanes (CH02, CH05, CH06). The political administration of the CAT from Punta Arenas offered a semantic ambiguity that locals took seriously.

There were opposed views on the meaning of Antarctica. For some it was “a duty” and “commitment to protect” (CH01, CH03, CH07), a place for “inspiration” (CH06, CH07), an “imperialist conundrum” (CH05), and the “last wilderness on earth” (CH02). During the interviews, these views were brought to the fore on several occasions, particularly in discussions over conservation, protection, and control of Antarctica. One respondent expanded on the idea of the “patriotic duty” all Chilean citizens had to protect Antarctica, indicating national law dictated it (CH01). The armed forces presence in Antarctica was also interpreted as fulfilling patriotic duties in the Far South (CH01, CH07). In parallel themes, Antarctica was associated with Chile’s national symbols. The Chilean flag hoisted in the foreground of buildings and in the Antarctic landscape was poignant: “Nothing gives me more pleasure than to see pictures of the cute penguins marching towards the flagpole, and you see the Chilean flag flying in the white vastness” (CH04). Moreover, the idea of commitment to protect Antarctica was associated with intrinsic values of the place, wilderness, and beauty (CH01). Beauty was another recurrent theme, but on many occasions “beauty” was used to portray places in Antarctica that did not have man-made structures and objects (CH01). On many occasions, Antarctic spaces void of human intervention were interpreted as “pristine” (CH06).

Memories of Antarctica were expressed with descriptive words: *magnificent, dream, childhood obsession, overwhelming* (CH01, CH02, CH03, CH7). Also, Antarctica was described with dimensions and colour: *immense, black and white contrast, grey, white continent*, (CH02, CH03, CH07). Antarctica had a contemplative meaning for one participant. She remembered feeling like a dwarf in the presence of a giant; the more time spent in Antarctica, the more she questioned her human condition and the reasons why people were there (CH06). The same participant expressed to be disillusioned with the trip to Antarctica. The purpose of the voyage was to find inspiration for artwork; instead, the participant was confronted with the busyness of an active Antarctic research station and inflexible rules for exploring the surroundings (CH06). For this participant, Antarctica signified anthropogenic changes, noise, and death of wilderness (CH06).

Without elicitation, participants provided a comparison of Antarctica and Magallanes through similarities in weather conditions. Participants who had been in Antarctica did not find the

Antarctic very cold (CH03, CH07); others argued that Magallanes was at times colder than Antarctica (CH01, CH06). Participants with no Antarctic experience were not concerned about how cold Antarctica could be, arguing that every Magallánico would be prepared for it (CH05).

Concerning participation and engagement with the local Antarctic community, participants had opposing views. While some considered Punta Arenas' interest in Antarctica was growing and there were plenty of activities for the public to participate (CH01, CH03), others suggested that the narratives that framed Antarctica and the city were nationalistic and arbitrary, representing the old Chile, and thus were not attractive enough for younger generations (CH05, CH06). Moreover, a participant with no Antarctic experience indicated that he became interested in Antarctica through a job opportunity to work in art. In trying to nurture this interest reading books, he discovered that the history of Chile in Antarctica was prescriptive and lacked inspiration and excitement: "too many uniforms, too many milicos, boots, boots"⁶⁴ (CH04). The participant reflected that this opened an opportunity too for book writers, although he anticipated there could be more published literature on Antarctica from Chilean authors that perhaps are still to resurface after the military intervention and censorship (CH04).

Antarctic education was another theme connected to community engagement with Antarctica. One participant expressed his regret for "not knowing enough" about Antarctica before he started working for a company involved in Antarctic activities. Growing up in Punta Arenas, he could not recall any instances of learning or "being told" about the rich history of polar connections in the city: "Why no one told me [about Punta Arenas' Antarctic connections]? I learned about Antarctica in school, but as a geographic unit and nothing else. There was no connection with Magallanes . . . it [Antarctica] was just a frozen wasteland and nothing else" (CH07). All participants shared CH07's sentiment regarding insufficient Antarctic education at schools, which resulted in little understanding for the linkages between Antarctica and Chile's mainland, and in particular with Magallanes. Most respondents contended that more and modern education resources were needed to teach young Magallánicos about the connections of the region and the Antarctic. Some speculated that the "spoiled kids in Santiago" (CH02) probably knew more about Antarctica than Magallánicos, alluding to the general understanding that better education and wealth are connected to, and found only in, the capital city (CH02, CH07).

Participants had a similar understanding of the role of Punta Arenas as a gateway city. They saw this role through the lens of mobility: infrastructure for transport support. Some referred to the fleet of Antarctic ships that could be seen in port during the spring and summer seasons

⁶⁴ *Milicos* and *boots* are colloquialisms for a military person. They are commonly used to refer to actors of the military dictatorship.

(CH01, CH07). The concept of gateway city was said to be explicit by some respondents, who did not offer to expand on the meaning or to assign characteristics to it. Moreover, they perceived the gateway city function was a governmental and administrative affair, where the community had no further involvement with this role (CH04, CH05, CH06). In addition, one participant argued that the government's efforts to engage the local community in Antarctic science were hindered by jargon-filled talks that the public could not relate to or find practical uses for in everyday life (CH03).

However, participants remarked on the benefits of the role of Punta Arenas as a gateway city. There were better transport infrastructure and more business for the region (CH03, CH06, CH07). For some respondents, the Antarctic gateway would facilitate operations in Magallanes to the Antarctic tourism industry, instead of bypassing it (CH02, CH04). Other respondents understood that one of the benefits of the Antarctic gateway was to create better transport connections with the southernmost points of the country, which included Navarino Island, Cape Horn, and Antarctica (CH01, CH03, CH06).

Participants were keen to compare Punta Arenas against Oceania's gateway cities. They liked to think Punta Arenas was more akin to Christchurch in terms of Antarctic gateway development, while considering Hobart as the model to follow. "If I could bring 10% of the Antarctic vibrance of Hobart to Punta Arenas, my job would be done" (CH03). Also, participants identified Ushuaia as an important gateway for the region, but remarked on the shortcomings of their dedication to the Antarctic tourism industry (CH01, CH03, CH04): "Our trans-Andean neighbours have tourism and nothing else; we have science" (CH03).

Polar legacy was another theme considered important to validate the gateway function. Respondents appealed to the modern history of Magallanes to find links with Antarctica: "The [Magellan] Strait was the first to be discovered . . . they [explorers] all left from here" (CH02). Participants understood that past European explorations in southern Chile were motivated by the search of Antarctica (CH01, CH05), and Magallanes was seen as an "area of polar transit" for almost five centuries (CH05). Twentieth-century trade in the Southern Ocean was considered a local custom that granted rights to the exploited region: ". . . Antarctica is in our inherited rights; our whalers were the first there" (CH05). However, the pivotal historic connection of Punta Arenas with Antarctica was Chile's participation in the rescue mission of Shackleton's marooned men in 1916. All but one respondent (CH06) alluded to Captain Pardo's "Chilean national spirit" (CH03), in response to the humanitarian call to save these men. Respondents recognized Captain Pardo as a national hero, yet they also admitted that little was known about this historic event until recent years when Punta Arenas organized local celebrations for the centenary of this expedition (CH01, CH02, CH07). Participants speculated that the perceived modest personality of Pardo, who was believed to have "reject[ed] the polar

medal offered to him”⁶⁵ (CH05) was the reason the local community knew little about this heroic deed. Participants also commented on the recently announced construction of an Antarctic centre in Punta Arenas. There was confusion on whether this project was funded by government or privately (CH02, CH04), and participants believed that if it was the latter, this centre would be a tourism attraction only, and, potentially, too expensive for locals to enjoy (CH02, CH04). Other participants referred to the Antarctic centre as the critical project that would renew the local community’s interest in Antarctica (CH01, CH03).

Concerning the participants’ views on Chile’s activities in Antarctica, two respondents seemed confused at the question. They admitted they did not think of a reason before they were asked by me, since Chile had “always been” in Antarctica (CH02, CH04). For others, the presence of Chile in Antarctica was strategic (CH01, CH03), necessary (CH01, CH02, CH07), to control national borders (CH01, CH03, CH07), and because it mattered politically to former military president Pinochet (CH05, CH06). The theme of military presence in Antarctica had opposed perspectives. For some participants, military were necessary in Antarctica as they provided transport, logistics, and safety in the area (CH01, CH02). Also, it was a military tradition to serve in Antarctica (CH01, CH03). For others, military involvement in Antarctic logistics hindered the science programme; their protocols were too old in contrast with the modern technology needed for science, and thus were affecting scientists’ access and efficient use of time in the field (CH03, CH07). Two participants conveyed that military presence in Antarctica responded to a bygone era and Chile had to modernize their programme (CH05, CH06). “Antarctica is a representation of the perpetual patriarchal society we have in Chile” (CH06). Participants perceived there were too many military jobs in Antarctica, which seemed expensive and unnecessary when some of these spaces could be used for science or artist-in-residence programmes (CH05, CH06).

The theme of military in Antarctica also initiated a discussion on human settlements in Antarctica. None of the participants expressed strong views concerning Villa Las Estrellas at King George Island. Moreover, the presence of children in Antarctica brought back emotive memories: seeing children walking on the snow to get to school was heart-warming and charming (CH04, CH06); the presence of families nearby broke the feeling of isolation and the monotony of Antarctica (CH01, CH03); children were needed to make life in Antarctica “more natural” (CH03, CH07). In contrast, one participant connected the presence of families with a natural process of occupation derived from colonialism (CH05). Lastly, one participant expressed desires to live in Antarctica: “Once my kids grow older, it [Antarctica] would be a

⁶⁵ In 1916, the Chilean Patriotic Navy League and other organizations proposed to award Pardo with a medal, but this award did not eventuate (Farias Cardenas, 2016).

great place to bring up teenagers, and keep them away from drugs and those bad things that are available in the city” (CH07).

7.1.5 Ushuaia

Ushuaia participants showed interest in my research project and were intrigued to find out whether the study would extend to all cities known as a gateway. Intriguingly, participants were curious to know whether the study did consider the Malvinas/Falklands as a gateway too.

Participants’ Antarctic experience was largely interpreted through the lens of tourism. All but two participants had travelled to Antarctica by cruise ship, quickly remarking they did so for work-related purposes. Nevertheless, their terms to describe their impressions of Antarctica were emotive: *amazing, unforgettable, fantastic, unreal, sublime, out of this world* (AR02, AR03, AR05, AR07). The meaning ascribed to Antarctica was intertwined with practical applications for the place. For some, it was “a winter wonderland for tourists” (AR03, AR04), “a place full of potential” (AR07), “a part of Argentina less explored” (AR01, AR02, AR06). “Going to Antarctica changed my life, literally [. . .] I found an unknown new world” (AR07). Antarctica meant “innocence”, “peace”, and “untouched place” (AR07). Tourism was also the limitation to accessing Antarctica: “Travelling to Antarctica is like winning the soccer world cup! But no one from here could go to Antarctica; it is too expensive for us” (AR02).

Wilderness was another theme explored in connection to the meaning of Antarctica. Antarctic wildlife was “innocent” and “untamed” (AR03, AR04), “comfortable” living in a cold environment (AR06); penguins, ice, and glaciers summarized one fused image of Antarctica (AR03, AR06). Antarctica was represented in colour, shapes, and tactile ways too: glaciers were covered in “the whitest snow” (AR06), snow resembled “soft meringue” and “shone like crystals” (AR05). Also, colours in the Antarctic scenery were contrasted with the vibrant colours of the tourists’ clothing, which broke the monochromatic perception of Antarctica (AR03, AR08). The blue palette acquired different and indescribable shades when respondents were trying to describe the colours of the Antarctic sky and the ocean (AR05, AR06, AR08). However, for some respondents, Antarctic landscapes resembled the familiar world. Antarctica was interpreted as magnified places in Argentina (AR02, AR05, AR06): “It’s like the Perito Moreno⁶⁶ but 100 times bigger and a 1,000 times more glaciers” (AR05). Moreover, one respondent compared the beautiful sceneries to Tierra del Fuego: “Antarctica is no different from what we have here; you can see the same mountains and the same scenery . . . the biggest difference is all the penguins and icebergs there are there” (AR02).

⁶⁶ Perito Moreno is a large glacier in Patagonia, and a popular tourism attraction.

Participants AR01 and AR04 did not have Antarctic experience. Nonetheless, Antarctica represented purity, an inaccessible world, hidden mysteries, and the unknown. Both participants did not find themselves to be disadvantaged compared with others by not having visited Antarctica; instead they prided themselves on “having a good idea of what the place is all about” (AR04). Yet, one participant regretted the government did not facilitate access to Antarctica to people born and raised in Tierra del Fuego, such as herself: “It’s ironic, isn’t it? It’s our land but it is economically unfeasible [. . .] I don’t have the means to pay for a cruise down there” (AR01). When asked whether she had pursued other alternatives to go to Antarctica, such as a job, the perception was that employment was only available to military staff.

The weather was another point of comparison with Tierra del Fuego. Most participants indicated that the weather in Antarctica was “pleasant” (AR03), “calm” (AR02), “not as cold” as expected (AR05, AR08), remarking on parallels with winter weather conditions at home.

Travelling to Antarctica did not reach the expectations of all participants. Two respondents mentioned they were expecting to see more research stations in Antarctica (AR03, AR07). Others were surprised to sail by other cruise ships which were not “icebreakers” (AR06, AR08). The theme of icebreaker was mentioned in several opportunities, connected to the “loss” of Argentina’s Antarctic flagship *Almirante Irizar*,⁶⁷ and the existing political tensions that arose from the repair of it. “We lost the icebreaker [. . .] I hope they don’t want to take it [Antarctica] away from us like they did in Malvinas” (AR02). Other respondents indicated disappointment in the high number of tourists seen in Antarctica (AR02, AR03). The perception was that the number of people and ships involved in the tourism industry was too large to manage from Ushuaia: “Who can control so many ships going there? We can’t, we don’t have the means now, and so it is left in the hands of others to do it; that’s how we lose all the time” (AR02). Although both participants referred to the AT [*sic*] as the governing body in Antarctica, they perceived the gateway city had a role in the management of Antarctic tourism, and the absence of such supervision meant losses for the country. “I hope the tourists like what they see in Antarctica, and that they don’t ruin it; we have a beautiful country and we don’t know how to take care of it” (AR01).

Questions regarding engagement and participation with the local Antarctic community resulted in participants self-questioning whether there was a local Antarctic community. If so, who would be the members of such group(s)? This was the first time participants questioned this section of the interview during this study. Although participants could not identify whether there was a local Antarctic community, many concurred⁶⁷ that, largely, people in Ushuaia do not seem

⁶⁷ The icebreaker *Almirante Irizar* was inoperable for a decade after catching fire in 2007. At the time of conducting the interviews, the ship’s repair plans were in doubt.

interested in Antarctica. Respondents summarized this as a two-fold problem: lack of political interest for connecting citizens with Antarctica beyond the nationalistic message of territoriality, and lack of a rooted community in Tierra del Fuego. The former problem was engrained in what a respondent likened to a “tug of war” between the municipal and the provincial governments over whose jurisdiction Antarctica falls under (AR07). Despite the province’s name including *Antarctica*, the polar region was poorly understood and under-researched in Tierra del Fuego, and presumably in the rest of Argentina (AR01, AR04, AR06). For some, the administrative autonomy of Tierra del Fuego’s province was relatively new for local politicians. Hence, many were novices and unprepared for the geopolitical nuances of attempting to manage *Antártida Argentina* from Ushuaia, given that it is a federal government’s international jurisdiction (AR07). Moreover, some participants believed the federal government paid little attention to Tierra del Fuego’s efforts to be involved in national decision-making processes regarding Antarctic matters (AR07, AR08).

Community rootlessness in Ushuaia was identified as another issue for the little interest in Antarctica: “It is hard to think of developing an Antarctic identity in this community when we can hardly say people have a Fueguino identity” (AR03). Respondents identified that the majority of the local adult population was born elsewhere in Argentina but migrated to Ushuaia for economic reasons, expecting to return to their hometowns later in life. Ushuaia’s cold weather, sense of isolation, housing problems, and general lack of urban planning created barriers for people’s place attachment, and, as a consequence, a disconnection with Antarctica (AR01, AR03, AR06, AR07). In contrast, other participants found that the younger generations of those migrant families were changing the paradigm of rootlessness. Youth born and raised in Ushuaia had adapted to the cold, enjoyed the surrounding wilderness, and did not perceive the isolation their parents endured (AR02, AR04, AR08). These participants were basing their assumptions on the experiences of their own children, who had a sense of belonging to Tierra del Fuego. According to these research participants, the construction of a connection with Antarctica was a matter of time for the young generations of Fueguinos (AR04, AR08).

Largely, engagement with Antarctica was perceived as being stronger by people working in Antarctic tourism-related activities (AR01, AR05, AR08). One participant summed up the community disconnection with Antarctica:

. . . it is somewhat logical that people connect Antarctica with the tourism industry only. After all, the Fueguino society is composed by migrants who are economic speculators . . . We all came here looking to better our lives, following an economic incentive . . . hence, it is likely that people only put their attention on the [economic] opportunities that are available around them . . . (AR08)

Concerning the role of Ushuaia as an Antarctic gateway, respondents had conflicting views. Once again, the theme of Antarctic tourism dominated the narratives and was considered central to the role of a gateway city. In addition, respondents had unfavourable comments about Ushuaia as a tourism hotspot. Most respondents agreed that the city did not host tourists well. Traffic jams and aggressive drivers, the lack of information signs in English, and the little consideration given to modifying shop and restaurant opening hours to facilitate tourists' access to services were seen as a poor understanding of the role of an international gateway city (AR01, AR03, AR07, AR08). "We are a city that receives tourists, but we are not set up for tourism" (AR01). Other related comments regarding the Antarctic tourism activities that happened from Ushuaia concerned the missed opportunities for integrating locals into this industry. Respondents considered that only a few local companies offering marine services and supplies benefited directly from Antarctic tourism (AR01, AR05, AR06). In parallel, participants noted that most Antarctic guides employed in the cruising industry were foreigners, and expressed frustration that the local university seemed not to focus on training competent staff to supply the international Antarctic cruise ship industry (AR04, AR07). The latter was explained as short-sightedness by the government. There was no policy in place to secure jobs or business to favour the local community over foreigners, even though the local parliament had the autonomy to pass such legislation (AR07). Moreover, government reporting on Ushuaia's status as a gateway city was largely based on basic tourism statistics but there was no socio-economic impact assessment available yet (AR07, AR08).

Regarding government influence on the Antarctic gateway development, study participants perceived there were no clear plans to advance the role of Ushuaia in the Antarctic context. Some noticed there was a relatively high turnover of government officials who were directly working with Antarctica matters, which had a negative impact on efficient government communication and decision-making, and resulted in private stakeholders' lack of confidence in the authorities (AR05, AR06, AR08). In addition, government efforts to promote the city's connection with Antarctica beyond the tourism activity had little traction: budget shortcuts, inconsistency, and political speeches that perpetuate the rhetoric on Antarctic sovereignty had failed to attract the social imaginary (AR02, AR04, AR07):

Our politicians don't have a clear message to motivate people about Antarctica besides the usual speech on Argentine sovereignty over the "pizza slice". We need ideas that engage the community into thinking we are responsible for looking after that part of the country [. . .] otherwise, people see it as propaganda, just another pretty pamphlet made by the government. (AR01)

Moreover, participants identified Antarctic education and the absence of the NAP in Ushuaia as two significant issues that weakened the local community's perception of the gateway city's role (AR04, AR06, AR08). Respondents pointed out that teachers from Tierra del Fuego managed Argentina's school in Antarctica, but their influence had not made an impact to include formal Antarctic education in the school curriculum (AR03, AR04). Another issue considered a hindrance to teaching Antarctic matters at Tierra del Fuego's schools was the origin and training of teachers teaching locally:

The problem we have here [Ushuaia] is that many teachers that teach our children come from the north of Argentina [. . .] they don't know anything about Antarctica, so how can we expect they will be interested in teaching something they don't know?" (AR04)

Another obstacle to community awareness that was seen was the date of Argentina's national Antarctic celebration (22 February), which fell during summer holidays, alluding to the perception that "no one was around" to celebrate this patriotic day but members of the military and local government officials (AR01, AR07). In line with the theme of Antarctica education, the compulsory use of Argentina's bicontinental map⁶⁸ produced opposing views. For some participants, the map depicted the "real Argentina" and Tierra del Fuego was the centre of the country (AR03, AR04). Others indicated it was an impracticable map to use at schools as *Antártida Argentina* occupied such a large part of the country, diminishing other important areas of Argentina (AR05, AR06, AR07). Nevertheless, all participants agreed that the Antarctic sector should be included in a map of Argentina.

In addition, participants viewed the presence of IAA in the city as important to consolidating the Antarctic gateway role (AR03, AR07, AR08). Although the transfer of the Argentine science programme to Ushuaia was referred to as "a utopia" (AR07), alluding to the long-standing agreements made between local government and the Antarctic organization without any effective action, participants were confident it could happen in the future. "If Chile moved INACH to Punta Arenas, why can't we dream big too?" (AR08). Other participants did not see as critical the presence of the NAP in the city but would rather have Argentina's icebreaker based in port (AR01, AR02, AR05).

Concerning the role of Argentina in Antarctica, there were two divergent positions. On one hand, Argentina's presence was necessary to keep the country's Antarctic research stations open, and for SAR operations (AR06, AR08). Also, it responded to the legacy of pioneers such as Sobral (AR01, AR05), and to keep the record for longer permanence in Antarctica (AR01, AR03, AR04). Regarding the latter, two participants recognized that Antarctic sovereignty was

⁶⁸ For more discussion on Argentina's bicontinental map, see Chapter 5, Antarctic Nationalism.

a contested issue with other countries, but the AT did not prohibit Argentina from stating its rights to the land (AR03, AR04). On the other hand, participants perceived that some Argentine bases were occupied for the interests of the military only (AR01, AR05): “They need something to do, so they keep them there. They [military] are also getting paid more for being so far away, so they can’t complain” (AR01).

Participants inferred from Argentina’s science programme in the narratives of popular Antarctic research stations. Orcadas Station was remembered as a historic landmark that gave Argentina the right to claim longest permanent occupation in Antarctica (AR01, AR03, AR04, AR06); Carlini Base had recently changed names to honour a popular scientist who had passed away (AR06); and Marambio Station operated the Antarctic airstrip (AR03, AR07). Little reference was made regarding the science conducted by Argentina in Antarctica; respondents remarked that little information was shared with the community although they would like to receive more. Science was considered an important activity in Antarctica and understanding the effects of climate change seemed important for the local community (AR02, AR03, AR05).

7.1.6 Summary of findings

This subsection contains the main arguments from the interviews per city. The subsequent sections of this work will discuss the analysed data from all gateways as one dataset instead of city-by-city.

Cape Town’s participants indicate that the Antarctic gateway connection is a complex concept for its community. White, cold, and far-flung, Antarctica represents a paradox to the socio-economic and political conditions of Cape Town. On one hand, Antarctica is perceived as an egalitarian place where races and genders can co-exist, and an opportunity to (re)create a modern legacy of South Africa in the White Continent. On the other hand, the memories of the country’s past race politics and white men’s legacy are perpetuated in the history of Antarctica; these hinder the construction of a sense of place with the Far South. In contrast, the Southern Ocean is an extraordinary boundary that divides the known from the unfamiliar (Antarctica). Yet, South Africa’s sub-Antarctic islands are cherished and form part of the geographic imaginary for the people from Cape Town.

For Christchurch participants, discussions around the concept of gateway and the city’s relationship with Antarctica were centred on the conviction that New Zealanders have a sense of duty to the Antarctic region, from a personal to a governmental level. This perceived responsibility was founded on spiritual, emotional, historical, environmental, political, and economic ties between Christchurch and Antarctica, which some members of the community

perceived are currently being lost. Political will, emphasis on polar legacies, and public education are required to tighten these bonds.

In Hobart, locals seem to feel strongly connected with Antarctica, and, at times, even closer to it than the mainland. The Southern Ocean is valued and occupies a central place in the local imaginary; it is the gluing element with the South. Moreover, the ocean is the place to exercise control and create knowledge through science; maritime efforts empower leadership. Regarding the Antarctic gateway role, it is presumed that it is understood and unquestioned by all locals; it lies conveniently beneath the surface, weaving narratives of a selected group but disengaged from others in the Tasmanian community.

For the South American city of Punta Arenas, discussions showed that Antarctica features in the imaginary of Magallanicos, from a territoriality perspective to protectionist views. The sublimity of Antarctica was contrasted with the human presence in the place, the latter championed as needed for Chile and for Antarctica. Punta Arenas' gateway role is seen important for supporting mobility to the southern regions of Chile, which in return can result in economic benefits for Magallanes.

Finally, the main arguments exposed by Ushuaia's participants indicate that Antarctica has a subtle presence in the imaginary of the local community. Antarctica it is commonly perceived as a tourism destination for the wealthy and privileged, despite the geographical familiarity that proximity to the place engenders. The socio-economic tensions present in Ushuaia prevent people from engaging with Antarctica at deeper levels; issues of territoriality, nationalistic rhetoric, and imposed symbolic representations of *Antártida Argentina* influence locals' place-identity responses. Government involvement in Antarctic matters seems overbearing and slow, but needed to further implement the Antarctic gateway role.

7.2 Codes and categories emerging from the data

The analysis of the data from interviews followed the tenets of Grounded Theory methods in its constructivist approach. The focused codes introduced here are the result of iterative and constant comparative analysis of the data from all the interviews conducted at the five gateways. As focused codes emerged from the coding process, I looked for consistencies, variances, and relationships between these concepts. I grouped the focused codes that were conceptually connected, and built up five categories. These are: (a) conservation, (b) otherworldly, (c) imagined homeland, (d) gateway role, and (e) global connections. Table 2.4 in Chapter 2, contains the list of all core categories generated for this study and the focused codes that support them.

The following sections introduce each core category and its focused codes, and explain the underlying relationships between them. These categories are central to the discussion of the main questions asked in this research, which will be discussed in the next section of this chapter. Here, I take a top-down approach, describing the core category first, followed by the focused codes (indicated in italics) that are included in the respective category. The first three categories listed below refer to Antarctica, and are followed by the categories that concern to the gateways.

7.2.1 Conservation

The category of conservation represents the views people have regarding the caring for Antarctica in its natural state. Here, *conservation* is not understood as solely the prevention of wasteful use of a resource, but also encompasses broader interpretative meanings within the concept of caring. Respondents care for the preservation of the unique environment that Antarctica represents, and feel a moral obligation to protect it. During the data analysis, I observed how the memories of Antarctica compel participants to think about how to look after the region. These altruistic feelings towards Antarctica validate national governments' actions in the Antarctic region. For instance, I saw a close relationship between respondents' views on Antarctic human habitation at the research stations and the understanding that these settlements enhanced a better protection of Antarctica. Also, scientific leadership is connected with the conservation category: taking a leading role in science allows a country to promote conservation and have influence on the Antarctic environment management. The category conservation is therefore connected to the validation behind NAPs' activities in Antarctica rather than environmental consciousness for preserving the region.

The above interpretation of the category of conservation highlights the integrative nature of this theme. The following focused codes support this category:

1. *Value of Antarctica* encompasses the intrinsic (including aesthetic) values⁶⁹ ascribed to Antarctica. *Value* is a contested concept, with not one but a number of meanings across topics, involving objectivist and subjectivist views over the same matter (Neufeld et al., 2013). In the Antarctic context, cultural constructs guide the ascription of values, but so do beliefs that, as a place, the Antarctic is worth valuing (Tin, Summerson, & Yang, 2016). Human interactions with the Antarctic environment develop empathy with the natural world, making it worth preserving. Hence, the code *value* included all descriptions of the physical attributes of Antarctica, including the

⁶⁹ Antarctic values is a contested concept and scholars are delving into its study (Liggett & Hemmings, 2013; Neufeld, O'Reilly, Summerson, & Tin, 2013).

imagined, the unfamiliar, and the intangible. Antarctica's colours, shapes, dimensions, textures, sounds, silences, and sensory memories are considered here as constructions of value.

2. *Human presence* in Antarctica enhances the sense of place that people attribute to the region. Living, working, researching, or travelling in Antarctica create cultural experiences with the place that enhance the desire for looking after it. Additionally, there is an understanding among participants that human presence in Antarctica is needed, accepted, and justified. Humans fill a void in this uninhabited place, but unwritten rules mark a pecking order. For instance, if science is the reason for someone's personal experience, others, such as tourists or military, are seen as unnecessary or imposed by oligarch powers. In addition, there are contrasting thoughts regarding the number of people participants "saw" in Antarctica at the time(s) of their visit(s) (i.e. only a few or too many). In general, Antarctica is perceived as becoming increasingly crowded, in detriment to the aims of its conservation. Participants with and without Antarctic experience expressed these last views.
3. Likewise, *science leadership* has a strong correlation with the category of conservation and with the above-mentioned codes. Science is stated as the primary reason for countries' presence in Antarctica, but, more importantly, scientific knowledge is the conduit to guaranteeing leadership in the region. Positions of leadership in Antarctic and Southern Ocean affairs mean having decision-making powers over the care of Antarctica, and a point of advantage over other interested parties.
4. Lastly, *capacity* represents the views regarding what resources are required to undertake the conservation of Antarctica. Recurrently, respondents connected the capacity to transport human resources and goods, such as Antarctic research stations, and polar-capable ships, operational airports, and aircraft for Antarctic travel to the conservation of Antarctica. These transport and infrastructure facilities are popular in people's narratives because they are often portrayed in political speeches and local media, and, in some gateways, are visually present in everyday life (i.e. the country's icebreaker docked at the local port). Study participants had critical views on vulnerable aspects of their country's capacity to undertake these tasks. For instance, budget cuts to the Antarctic programme in Australia resulted in public uproar. Ushuaia's respondents considered that the absence of the Argentine icebreaker in Antarctica may result in potential loss of power in the region.

7.2.2 Otherworldly

The category of otherworldly describes the geographic imaginary attributed to Antarctica as an exceptional place. The participants' voices present Antarctica as a mystical experience, a different world challenging the human senses and intellect. It is a seductive and captivating world that only a few seemed to have experienced. Antarctica stimulates the sense for adventure and draws on the spirit of sacrifice from heroes of the past. The vastness of Antarctica is revered; this limitless place seems inhabited by creatures of a different but familiar world. The category of otherworldly appeals to the subliminal and the spiritual stimulus that Antarctica seems to provoke in respondents.

The following codes support the category of otherworldly:

1. A *sense of adventure* seems to be intrinsically connected to the sense of place imagined for Antarctica. The iced unfamiliar world combined with the perception of survival in the harsh environment suggests to those who visit the place that there are endless opportunities for first-hand exploration of these remote lands. A popular recurrent narrative among respondents is the notion of following on polar heroes' footsteps while in Antarctica. In all likelihood, this is a perpetuation of the rhetoric promoted widely in reference to the Polar Regions and at home concerning Antarctic connections. The *sense of adventure* can be experienced vicariously too; for instance, through reading polar books while being in Antarctica. However, I also observed opposing views regarding the sense of adventure carried from a polar legacy: for some, it is important to keep promoting the spirit of adventure in Antarctica for the sake of national pride, while for others this legacy carries injustices of race politics that are partisan to concealing unwanted groups from the history of Antarctica.
2. The *wilderness* code refers to the spiritual experiences that the Antarctic landscape and wildlife inspire in respondents. In this challenging and vast environment, people are compelled to embrace their own humanity; intellectually and physically, people feel dwarfed by the size of the polar landscape. I noticed the subtle comparison between the wild beauty of Antarctica and its fragility, which has correlation with the theme of conservation and a human desire to protect the place. Moreover, the Antarctic wilderness is thought to be vulnerable to exploitation, while others explored the rational use of the natural environment. The *wilderness* of Antarctica also acquires geopolitical dimensions when it is compared with and likened to the participant's homeland. Additionally, encounters with Antarctic wildlife are memorable and breath-taking; there

is a sense of admiration and amazement that living organisms besides humans can thrive in this environment.

3. *Uniqueness* appeals to the extraordinary characteristics of Antarctica, coupled with the imaginaries constructed as a result of the human-environment interactions. Antarctica's uniqueness promotes a feeling of privilege in those who have experienced the place. The otherworldly environs, the remoteness and the difficulties of access, the distinctive wildlife found there, all are elements of a distinct social construction of Antarctica.

7.2.3 Imagined homeland

The category of *imagined homeland* relates to the narratives concerning the sense of community that people build in Antarctica. An emotional and spiritual connection with Antarctica brings people who are strangers to each other to come together as a community in a foreign and treacherous environment. Some respondents long for the camaraderie found in Antarctica; others find a strong sense of belonging to the place that would go to the extent of allowing them to call it home. For some participants, the sub-Antarctic islands are included in this imaginary. Governments' jurisdiction over these islands seems to strengthen the sense of place and give polar legitimacy to the adjacent regions. Such is the case of Macquarie Island within the Tasmanian identity, and the Prince Edward Islands with Capetonians. Additionally, the category *imagined homeland* describes the nationalistic views over territorial sovereignty, validated through the presence of military, which are seen by some as a critical partner to NAPs in Antarctica. Also, patriotic feelings that emerge from seeing one's country represented in Antarctica, as well as symbolism and expressions of banal nationalism (Billig, 1995) are also incorporated in this category.

These are the codes that comprise the category *imagined homeland*:

1. *Community*: Participants express that they experience a sense of community among those who shared their time in Antarctica; a belonging to a group that transcends a common nationality, race, and gender. This social construct relates to the narratives of trustworthiness and camaraderie experienced in the Antarctic, perceived stronger than anywhere else because of the harsh environment where human interactions develop. Similarly, the community of like-minded people define themselves as *Antarcticans* who construct their own cultural practices influenced by the place.
2. The code *national asset* represents the nationalistic rhetoric of sovereignty performance in Antarctica (Dodds, 2011). Antarctica represents a valuable asset for

the country to assert control over a pretended area. Management of the imagined possession is demonstrated by transferring to Antarctica the symbols of national identity, such as flags and national colours that are present in buildings and Antarctic clothing. Moreover, the establishment of human settlements in Antarctica further represents the code *national asset*. These purposely established colonies offer to nationals of the country the perception of common living in an extension of the national territory, which is unperceived as a contested land.

3. The code *boundaries* reflects on the imposed and imaginary borders that participants perceive in Antarctica. From compulsory-map uses to theories of geological resemblance, these geopolitical and geographical boundaries extend or relax to suit the speaker or the narratives. Narratives of geographic closeness with Antarctica expand the national territory of one's country and reduce distances between regions. Land, ice, islands, and even the Southern Ocean are geographic elements of these imagined boundaries that can also become a deterrent to entering the polar area. Additionally, the code *boundaries* speaks of the connections participants make in relation to the weather. Weather systems that affect the gateways are a connection with the Antarctic, and gateways communities' adaptations to the southern latitudes are tested in meteorological conditions and endurance. Participants connect also weather and Antarctica with the effects of climate change affecting the gateways.
4. Finally, the code *power relations* expresses the interpretations of participants concerning the politics of Antarctica. Participants perceive that to protect their country's Antarctic (imagined) sovereignty it is instrumental to be a signatory party to the ATS. After all, the general understanding is that the ATS does not proscribe their rights to sovereignty in Antarctic soil; in fact, the Treaty allows for international cooperation and territorial jurisdiction to coexist. Other advantages to signatory parties to the Treaty include international credibility and forging alliances with foreign partners for cooperation and sharing of logistics of Antarctic operations. In addition, the presence of military forces in Antarctica, even in countries with painful memories of past dictatorships, seems a legitimate occurrence and a critical partner to conducting activities in Antarctica.

7.2.4 Gateway role

This category refers to the manifold interpretations that research participants had over the concept of Antarctic gateway, and the function(s) the city has in connection with Antarctica. Participants connected the meaning of *gateway to Antarctica* with the most dominant Antarctic-related activity happening in their city. Transport and logistic support for science and tourism

were the predominant understandings of the role of a gateway. In addition, the gateway role category includes the value given to historic links with past polar explorers, and the efforts to assert and keep alive those connections in the community. Governments' strategies to maintain the Antarctic gateways relevant for the polar community are also considered here.

The codes that integrate this category are the following:

1. *Polar heritage* is understood as the cultural patrimony inherited by the Antarctic gateways from past Antarctic expeditions. This legacy includes tangible and intangible subjects, such as artefacts, buildings, statues, sites of interest, human connections, and memories shared with the local community. Polar heritage is given a significant value at the gateways; it is professed to generate strong bonds connecting people with Antarctica by weaving past generations' legacies that seem to validate the city's gateway status. However, the narratives from polar legacies are selected and shaped to suit a post-colonialist⁷⁰ agenda at the gateways. Conversely, Antarctic connections with heroes of the past are not always valued. For instance, Cape Town resists engaging with chronicles of British and apartheid past while attempting to re-create a contemporary representation of South Africa's legacy in Antarctica.
2. *Community engagement*: This code refers to the participants' common understanding that people living at the Antarctic gateways ought to be acquainted with the city's role and connections with Antarctica. Participants have critical views on the need for government-led Antarctic education efforts to maintain interest in Antarctica in the younger population, which, in their opinion, translates into better-prepared gateways for the future challenges affecting the polar region. Also, participants see themselves as actors generating opportunities to create Antarctic awareness in their communities, with varied results. Moreover, this code integrates the interests manifested by the participants for continued transmission of knowledge and cultural traditions attached to the Antarctic connection needed at the gateways; for instance, the regular implementation of community celebrations such as Antarctic-themed festivals.
3. *State responsibilities*: This code reflects on the participants' perceptions of the local government responsibilities in supporting the needs for improvement and growth of the Antarctic gateway role. These perceived state obligations include long-term planning strategies for local and regional development, political support, environmental performance and social connections, and government investments in the infrastructure and services offered to the Antarctic community. Facilitating connections between

⁷⁰ The concept is adapted from Dodds (2006).

public and private stakeholders to provide fundamental services, systems, and facilities is regarded too as a *state responsibility*. For instance, Christchurch participants pressed the national government to formalize policy to support their city as a gateway. Participants also considered that it was critical to make provisions for the establishment of national and international agencies for Antarctic management and policy at the gateways. These organizations are perceived as bringing prestige to the gateway and enabling economic opportunities. Likewise, participants see their gateway cities as acting ambassadors for their country in the presence of these international organizations. Conversely, the absence of these Antarctic organizations is seen as being to the detriment to the gateway's reputation, and comparisons ensue between host cities to these agencies.

7.2.5 Global connections

The category of global connections represents the interests and ambitions of the people from the gateways concerning their city's role in the international Antarctic community. Participants shared their views regarding how they see their cities taking advantage of the Antarctic connections they have and developing opportunities to strengthen those links. Participants have a regional view of the extent of their cities' connections, but understand too that activities and business opportunities connected with Antarctica extend beyond the national boundaries and the jurisdictions of their urban areas. Hence, I observed in participants' perspectives how comparison with other gateways' conditions and competition play a part on their worldview of the Antarctic gateway concept.

The codes that comprise this category are presented here:

1. *Regionalism* refers to the geopolitical views and condition of the Antarctic gateways. Respondents see their cities as the optimal headquarters for the Antarctic activity happening in their country. Although they understand the internationality of Antarctica, participants perceive the gateway must play a stronger role in strengthening the Antarctic links and creating further opportunities.
2. The code *Antarctic tourism* incorporates the views from participants concerning the positive outcomes resulting from the Antarctic tourism business operating from their city. Antarctic tourism is a desired industry for the gateways for its perceived economic advantages and international profiling, but respondents also identify the shortcomings of monopolizing services and infrastructure to attend to the needs of only this business. This code also incorporates views regarding tourism that take place in Antarctica and fortuitous tourism attracted by the Antarctic connections at the gateways.

3. Finally, the *gateway dynamics* code includes the opinions of participants concerning comparison and competition between the gateways. I observed participants comparing common Antarctic connections found in the gateways, and making observations on links their city has, does not have, has lost to a competitor, or aspires to have to fulfil the perceived role of a gateway to Antarctica. Traditional rivalries between cities marked by geography, history, and overlapping geopolitical interests in Antarctica, such as the case of Punta Arenas and Ushuaia, extend to the gateways. Competition for becoming the dominant gateway city in each region seems to be prevalent in the participants' comments.

7.3 Discussion of findings

This section focuses on the key findings of this research. To initiate the discussion, I propose two core concepts that have emerged from the interrelation of the categories and focused codes described before in this chapter. The core concepts are connected and should not be interpreted in isolation from one another.

The core concepts are:

- 1) Antarctica inspires long-lasting connections
- 2) The role of the gateway city in fostering an identity with Antarctica

Below, I explore the core concepts contextualizing these with propositions from the scholarly literature to address the main questions guiding this work.

7.3.1 Antarctica inspires long-lasting connections

What aspects of Antarctica inspire people to construct long-lasting connections with a remote and frozen place? What is the basis of these connections? This core concept attempts to answer these questions by focusing on the conceptual relations between the categories of conservation, otherworldly, and imagined homeland. These categories reflect people's social constructions of the meaning of Antarctica, place attachment⁷¹ and the sense of community with "The Ice". It includes the values ascribed to Antarctica and the symbolic representations of place through imposed (geo-)political boundaries. The patterns emerging from these categories have enabled the construction of this core concept.

⁷¹ *Place attachment* is a complex, multidimensional, and integrating concept that involves the affections, emotions, knowledge, beliefs, and behaviours of human interaction with a place (Altman & Low, 1992).

It is hard to argue that Antarctica is like any other region of the world. Its frozen, distant, and ethereal characteristics provide inspiration for vast amounts of social constructions that convey the extraordinariness of the place. People develop deep bonds from interactions (real or imagined) with Antarctica's natural environments, which become integral to their sense of place and identity. In this research, participants revealed a strong attachment to Antarctica through their emotive and meaningful memories of the place. I observed how respondents reacted when asked about Antarctica; they had a high level of satisfaction when thinking about the place; there was happiness and wonderment for the unique environment, even for those with no personal Antarctic experience. These affective representations of Antarctica reflect an emotional bond with the place, which is one of the dimensions identified by scholars in the process of place-attachment (Altman & Low, 1992). Some participants had a more profound sense of belonging to the place than others, but, as will be discussed later, it was the social interaction with individuals interested in the same spatial setting that strengthened the bond with Antarctica.

Place attachment is dynamic and socially constructed, usually referred to when a person (or a community) develops a positive bonding and has pleasant feelings about a place (Hashemnezhad et al., 2012; Manzo & Devine-Wright, 2019). The language used to describe the bond with the place enhances the sense of well-being and positive self-esteem in individuals (Lewicka, 2011; Manzo & Devine-Wright, 2019). Also, according to Brown et al. (2019), research on place-identity offers insights on human motivations for pro-environmental behaviour, and argue that empathy with nature drives people's sustainability and conservation efforts. These observations relate to participants narratives towards Antarctica. Hence, participants' representations of Antarctica as fragile and peaceful contribute to their individual well-being, imagining a bond with a delicate and special place. Antarctica's paradox is that it also embodies a frozen wilderness where individuals create affective ties by romanticizing cultural representations of survival and adventure with their own experience of the place (Glasberg, 2012).

I now focus my attention on the understanding of the values participants attributed to Antarctica, and how these ideals influence feelings for its conservation. I borrow the term *conservation* to marry the idea of the protection of Antarctica's unique environment with a consideration of anthropocentric views. Participants seemed to assume that the conservation of Antarctica can be achieved with human presence (including manmade infrastructure) conducting scientific and environmental actions in the place. The perception that people's presence in Antarctica is needed for environmental protection aligns with Tin's (2017) arguments on environmental ethics: Antarctic parties maintain that the place's unique values justify the activities of NAPs. Although the human footprint in Antarctica is lower compared to

the rest of the world and attitudes towards environmental stewardship are generally present in the ATS, Tin asks what are “the limits of human appropriation of nature” that warrant our interference in a seemingly pristine place (2017, p. 74).

Although not every participant in this study had a personal connection with Antarctica, all had socially constructed images of the place. This is not surprising, considering the popularity of Antarctica in cultural productions from the 20th century (Glasberg, 2012; Leane, 2018), and the framing of Antarctica as a pure and fragile continent in media and advertising (Nielsen, 2020). Also, my invitations to participate in this research may have prompted participants to think about the polar south. Affectionate descriptions of Antarctica showed that participants have an appreciation for the living world. Their graphic and emotive details of the physical and imagined attributes of Antarctica conferred to the continent a set of values that seemed to influence interest in its conservation. Largely, participants manifested a sense of responsibility for caring for Antarctica and for creating awareness of its protection. Empathy with nature strengthens people-environment interactions, providing a conduit to emotional and cognitive bonds with the natural world that can lead to an awareness for conservation (Brown et al., 2019).

In general, participants remarked on Antarctica’s aesthetic and wilderness values when referring to the meaning of Antarctica. These views correlate to the findings of other scholars regarding the recurrent values people ascribe to Antarctica (Neufeld et al., 2013; Tin et al., 2019). *Antarctic values* is a relatively recent topic of study for humanities and social sciences scholars. Research has been conducted to understand how Antarctic scientists (Frederick & Rock, 2018), tourists (Cheung, Bauer, & Deng, 2019), students (Tin et al., 2019), and the public in general (Salazar, 2013b; Summerson & Bishop, 2012) value Antarctica. Moreover, ascribing value to Antarctica is prescribed in the Madrid Protocol. The Madrid Protocol remarks on the intrinsic, wilderness, and aesthetic values of Antarctica, as well as considering of value the conducting of scientific research in the region (Secretariat of the Antarctic Treaty, 1991 art.3). However, scholars are critical of the ambiguity of the concepts of value within the ATS, and even more with the slow progress on definitions and implementation of measures for the protection of these Antarctic values (Summerson & Tin, 2018).

According to participants, Antarctica embodied purity, untouched landscapes, and nature; all these representations lacked human presence. These impressions were unique and long-lasting, particularly for participants who had been in Antarctica. It was interesting to observe that while Antarctica meant a wilderness devoid of humans, their physical presence in the place was not perceived as spoiling the essence of the imagined pristine world.

When evaluating the values participants conferred to Antarctica, I noticed views were influenced by anthropocentric and nationalistic interpretations concerning Antarctic

environmental protection. Most participants agreed Antarctic conservation was important and it was achieved with human presence in the continent. The human footprint⁷² in Antarctica, represented by research stations, means of transportation, and even military staff (mostly noticed, and at times resisted, by South American respondents), was not perceived as a contradiction to the spirit of conservation of wilderness and pristine environment. On the contrary, people and the critical infrastructure needed to support human life in Antarctica were expected (and accepted) to be in the southern continent for the sake of its protection.

Further observations regarding Antarctica's conservation wove science and sovereignty together. Conducting scientific research was identified as the primary reason for NAPs' presence in Antarctica. Although the interviews were not designed to collect data regarding participants' understanding of the Antarctic science conducted, the recurrent science themes were climate change and unspecified Southern Ocean research. These align with the global awareness of environmental issues that place Antarctica in the forefront of nature's vulnerable places in need for protection (Nielsen, 2020). I noted participants' emphasis on the need for scientific leadership as a way to ensure the protection of Antarctica. Scientific knowledge was considered important, but it seemed imperative that their country should be (or aspire to be) the frontrunner in the science domain. Since scientific programmes are expensive to conduct in Antarctica, these require sustained political support and financial investment. As discussed in Chapter 4, Antarctica matters to the countries hosting gateways, hence their presence in the polar region is noticed by nationals with an interest in the Antarctic. Moreover, successes and disappointments linked to one's NAP were noted too: participants shared frustrations discussing NAPs' budget cuts, or the absence of the national flagship operating in Antarctica. In participants' views, the conservation of Antarctica seemed to depend on their country's performance in the polar region. These views relate to the remarks made by Hemmings, who argues that Antarctic science is political and celebrated as a matter of national pride perpetuating polar nationalistic rhetoric (2017).

Participants did not comment on the presence of other NAPs concerning international collaboration efforts in Antarctic conservation. This resonates with the discussions on nationalism in Antarctica that scholars such as Hemmings and colleagues (2015) have drawn attention to. Antarctic states, like the ones studied here, display their nationalistic interests with narratives that praise their presence and engagement in Antarctica in a superior manner than other states do (Hemmings et al., 2015). National narratives seem to influence one's country's presence in Antarctica and, although participants fashioned Antarctica as a whole and not limited to the sector of their countries' territorial pretensions, the protection of Antarctica was

⁷² *Human footprint*: “. . . an area subject to human activity” (Summerson & Tin, 2018, p. 269).

perceived as a national undertaking only. These views were particularly noticeable in participants from Antarctic claimant states; some had more-explicit nationalistic comments than others. For instance, Christchurch respondents connected Antarctica as the country's *backyard*, a seemingly innocent expression to refer to the natural world for which they care, lying next to them as close as stepping outside within the confines of their home bounds. For Hobart participants, Antarctica fitted nicely in the isolated haven of Tasmania (which cared for Macquarie Island), coupled with the perception of dominance of marine scientific endeavours undertaken by local scientists in the Southern Ocean. In their views, Antarctica could not be better cared for than by Australia. In the case of Punta Arenas, respondents perceived that there was a national law mandating all nationals to care for Antarctica. A sense of patriotism, paired with the popular understanding of Chile's long-standing participation in Antarctica, left no doubts of the duty every Chilean had concerning the protection of Antarctica. Moreover, for respondents in Ushuaia, their concern for the absence of a means to control the number of tourists in Antarctica, and their hope visitors would enjoy that part of Argentina, shows how participants imagine the Antarctic as one country with their homeland.

In parallel, Capetonians expressed caring for the sub-Antarctic islands and the Southern Ocean; Antarctica seemed too far removed from their social reality, but not "the islands". These observations indicate that politics of sovereignty over perceived national territory influences the views of nationals when caring for the protection of Antarctica and the peri-Antarctic islands.

The politics of sovereignty over Antarctica and sub-Antarctic islands contrasted with participants' ecocentric⁷³ views concerning the value of Antarctic wilderness. The vastness of the landscapes, the limitlessness of the white, icy surfaces, and the abundance of wildlife provided a sensory overload of the natural world. As self-centred beings, people saw Antarctica as otherworldly and incomparable with other known environments, and the interactions with the place acquired exceptional characteristics. Encounters with Antarctic wildlife were perceived as spiritual experiences and potentially transformative, affecting the way respondents inhabited the Antarctic. Intriguingly, much of the charismatic wildlife that participants experience in Antarctica (i.e. penguins, seals, and whales) can be appreciated near to the gateway cities. However, experiencing these creatures in Antarctica becomes enthralling to people because they thrive in an environment where humans require plenty of technology to survive.

⁷³ *Ecocentric*: linked to the concept of wilderness, ". . . in which natural settings that are untouched by humans are highly preferred and considered beautiful and good examples of nature" (van den Berg & Konijnendijk, 2019, p. 111).

Moreover, wilderness fuels popular representations of Antarctica (Glasberg, 2012). The generalization of superlatives to describe a striking and inhospitable environment assists with themes of heroism and survival (Hemmings et al., 2015; Leane, 2018; Nielsen, 2020). Participants imagined Antarctica as a place for first-hand exploration and adventure. Although they did not share to what extent they had experienced Antarctica in an exploration capacity, cultural legacies from past expeditions and geographic conquests influenced their views and dreams about the southern region. Polar heritage was an integral concept for place attachment with Antarctica for participants from Commonwealth countries, with both positive and negative connotations. For instance, Australian participants felt they had plenty to celebrate and emulate from the travel records of Mawson's expeditions, whereas New Zealanders were better connected through the polar heritage from their British past. Moreover, visiting the historic huts of Scott and Shackleton's expeditions on Ross Island were said to provide guests with a vicarious experience of how the explorers lived a century ago in Antarctica. Although these huts have been heavily modified in the past and restored by the conservation work carried out by New Zealand's Antarctic Heritage Trust in the last decades, these historic sites are enshrined as the embodiment of polar exploration for most New Zealanders. It is unsurprising that Ross Island historic huts are invoked in the memories of heroism since visiting these historic sites is on the agenda of most people travelling to Antarctica with New Zealand's NAP (Priestley, 2019). This indicates how important it is for New Zealand and its nationals to maintain a connection with the colonial past in reference to Antarctica.

In the case of South African participants, the Antarctic links to British expeditions of the Heroic Era, and the mid-20th century participation of white South Africa in Antarctica, were acknowledged by some, and resisted by others. Some participants were disappointed at the national government's concerted efforts to conceal the country's history in Antarctica because of connections with the past colony and white supremacy. Respondents understood these links perpetuated racial segregation in the representations of Antarctica, but felt that a recognition of the historic intervention of South Africans in the Antarctic would assist with general awareness of the polar region. Other respondents did not identify a history of South Africa in Antarctica at all; Antarctica's white history was contested. However, Capetonians found a common ground to connect with the wilderness value: the memories of the sub-Antarctic islands. South Africa's long-standing seafaring tradition and the work carried out by coloured and black men on Prince Edwards Islands since its annexation to the Republic (van Sittert, 2015), reproduce South Africa's memories of the polar world from the northern fringes of Antarctica.

The wilderness of Antarctica was also appreciated through a commercial lens. Antarctica's reputation as an unspoiled region attracted tourism, but some respondents had critical views

on this industry. On one hand, respondents from Cape Town and Ushuaia welcomed the economic benefits deriving from the tourism industry. On the other hand, the same respondents perceived Antarctic tourism as an elitist affair for a few to enjoy. Moreover, respondents from Ushuaia saw tourism as the only instance they had to visit Antarctica, but it was expensive and unattainable for those who wanted to connect with the southern region of their own country. Their views agree with Herbert's arguments on the extent of the influence of Antarctic tourism from the gateway in shaping nationals' polar geopolitical identities (2014).

The appreciation for Antarctica's wilderness also provided participants with a medium to connect perceived-similar environments and the people that inhabited this place. When constructing the category of imagined homeland, I borrowed Anderson's concept of "imagined communities" (1991), since the initial analysis of community-making in Antarctica had a resonance with nationalistic endeavours. For instance, for Hobart and Ushuaia participants, maps offered geographic representations of Antarctica's territorial connection with the mainland. In Punta Arenas, responses naturalized the raising of families in Antarctica, seen as a safe place free of urban crime. However, participants' sense of place in Antarctica presented other characteristics that transcended nationality and nationalism. For example, Capetonians related with satisfaction the egalitarian aspect of Antarctic work, and Cantabrians felt at home in Antarctica.

Community-making in Antarctica is not a novel concept but it has been mostly attributed to human settlements in Antarctica, whether these are established for science or sovereignty reasons. Verbitsky warns of the challenges of conceptualizing community and argues in favour of the "post-place community"⁷⁴ concept to refer to the science communities in Antarctica (2015a, p. 50). However, it is not only scientists who construct a sense of community with Antarctica. As O'Reilly and Salazar point out, ". . . there is a fluid mosaic of everyday life in Antarctica . . ." (2017, p. 22) beyond scientists and military personnel. It was common to hear from participants the words *Antarctican* and *Antártico/Antarticano* when those who had experienced Antarctica referred to themselves and their colleagues. Moreover, the lack of a common Antarctic culture brings people together to develop cultural traditions and a common language to connect with the place while being in, or away from, the spatial setting. Some *Antárticos* wore Antarctic-issued clothing to the interviews, which displayed commemorative patches and pins of their experience in Antarctica. Other participants referred to collectors' items and philately as symbols of the Antarctic community culture. These symbols may be

⁷⁴ "Thus, 'post-place community' is a description that fits the Antarctic scientific community well, as it incorporates both scientists around the world who research Antarctic issues and interact with others in the same field - but who may never visit Antarctica - and those scientists who physically undertake research in the Antarctic continent" (Verbitsky, 2015a, p. 50).

seen as banal, but, as Child warns us, there are hidden messages of sovereignty behind an innocent postage stamp (2008).

Also, I noticed that participants affectionately referred to Antarctica as “The Ice”; New Zealand respondents used this term mostly. *Antarctican* and *The Ice* seem to be common language in the Anglo-Saxon polar parlance. Entries in Hince’s dictionary (2000) refer to affectionate human entanglements and belonging with Antarctica; Meduna attributes the term *The Ice* to the strong connection felt in New Zealand with Antarctica, to the extent of affirming that “. . . the frozen continent is part of its national identity” (2012, p. 11).

Adverse instances were also reminders of the sense of community experienced with Antarctica. For New Zealand respondents, the Mt Erebus air accident was remembered and heartfelt in the country as it brought Antarctica into their homes. Although narratives of grief and disbelief over the official mishandling of this tragedy have occupied the media headlines for decades, it will require temporal distance and a new generation of New Zealanders to change the cultural narratives to reconciliation and acceptance (Strongman & Young, 2011).

Concerning gender issues in Antarctica, only one participant addressed this directly, and this happened when celebrating the participation of people of colour and females in the Antarctic. As Nash et al. (2019) remark, Antarctica as a workplace continues to be associated with the image of masculine leadership, which perpetuates social power relations towards gender bias, misrepresentation of minority groups and conditioning homosociality.

Chilean participants referred in several instances to gender stereotyping in Antarctica. Discussing the small population at VLE, participants perceived that the families’ and children of the military forces in Antarctica gave a sense of normality to the place, while assuming women were taking the role of spouses, companions and mothers to the (largely) male military staff. This perception compares to the research of Llanos, who argues that in the establishment of VLE in the 1980s, women were treated as companions to their husbands and obedient to the government’s goals of colonization (Llanos, 2019). Intriguingly, the same space and actors are perceived differently by O’Reilly and Salazar (2017), who see the presence of military families (and their children), as contemporary cultural practices of inhabiting Antarctica.

Not all participants interpreted the presence of Armed Forces in Antarctica equally. None of the participants from Cape Town, Christchurch and Hobart made references to military staff in Antarctica, even though military personnel of the countries involved in this research offer different services in the Antarctic, and their contributions are well documented (O’Reilly & Salazar, 2017; Sanchez, 2017). However, participants from Punta Arenas expressed discontent for having military presence in Antarctica. The military discipline imposed onto civilians was perceived unnecessary and, at times, misogynist. It appears that the tensions

between military forces and civilians in *Antártica Chilena* reported by Llanos continue today (2019). As Larrain observes (2016), the dictatorship in Chile left in the population scars of terror, grief and rejection towards military and their symbols of oppression, and Antarctica does not escape from these raw emotions.

In contrast, respondents from Ushuaia acknowledged the presence of military in Antarctica and accepted this group as the most capable for living and working in the polar region. Participants longed for more participation and visibility of the Argentine programme in Antarctica, embodied in Armed Forces staff and not scientists, as a way to control and protect the southern corners of the country. Therefore, Argentina's military community in Antarctica represented similarities to a border town looking after the margins of the country, symbolizing national geopolitical ideals. This perception aligns with Belwell's (2017) arguments that Argentine nationals are frequently reminded of the lost territories (e.g. Malvinas) and the need to stay vigilant over contested areas, such as *Antártida Argentina*.

One final group that has been disregarded thus far as Antarcticans, or members of an Antarctic community, are tourists and those working for the tourism industry. Although the extent of ". . . who might be regarded as 'true Antarcticans' . . ." (O'Reilly & Salazar, 2017, p. 22) is beyond the scope of this research, participants from Ushuaia who visited Antarctica as tourists, also revealed a strong sense of place through their experience and saw themselves as Antárticos. Curiously, in their views, Antarctic tourists were visitors to the *Antártida Argentina*, thus, they did not see themselves as tourists. This perception aligns with the research conducted by Stewart and colleagues (2006), where Scott Base staff find themselves playing host in Antarctica to the tourists visiting the station and surroundings, exposing different degrees of tolerance and complex attitudes towards tourism in a place for science (Stewart et al., 2006).

Antarctica as an *imagined homeland* had similarities with the regions hosting the gateways. Geographical references, such as geographic proximity due to the southern latitude of the gateway city, or the resemblance of its topography (i.e. the mountains) with Antarctica's physical features, builds on the imaginary of representations of geological continuity for territorial assertions that Howkins labels "environmental nationalism" (2010, p. 238).

Moreover, the Southern Ocean embodied the connector or the boundary with Antarctica. Despite all gateways having significant coastal areas, some towns linked their seascapes with Antarctica. The use of expressions such as *conveyor belt* and *doorstep* by New Zealand and Australian respondents, respectively, symbolized closeness and a tight relationship with the Antarctic through its ocean, drawing parallels to the discussion of asserting environmental authority or control over nature from past imperialist ideals (Howkins, 2010).

An unforeseen element connected all participants with the South. I observed how comparison with atmospheric elements, such as the weather, represented a link with Antarctica. Respondents often referred to the local weather at the gateway and compared it to weather conditions experienced or imagined in Antarctica. Weather was seen as shared with Antarctica, as if the thousands of kilometres' distance between the gateway and the polar coast did not exist. For instance, weather delays affecting Antarctic travel were assessed looking at the weather at the gateway. Hobartians' chilly mornings and a snow-capped kunanyi/Mount Wellington meant Antarctica's weather was present in the town. Christchurch respondents referred to "the southerlies" as an indication of a lack of boundaries with Antarctica. In Punta Arenas, resisting the local harsh weather meant the person was apt to survive in Antarctica. Similarly, participants from Ushuaia revealed the weather in Antarctica was as expected, ". . . just like here [Ushuaia] in winter . . ." (AR05), which explicitly reminded them of the advantageous geographic distance between their town and the Antarctic. I noted too that the weather forecast for Antarctica and the sub-Antarctic islands is often reported in the media and television news at the gateways. I interpret these perceptions and comparisons of local weather with Antarctica as another representation of geographic closeness for sovereignty performances in Antarctica.

In contrast, Capetonians perceived Antarctica's weather as paradoxical. It was unlike anything they had lived through or imagined, gradually changing from the familiar to the unknown as latitude increased. These perceptions are particularly interesting if one considers South Africa's initial involvement in Southern Ocean and Antarctica matters, providing weather forecasting for agricultural purposes at the Cape, and a history of sealing and whaling in the South (van der Watt & Swart, 2015). The perceived disconnection between Antarctica's weather conditions and Cape Town (and the Western Cape) aligns with Lavery's proposal for decolonising knowledge and representations of the interrelations between Antarctica and Africa (2019).

The manifold representations of Antarctica expressed above have established that the polar region does generate a strong connection with people who live at the gateway cities. Individuals' representations of Antarctica are varied and show different levels of engagement with the Far South: from deep, emotional, and meaningful memories of personal experiences in Antarctica, to rational and informed understandings of the southern polar region and its importance within global systems. The meaning of Antarctica acquires diverse levels of complexity for some individuals who feel a profound sense of belonging to the place.

7.3.2 The role of the gateway city in fostering an identity with Antarctica

To understand the relationships forged at the gateway cities with Antarctica, I took into consideration two main characteristics that emerged from respondents' views: (a) how they see their city as a gateway and how they interpret this role, and (b) what are the perceived benefits and, or, disadvantages for the city in its association with Antarctica. The interdependence between the categories of gateway role and global connections is discussed in core concept two.

Introducing the focus of my study attracted much attention from the participants. Is there an Antarctic identity? If so, can it be found at the gateway cities? Only a few enthusiasts believed their city had a stronger connection to Antarctica than other gateways, but none of these could substantiate their statements with facts. Rather than realities, the statements were expressions of yearnings and personal passions for Antarctica.

The cities' Antarctic connections are well known to participants with Antarctic experience. When remarking on the qualities of their gateway, participants' views seemed rather parochial, but these highlighted how much Antarctica matters to these cities. Gateways require the polar connection as a distinctive character to brand themselves as a success story beyond their condition as frontier southern towns (with the exception of Cape Town). As Leane (2016) and Nielsen et al. (2019) remark, Tasmania (and Hobart's) position is reframed when contextualized with Antarctica, going from being on the southern periphery to Australia's mainland, to being the gate to the country's polar ambitions.

Competing interests and comparison between gateways sparked animated conversations, too. There was a clear bilateral antagonism between gateways close together: Christchurch-Hobart, Punta Arenas-Ushuaia. In respondents' views, the political and economic interests that are attached to the role of the gateways seem to be perpetuated as competition between cities. According to Hall (2000), all gateways have engaged different strategies and policies to attract the science support operations and the tourist industries to their shores; considering the seasonal nature of these activities, competition seems inevitable for these five cities. Place competition, geographic and cultural positionality, and entrenched geopolitical rivalries are difficult to set aside at the gateways (Hall, 2015). Yet, with the intentions of sharing best practices in Antarctic operations and move away from rivalries, Christchurch invited its fellow gateways to sign a non-binding Statement of Interest (Christchurch City Council, 2009). This symbolic document was a first-step to gateways' cooperation, and, although it was signed by all five cities, no joint activities resulted from it. Concerning participants' perceptions of other gateways, I sensed a hint of condescension when respondents from Oceania referred to their South American counterparts, at times confusing the cities as one town and remarking that

they were about “only going to the Peninsula” as if it was not part of Antarctica. Are the global climatic changes so significantly affecting the Antarctic Peninsula sufficient to warrant excluding this area from *real* Antarctica? Or are these comments humorous banter from a mostly Anglo-based reference to the Antarctic Peninsula as the ‘Banana Belt’⁷⁵ of Antarctica? One final note on participants’ perceptions of other cities was their surprise to learn that Cape Town integrated the cluster of gateways, and how much Antarctic activity happened from the African continent.

State responsibility was a recurrent theme when participants referred to what had worked well (and what did not so much) at the gateway. According to participants, the Antarctic gateway role required sustained political will, coordinated planning, and federal government commitment to invest time and resources. The Antarctic gateway character had to be among the priorities of the local city council, otherwise attention to the development of the Antarctic connection waned. To avoid impasses in the growth of the gateway, respondents identified as critical the adoption of a long-term strategy; without it, plans halted under unexpected circumstances or changes in the government. The importance of policy supporting the development of the gateway and bridging together political and scientific endeavour for the country (and Cape Town) are the basis of the arguments of Boekstein’s (2014) and Ansoorge et al. (2017). By coordinating efforts from private and public stakeholders, there is much to be gained by hosting an Antarctic gateway.

For South American respondents, the political position of their city as head of their respective Antarctic regions meant that Punta Arenas and Ushuaia did not compete with others within their country for the title of *Antarctic gateway*. National and regional policies granted these cities the official role of gateway and manager of Antarctica (Wehrmann, 2019). Yet, their southern location isolates them from the political centres of their countries, rendering them almost imperceptible to the nation’s decision-makers (Guyot, 2013). Consequently, these geopolitical titles did not generate in Ushuaia’s residents a strong place attachment with Antarctica. Participants acknowledged the role their city had as sovereignty custodians of the Antarctic and adjacent oceans; yet, the city’s rootlessness was a big gap to overcome in creating strong bonds with the South. Despite decades of official education programmes with nationalistic overtones supporting Argentina’s Antarctic claim (Benwell, 2014, 2017), it appears that sovereignty performance (Dodds, 2016) at some gateways might not be as effective as anticipated for place-making.

⁷⁵ Banana belt is “a place in Antarctica reputedly less cold than other parts, especially the west or northwest of the Antarctic Peninsula” (Hince & Museum, 2000)

Policy and sovereignty were not the only aspects of the gateways that mattered to participants; the Antarctic connection was seen as a promoter of economic development for the region. It seems the gateways seek to attract more Antarctic dollars, and tourism was an industry considered by all. Many scholars (Bertram et al., 2007; Boekstein, 2014; Daverio et al., 2008; Hall, 2000; Muir et al., 2007) have explored the Antarctic tourism industry as a regenerator of the economy of the gateways, and what infrastructure, policy and services are required to be an attractive tourism host. Other scholars propose that hosting Antarctic tourism from the gateways are blatant expressions of nationalism over the claimed polar region (Dodds, 2016; Elzinga, 2013). Yet, the benefits associated to the tourism industry are not perceived equally by the population of the gateways, as Herbert (2014) discussed in her research, nor seem to impact on people's connections with Antarctica. Ushuaia participants recognized that the city's social fabric and the relatively recent migrant-settler condition were impediments to imagining an identity with Antarctica. The local community's rootedness was a process in evolution, which required a generational change for a connection with the southern polar region that was beyond its geopolitical importance (Hermida et al., 2016). In the meantime, in *Fueguinos'* views, Antarctica would continue to be a military post or a playground for rich tourists.

I anticipated that participants would identify transport and logistics as the main role for an Antarctic gateway. Services and facilities that support access to Antarctica from the gateways were deep-rooted in the minds of respondents: participants listed seaports and airports in order of importance according to which was the dominant Antarctic travel mode from their city. Operational transport infrastructure, networks, Antarctic science and knowledge, skilled workforce, and appropriate policy meant the gateway could host international partners too. Hosting international polar agencies was thought to validate the city's gateway role; it brought prestige and ambassadorship opportunities to the local government. For instance, Wehrmann (2019) observed that Chile's polar strategic plan aimed to attract foreign Antarctic partners to further its own scientific Antarctic knowledge and to raise its international profile as a South American polar leader.

The above-described attributes of a gateway match with Christchurch's Antarctic Strategy in what it is considered "[the] foundations for an exemplar gateway city" (ChristchurchNZ, 2018a, p. 11). There is no criteria offered to inform what an *exemplar gateway* is but over time, concepts such as this percolate into the community, especially when the local authority promotes the competitive attributes of their Antarctic gateway. For instance, the media reported the Christchurch Mayor's welcoming speech to the 60th anniversary of Scott Base celebrations, in which attendees were reminded of the exemplar condition of the gateway (Dalziel, 2017; Truebridge & Mitchell, 2017).

There was a general understanding for the need for consistency in the framing of Antarctica and the city's polar connections for growing public awareness. Participants called for a storyline, a theme that encompassed the Antarctic gateway's merits. Polar legacy connections, education programmes, and public outreach activities were considered essential local government undertakings for supporting the construction of a community identity with Antarctica. Among the city's Antarctic narratives, polar heritage was a recurrent theme. Cities from Commonwealth countries preferred to highlight the past expeditions of Antarctica's Heroic Era with statues and memorials in public spaces. These findings are consistent with the narratives of representations of Tasmania by means of the expeditions of bygone eras (Leane, 2016), and the reproduction of nationalistic endeavours through museum and public exhibits at the gateways (Leane et al., 2016). However, these alone were not enough to inspire the communities to connect with Antarctica. The official speechmaking over these polar legacies was clichéd, repetitive, and not attractive to the public. Moreover, participants at these gateways recognized that the same Antarctic aficionados attended most public outreach events; the challenge was to reach further into the communities to those unfamiliar with the Antarctic.

Participants who did not know about their city's Antarctic gateway role were amused at the idea of linking their urban setting with Antarctica, while others felt let down by their community for not creating better opportunities for all to have an understanding of the region's relationship with the South. These respondents considered themselves locals, well-educated, and mindful of the current affairs happening in their town. Hence, their disappointment at not knowing their city's Antarctic gateway character was summed up as a government's flaw. They argued that people who have a connection with Antarctica are those in the community not disadvantaged by social inequalities, marked by community access to education and economic opportunities. The government was responsible for public misinformation about Antarctica in their cities. Without an official policy that incorporated Antarctica into the school curricula and sustained programming of public events, the Antarctic connection will remain known only by the elite. The sentiment of community disengagement with Antarctica is not new nor exclusive to the gateways. Since the 1990s, the ATS and associated polar agencies have created Antarctic education and outreach programmes and activities for the general public, but development and consistency of these programmes has been slow and patchy (Xavier, Mateev, Capper, Wilmotte, & Walton, 2019). Efforts such as the 2007-2009 IPY education and outreach programmes have produced large numbers of outcomes, but these are limited to a specific and sporadic event, and often do not have participation of indigenous knowledge and non-English speaking collaborators (Salmon & Priestley, 2019). Online resources, media and Artists in Antarctica programmes contribute to engaging different sectors of the public with

Antarctica, yet scholars warn us that the discussion on education is still low in the priorities of Antarctic states (Xavier et al., 2019).

Participants shared sentiments of elitism concerning access to Antarctica, or Antarctic education. Many found themselves fulfilling a childhood dream to visit Antarctica, or a serendipitous opportunity to work there. Participants who pursued an Antarctic-related career were mindful that there was no clear path to follow for the uninformed. Moreover, projects such as the Antarctic centre in Punta Arenas were perceived as fundamental to raising the Antarctic profile of the city, but concerns were raised on whether the local community will have trouble-free access to such a facility, or whether it was a development for a high-end tourism industry. Similarly, Christchurch's IAC was identified as a unique resource for community identity with Antarctica, but its expensive nature and fun-based programmes were counter-productive for the purposes of education on New Zealand's Antarctic matters.

In summary, the cities' gateway function is understood from the support offered to the transport and transfer of goods, people, and services to Antarctica. The Antarctic gateway status seems more valued by members of their Antarctic-connected communities than by the local governments. The lack of policies and plans for the growth of the gateway role, combined with poor or non-existent education programmes and outreach activities to reach all levels of the societies, generates frustrations and mistrust of the states' commitments to the gateway role. Therefore, competition and comparison between cities continues to be the only engagement the municipal governments of these cities have in their role of gateways to Antarctica.

7.4 Concluding words

This chapter presents the content-rich findings from the 36 interviews conducted at the five Antarctic gateways. These results are represented in 17 focus codes and five core categories. Central to this research are the process of Antarctic identity building and the role of the gateways in facilitating this personal and community bonding with the South. These themes are explored through the concepts of place attachment, community making, cultural representations and values ascribed to Antarctica, political and imagined territories, and the meaning of Antarctic gateway.

Drawing on the results of the interviews, one can conclude that Antarctica does generate a special connection with the people from the gateway cities. However, it should be noted that all research participants live at an Antarctic gateway. Therefore, the question to ask is whether living at the gateway is critical for the construction of a distinctive connection with Antarctica. Furthermore, returning to the question *how does the Antarctic connection influence the*

gateways communities to construct an identity with Antarctica? I can infer from participants' responses that Antarctica does not occupy a prominent place in everyday life of the gateway communities. Participants do not perceive that the gateway character of their hometowns is a strong stimulus for people to construct an identity with Antarctica. The cities seem to embrace their Antarctic connections in a haphazard way, lacking of an engaging narrative that connects all members of the community with Antarctica. Moreover, this research identified that socio-economic inequalities and tone-deaf politics hinder residents of the cities from connecting with Antarctica. Antarctica seems reserved for privileged groups within the societies who have access to education and opportunities to engage further in Antarctic matters.

Therefore, the construction of an Antarctic identity is an individual's personal and cognitive choice that can develop, but it is not nurtured, by the Antarctic gateway status of their place of residence.

Revisiting the theme of identity building, I explored and contrasted the concept place attachment with the findings. Place attachment has a role in promoting and maintaining self-esteem of an individual or a group that feels emotionally connected to a place (Altman & Low, 1992; Stedman, 2016). One does not have to travel to Antarctica to have an affinity with it, but the bond seems stronger for those who have witnessed the Antarctic. Participants' positive emotional responses to Antarctica reinforce the relationship between people and place (Hashemnezhad et al., 2012), where Antarctica acquires cultural and symbolic meanings that underpins the self's identity (Stedman, 2016). Memories of Antarctica can be powerful; interactions (real or imagined) with the natural environment shape the way in which people define themselves. Also, societal expectations, cultural background, and political influencing can motivate place attachment. For instance, cultural productions and the media are populated with images of the Antarctic wilderness that perpetuate sentiments of purity in a fragile continent (Nielsen, 2020). Likewise, political influencing is considered in identity building with Antarctica, seeing that national and regional governments' discourses emphasize the special character of the gateways' identity and its connections to Antarctica (Benwell, 2017; Dodds, 2016; Wehrmann, 2019).

Also, I took into consideration the aesthetic and wilderness values that participants ascribed to Antarctica, inspired by its physical characteristics and spiritual appeal. Combined with the image of fragility, these values motivate a desire to protect Antarctica under the proposition of conservation. However, the conservation of Antarctica comes at the price of a bigger human footprint on the continent. Participants asserted that the conservation of Antarctica is achieved through the scientific and monitoring efforts conducted by their respective countries in the Antarctic. In their views, people are needed *in situ* to effectively protect Antarctica, even if human intervention contradicts the principle for wilderness. Neufeld and colleagues remind us

that the values that people attribute to Antarctica are rooted in their experiences elsewhere; these are part of people's cultural background and worldviews, shaped by the different interpretations of wilderness and use of resources (2013). In addition, the scarcity of definitions and guidelines from Antarctica's governing body regarding the meaning of Antarctic values and wilderness creates further ambiguity for interpretations and applications of environmental protection measures, say Summerson and Tin (2018). The alleged vagueness of concepts gives room for politically motivated discourses encouraging national scientific leadership and stewardship for the conservation of the frozen continent (Elzinga, 2017). Do these political discourses affect people's motivations for the conservation of Antarctica? According to the findings of this research, they do. These political messages have a significant influence when people create a bond with Antarctica and feel part of the national conservation effort. Antarctic science is celebrated as a matter of national pride, perpetuating representations of territorial rights in Antarctica (Dodds, 2016; Hemmings, 2017). Less conspicuous nationalistic symbols, such as the presence (or absence) of the country's icebreaker, reinforce the understanding of control, or intensify anxieties from missing out on a position of Antarctic leadership for one's country.

Antarctica's wilderness was appreciated through a cultural context too. Antarctica's inhospitable environment enhanced traditional and enduring associations with topics of heroism and adventure for Australians and New Zealanders. Polar heritage was a strong suit to relive the successes of heroes from past eras. For South African participants, polar legacies represented conflicting views. On one hand, responses acknowledged that the country's history in Antarctica was eminently representing white supremacists and ignored the contributions of the segregated groups, but concealing these stories was a detriment to the country's important heritage. On the other hand, South Africa's polar memories are currently being carefully curated, and are reproduced through the stories of black and coloured workers who contributed to the Republic's annexation of the sub-Antarctic Islands (Lavery, 2019).

Community making constitutes another nexus with Antarctica that shapes the person's identity. The representation of Antarctica as an imagined homeland incorporates culture and community-making in a non-human environment that goes beyond the traditional nationalistic views over territoriality. For instance, Chile's human settlement in Antarctica naturalizes the presence of children (and families) in the southern corners of the imagined country. Additionally, Argentina's military community in Antarctica represents a border town protecting the country's claimed southern margins. Settlements' buildings, everyday routines, and traditions embody South American polar geopolitics (O'Reilly & Salazar, 2017). Science can also be a conduit for bringing people together to form a community in Antarctica. Frederick and Rock (2018) found that New Zealand scientists develop a sense of community in

Antarctica as they interact with like-minded people in a space that paradoxically feels like home but it is not meant for humans. A professional identity is cultivated through camaraderie and unexpected collaborations in a socially intense place (Frederick & Rock, 2018). Research stations are not the only community-making opportunities. People develop common cultural traditions and a language that identify the group beyond the spatial setting. Defining themselves as *Antarcticans*, people share meanings from *The Ice* with fellow *Antárticos*, even if they never meet in person. Antarcticans share a profound sense of belonging with Antarctica, as well as common practices and symbols (Meduna, 2012; Verbitsky, 2015a). Additionally, some respondents considered the Antarctic community to have egalitarian principles, and others highlighted gender-stereotyping issues to be present and assumed normal. Finally, the sense of belonging with Antarctica is not exclusive to those who have lived and worked in the polar region; Ushuaia participants involved in the Antarctic tourism industry claim their place in the Antarctic community too.

Community making and the politics of Antarctic conservation further strengthens the perceptions of legitimate Antarctic territorial sovereignty. Participant responses from Antarctic claimant countries indicated that polar geopolitical identities are present in views relating to protection and land ownership. Participants' Antarctic connections are influenced, nurtured, and strengthened by nationalistic rhetoric: maps, flags, weather forecasts, bases, icebreakers, aeroplanes, scientists, and the military become important symbols for the perceptions of the country's polar authority in Antarctica. Subtle understandings of Antarctica as New Zealand's "backyard", or Tasmania's harmonious responsibility for the Southern Ocean and beyond reinforce the representations of territoriality in the Antarctic. Likewise, land ownership enforced South African participants' care for the sub-Antarctic islands. Emotional and historic connections with South Africa's sub-Antarctic islands outshone similar feelings for remote, removed, and unclaimed Antarctica. The Prince Edward Islands represent South Africa's Antarctica. Moreover, geographic comparisons between the gateways and Antarctica's natural environments provided further links with the South that assisted with nationalistic representations of environmental control (Howkins, 2010). For instance, seemingly short distances, calculated in kilometres or hours, joined the gateways with Antarctica; maps showed continuity of regions; the ocean provided a conduit; mountains emerged and were submerged to rise again, representing a same geologic origin and continuity. All these embodied a limitless area connecting the cities and the Antarctic.

Intriguingly, all participants (except those from Cape Town), found an interconnection of the weather conditions between the gateways and Antarctica. At times, there seemed to be no boundary line between the southern latitudes and the polar continent. In addition, the harsh weather at the gateways provided a high-standard training in human resilience that aided

Antarctic living. In contrast, weather was a boundary and an obstacle for Capetonians to imagining a connection with Antarctica, despite their long history with oceanography and weather forecasting in the Southern Ocean (Lavery, 2019). Colonialist views continue to be contested and resisted in the Rainbow Nation.

Focusing on what is the role of an Antarctic gateway, participants' views aligned to Halls (2015) definition of transport hubs rather than proper gateways. Providing transport and support services for travel to Antarctica was interpreted as the main function for the gateways. Yet, these services are seen as a national exercise carried out by the city: it is the federal government's responsibility to provide for the development of infrastructure and investment to support Antarctic operations, including providing the adequate policy to maintain these activities long-term, notwithstanding political changes in the country's administration. Participants spoke of "political will" and "commitment" from the federal government to nurture and expand the gateway city function. Responses revealed that Antarctica must appeal to local politicians in a personal level before these adopt and support policy and public funds to progress the gateway status of the city.

Also, the gateway function was perceived as a revenue generator for the city. Hosting international partnerships enhanced a regional knowledge economy and presented wider business opportunities for the gateway. Similarly, hosting Antarctic tourism operations was perceived as an economic opportunity and a chance to raise the city's profile in the international arena.

Moreover, the Antarctic connection offers a point of distinction nationally and internationally to these relatively small cities (with the exception of Cape Town). In this regard, the South American gateways understand their geopolitical mandate as heads of the Antarctic claimed territory. Although the sovereignty watchdog role does not imply the community perceives an immediate connection with Antarctica, these cities have no competitor at home. However, the South American gateways' geographic proximity and geopolitical history perpetuates their rivalry in the region. Punta Arenas and Ushuaia are locked in a strategic contest for more polar business (Elzinga, 2013; Guyot, 2013). Still, comparing and contrasting gateways against each other is not exclusive to South America; subtle comments on how *other* cities fair revealed that Hobart is considered the most developed Antarctic gateway.

Finally, the findings of this chapter demonstrate that Antarctic sovereignty matters when individuals create linkages with the Far South. Polar and sub-polar identities become stronger when there is a belief in land rights in Antarctica. Although Antarctica inspires long-lasting connections with those who have seen the place, it is far from stimulating a distinctive polar identity at the gateway cities. The Antarctic connection at the gateways seems driven and

reserved for only those who pursue politics, science, economic gains and nationalistic agendas. Therefore, Antarctica perceived as a distant and elitist space for the communities who live in its periphery.

Next, is the final chapter of this research thesis that brings together the salient learnings from this work along with recommendations for future research.

8 Conclusions

This research set out to investigate the connections that Antarctica generates in the gateway cities' communities, and to understand whether the strength of the engagement with the Far South results in the construction of a unique identity with Antarctica. Critical to this research was to establish the foundations of the Antarctic connections at each gateway, and to understand how their countries' polar politics may influence their citizens to construct linkages with Antarctica. The thesis aims to fill a gap in the existing literature of Antarctic gateway cities and their multi-layered interactions with Antarctica. Also, it seeks to contribute to the scholarly work on nationalism, and the understanding of human engagements with Antarctica.

The research adopted a qualitative research methodology and followed the principles of Constructivist Grounded Theory; the method's inductive, iterative, and constructivist approach suited my ontological and epistemological views. Semi-structured interviews provided for personal insight into the views, emotions, and behaviours that participants expressed about their associations with Antarctica.

The research findings indicate that Antarctica is a powerful place that inspires people to generate long-lasting connections. The bond with Antarctica is professed to be very strong for some, influencing their personal and social identities. Antarctica is a central place in people's understanding of who they are and the social groups they are part of, that creates a sense of belonging to a community. Supporting the sense of belonging are the aesthetics and wilderness values that people ascribe to Antarctica, which respond to cultural backgrounds and societal expectations over a place often construed as unique, untouched, and exceptional. Also, Antarctica compels advocacy for its conservation; a sense of responsibility and fulfilment develops when individuals think about Antarctica's protection. However, interpretations of Antarctica's conservation are entangled in science and national polar interests. Findings in this thesis demonstrate that the values individuals ascribe to Antarctica and the sense of responsibility for its protection reflect nationalistic discourses on Antarctic matters.

This research revealed the many and varied connections that the gateway cities maintain with Antarctica. The cities' communities recognize many of these connections, while various others are ignored, contested or resisted. Geopolitical influences, economy, cultural representations of Antarctica, and socio-economic inequalities affect how people perceive the Antarctic region from the gateways. This research did not find the existence of a unique Antarctic identity in the communities living at the gateways. Yet, an Antarctic identity seems to be present in individuals that live at the gateways, though one's place of residence does not seem to have a strong impact on this personal and social construction with Antarctica.

In the following sections, I return to the topics of Antarctic identity, geopolitics and gateways to integrate the learnings from this work. Also, I discuss the limitations of this study and opportunities for future research. I conclude the chapter by considering the contributions this thesis has made to the field of Antarctic studies.

8.1 Antarctic identity: a misplaced concept?

During the course of this research, many people have asked: *is there an Antarctic identity?*, while reminding me that Antarctica had no indigenous peoples; hence, who could legitimately claim to have an identity influenced by an unoccupied land?

These questions have accompanied me during this research. Identity is a modern and complicated concept that has been argued extensively in scholarly literature (Appiah, 2005; Hogg, 2005; Izenberg, 2016), also used in ordinary language to describe characteristics for self-identification and to identify others in a social context. Individuals seem to recognize that they have an identity, though it is unclear how it is constructed, unless there is a conflict with it (e.g. gender, politics, and ethnicity). An individual forms a personal identity through the collection of narratives about how they see themselves and the relationships with others, with places, memories and culture, finding out about themselves and making sense of the world (Lawler, 2008). As a social and personal construct, identity is a dynamic, changing and interactive process in the individual's search for uniqueness and belonging; the social environment shapes who they are, the place they inhabit in society and the membership to groups (Appiah, 2005; Lawler, 2008).

The construction of identity does not happen in a vacuum, it is influenced by the social world. At the gateways, the Antarctic connections allow people who profess to have a strong bond with Antarctica to perform self-verification of their identity with the Far South. The individual seeks to find meanings and cultural reproductions that will reaffirm the Antarctic bond. For instance, living at an Antarctic gateway reinforces the connectedness with the South (Leane, 2016; Nielsen et al., 2019). Yet, labelling the city a 'gateway' does not influence a relationship with Antarctica to all community members, as Herbert argues (2014). The socio-economic realities of Ushuaia (e.g. economic instability, rootlessness, etc.) inflict disconnections with an imagined homeland beyond the power of national geopolitics.

Discussing the concept of identity with Antarctica seems an oxymoron, considering the absence of indigenous groups, but it has not stopped people from imagining and connecting with the place. In fact, it has been interpreted as a blank canvas to introduce social and cultural representations of the place to the extent of perpetuating principles that may conform with

practices of the past (Glasberg, 2012). As Liu warns us, often, social representations are recognized as truth when dominant groups in society accept them, but this consensus may not necessarily represent all communities views (2012). For instance, the history of Antarctica has been narrated from an imperialist and colonialist perspective mainly, where discovery, exploration, occupation, commerce, and later science and conservation have justified human presence in the southern continent (Dodds & Collis, 2017). The history of the *white* space and its equally white occupants (Mancilla, 2019) leaves out the presence of other actors and their narratives, such as indigenous and non-white explorers (Maddison, 2020; Van der Watt & Swart, 2016). The absence of these outcasts from social representations generate conflict for the unrepresented groups of society, affecting their connections with the southern neighbour continent, as the findings of this research have shown in Chapter 7.

However, prevailing and popular representations of Antarctica's intrinsic values, purity and fragility strengthen the bonds people construct with the polar region. Antarctica appeals emotionally and intellectually, as a wilderness and a world science laboratory (Tin et al., 2019). The wilderness of Antarctica is awe inspiring and invites connectedness, but it is also a waning resource that requires attention and protection (Tin, Summerson, & Yang, 2016). As the findings of this research highlight, the protection of Antarctica's wilderness comes with attachments of the geopolitical order; national scientific endeavours are needed for the conservation of the polar region in spite of the human footprint generated.

As a place, Antarctica generates opportunities for community-making, as scholars argue (Verbitsky, 2015a). The influence of place cannot be underestimated in identity construction, as the physical, social and professional interactions in Antarctica (during and after the individual's visit to Antarctica) allows the person to inhabit the polar place, even if it is for a short period of time, shaping their identity and the sense of belonging (Frederick & Rock, 2018; O'Reilly & Salazar, 2017).

In addition to individual identity, Antarctica also elicits a social or group identity. To study the social identity of research participants in connection with Antarctica, I followed the tenets of Social Identity Theory (SIT), a popular theory for scholarship in social categories and intergroup behaviour. SIT is known for the study of extreme cases of intergroup conflict, which may result in favouritism, prejudice, discrimination, and fanatical nationalism, but it also provides the tools to understanding the cognitive processes behind people's choices for group classifications and membership. Group membership enhances the person's self-esteem and pride, and creates a sense of belonging with like-minded people known as in-group (Tajfel & Turner, 1986).

SIT identifies three cognitive processes for the evaluation of in-group behaviour, which I applied to the core findings of this research. Below, I use examples of the data collected from participants to represent the SIT processes:

- (a) social categorization⁷⁶: participants who had the opportunity to visit Antarctica expressed a strong connection with Antarctica, a place identified as special, unique, and at times, *homelike*. Although respondents did not know (or met) each other as result of this research, the cognitive process of identification with the place (Antarctica) was the unifying element for this group. There were similarities in the cultural narratives used to identify Antarctica as the central place of their social identity.
- (b) social identification⁷⁷: participants identified themselves as Antarciticans, developing an emotional response to the perceived social status in connection with the place they care about. People know they are not alone in this group; the self-identification with like-minded people develops a sense of loyalty and belonging a singular social world. The cognitive decision made being an Antarcitican maintains and achieves a positive response
- (c) social comparison⁷⁸: members of the group differentiated themselves (in-group) from others that did not have their same experience in Antarctica. For instance, people who worked and lived in Antarctica for long periods⁷⁹, identified theirs as a more authentic experience than those who travel as a tourist or work in the tourism industry. Moreover, having experience in the Antarctic deep field (referring to time away from the base, e.g. camping), added another layer of credibility to the personal bond with Antarctica. Likewise, group members assumed that the lack of Antarctic travel implied other people had little, or no, bond with the place.

The social categories that people place themselves in are constructed by societal and cultural practices, and exist only in relation to other contrasting categories (Hogg et al., 2017). In choosing a group, a person places themselves in the most appealing group. Antarctica is a distinctive place to centre a group's social identity. At the gateways, Antarciticans can perpetuate the sense of belonging to the group during Antarctic-related public events, such as lectures, festivals, visiting a museum, etc., reaffirming the self and the group's uniqueness and wellbeing. In addition, people who frequently work in Antarctica also have the same sense of belonging to a culture that develops in the inhospitable continent, allowing them to maintain

⁷⁶ occurs when a person selects the group(s) to belong to, and finds compatibility within the members (Hogg & Abrams, 1988).

⁷⁷ occurs when a person adopts and conforms to the identity of the group (ibid.).

⁷⁸ occurs when a person compares negatively (or differently) other groups to enhance the in-group (ibid.)

⁷⁹ more than a weeklong stay; brief visits are usually reserved for government high-officials and media (Harrowfield, 2017).

their individual identity (e.g. scientist) in a collaborative and social community of like-minded people (Frederick & Rock, 2018).

The central hypothesis of SIT is based on the premises of in-group discrimination and stereotyping towards the out-group to enhance and maintain their own self-stem (Tajfel & Turner, 1986). However, in this study, Antarcicans did not show a hostile competition towards the others, but responses revealed subtle forms of stereotype content for intergroup differentiation. For instance, a personal connection with Antarctica did not seem sufficient to call yourself an Antarcican, but the role performed there, the amount of time spent and where you were located during your Antarctic experience did matter. Antarctic tourists fit the stereotype of an Antarcicans' out-group since their means and motivations to visit the place did not conform to the norms for an Antarcicans' in-group. This reflection aligns with the work of Stewart and colleagues at New Zealand's Antarctic base during tourists visits (2006). The Antarcicans working at base (hosts) had different levels of tolerance for the visitors, some being wary of tourism' disturbance and negative impacts while others questioned their own presence in the continent (Stewart et al., 2006).

Undoubtedly, the many and complex layers of identity with Antarctica requires further analysis. Compared to the scholarly work on identities in remote spaces and in the Arctic, this topic of study in the Far South is in its infancy. The Antarctic gateway communities offer a myriad of opportunities for future research that social scientists should not dismiss because these cities fall outside the awkward boundaries placed around Antarctica.

8.2 Antarctic gateways for show?

The study of the Antarctic gateways would not be complete without an examination of the geopolitical influences that support the role of these cities in relation to Antarctica. The gateways have enjoyed decades⁸⁰ of publicity for being in a cluster of 'only five Antarctic cities in the world', but as this research has shown, geopolitical interests and serendipity rather than strategy gave them entry to this selected group.

Four out of the five gateways are regional cities within Antarctic claimant countries. What does it mean for them to be a gateway to Antarctica? Due largely to coincidence of geography and politics, these cities get national and international recognition of hosting associated polar agencies, as well as the economic benefits from the business generated by movement to and

⁸⁰ some might argue that it has been over a century.

from Antarctica. None of these cities was built for the Antarctic role but was given the honours because they had sufficient facilities in place and served geopolitical purposes, such as connecting Antarctica (and the claimed territories) with the collective imaginary in the homeland. The two South American gateways in their usual “hawkish [ways] in the defence of their Antarctic territories” (Dodds, 1997, p. xii), placed their cities as administrative centres of their respective southern and polar regions, bestowing to two isolated border towns an awkward and undeliverable political power, considering the management of Antarctica was not theirs to give away. Yet, by backing these geopolitical decisions with national policies, the entrenched nationalism in Argentina and Chile expanded the boundaries of their countries to encompass the totality of the territorial sovereignty reaching to the South Pole. In doing so, these countries changed the perception of territory for their nationals (and potential rival nations) (Howkins & Lorenzo, 2019), and opened the possibility of new settlers in the imagined homeland (Llanos, 2017). As shown in this research, expressions of nationalism and territorial sovereignty in these Latin American countries are abundant and popularized in the media and public education. But, as scholars argue, the nationalistic rhetoric does not impact equally in all members of society when thinking of Antarctica (Wainschenker & Leane, 2019). In contrast, the Oceania gateways adopted a less provocative and political approach, but nationalistic nonetheless. Political decisions were made to place all Australian Antarctic endeavours in Tasmania, reviving the significance of the Southern Ocean to the smallest (and financially needy) state. Polar legacy, geography and Antarctic ambitions have been at play in supporting Hobart’s gateway status (Leane, 2016; Leane et al., 2016). A similar, but less grand and at times, inconsistent approach was adopted by New Zealand when an Antarctic power wanted to take control over Christchurch’s transport capabilities. Instead of resisting the US expansion of Antarctic activities from the Southern Ocean Rim, New Zealand joined in, revitalizing the country’s interests in Antarctica, giving bucolic Christchurch a much-needed financial revenue and a renewed awareness of its closest southern neighbour.

Boundaries can take many forms and, as Nicklin (2019) argues the ATS’ avoidance discourse of boundaries in Antarctica does not mean these borders do not exist. In the Antarctic context, no line on a map has been officially recognized but boundaries have been placed for science (Elzinga, 2017), and for politics and biogeographical regions (Antonello, 2019; Nicklin, 2019). As Antonello argues, these demarcations are “fundamentally about human entanglements: with each other, with environments, and with the past, present and future” (2019, p. 2, Ch.5). According to the data analysed in this research, the physical boundaries surrounding Antarctica, such as the Southern Ocean and its cold winds, become conduits to link Antarctica with people living at the gateways, expanding the perceptions of connectedness, territory and political borders. Narratives of polar legacy and environmental responsibility with the Antarctic

region add layers to the sense of belonging and human entanglements with the alleged *terra nullius*.

The South African gateway presents a distinctive case from the others. The largest and oldest city from the cluster of gateways struggles to recognize its role within the Antarctic community. Historic race politics and internal power struggles in the Rainbow Nation leave Cape Town with little support to develop its Antarctic capabilities. Nevertheless, the Cape city serves as a major gateway although its communities have a passive voice regarding the connections with Antarctica. Why does Cape Town seemingly ignore Antarctica? Socio-economic inequalities and the complexities of nationalism seems to be the answers. For instance, most operations to Antarctica from Cape Town are managed by foreign stakeholders, from NAPs to high-end tourism, which perpetuates old practices of European hegemony that Africa knows too well. In addition, ownership of the land (or perception of owning it) seem to affect how strongly people bond with Antarctica. For South Africa, which is an original signatory country to the AT but not a claimant state, the absence of an Antarctic territorial claim diminishes popular and political interests in the South. I argue that sovereignty over the Prince Edward Islands substitutes South Africa's Antarctic ambitions; these sub-Antarctic islands are South Africa's Antarctica. Also, as shown by this research, maintaining colonial cultural narratives of Antarctica impacts negatively on people and their governments when finding their place and thinking of the polar south. Although some scholars have initiated a discussion on decolonizing and indigenizing the narratives of Antarctica (Dodds & Collis, 2017; Maddison, 2020; Van der Watt & Swart, 2016), the topic requires more attention from the social sciences to understand current polar imaginaries.

The future of the Antarctic gateways has not yet been fully explored. How do the gateways fare in a globalized world? How prepared are the cities for the imminent changes looming in the Anthropocene⁸¹? What geopolitical implications do these changes bring, and how will they impact the Antarctic gateways? Antarctic scholars are starting to ask these and other questions regarding Antarctica and its legal systems (Leane & McGee, 2020; Stephens, 2018), although the Antarctic gateways remain outside the scope.

The status quo of the Antarctic gateways may be challenged in the near future. The rapid warming of the Antarctic Peninsula will open up new deep field destinations for science that may challenge and fulfil geopolitical agendas to reach further south than before. Other cities may entertain the opportunity to develop Antarctic gateway status, and, as technology and satellite communications continue to improve, infrastructure for air and sea transport to, and

⁸¹ I adopt a broad understanding of Anthropocene: "indicate[s] the period in which human activity of various kinds has become a driving force of planetary environmental change" (Leane & McGee, 2020, p. 3)

within, Antarctica may develop new hubs in the continent. The dominant position of King George Island's aerodrome as the access point to the Peninsula may become a stepping point on the margins of Antarctica. Transport facilities at Antarctic stations, such as Rothera, McMurdo, Davis and Novolazarevskaya will have further demands to increase operations capacity and provide for more NAPs than their present operations (COMNAP, 2017). Currently, NAPs are undergoing reviews of their plans for modernization of the Antarctic facilities, aiming to be accessible year-round, as well as reaching other sustainability goals (COMNAP, 2020). What role will the Antarctic gateways play in the future? If discussions about operational needs continue to take place among the international Antarctic community but without input from the gateway cities as suggested further in this chapter (see Practical Recommendations' section), they will become redundant to the system and just another stopover point between the more developed regions and Antarctica.

As an observer of the Antarctic gateways for many years, I advocate for further academic enquiry about these cities and their place in the Antarctic community, beyond geography and polar territorial disputes.

8.3 Antarctica: cold, white and unattainable?

A significant finding from this thesis research is the understanding of Antarctica as an unattainable place for members of the communities at the gateways. Antarctica is seen as a region reserved only for the privileged. Not only the polar place is geographically distant from the urban realities of the people living at the gateways, but it becomes culturally inaccessible for those who have not travelled to Antarctica, or are outside higher education and academia. This is particularly worrisome considering that Antarctica, as a global commons, upholds the idea to be for the benefit of all and, hypothetically, accessible to all (Schrijver, 2016). The latter does not refer to physical entry to the place but access of knowledge about it. Furthermore, the ATS maintains the principles that peace and scientific collaboration in Antarctica are "in the interest of all mankind" (Conference on Antarctica, 1959). If *humankind* is the ultimate beneficiary of Antarctica's international peaceful status quo, in what ways does the ATS provide accessible information on Antarctica to the public? What is the responsibility of Antarctic states, to communicate and educate people on matters of Antarctica? Is Antarctica set aside only for the lucky ones? In this segment, I focus on two aspects that affect the perception of Antarctica as an unattainable place for the people at the gateways: education and tourism.

Educating the public on Antarctic matters is not a high priority for the ATS, even though the Environmental Protocol recognizes the value in cooperation and collaboration for promoting science, technology and educational programmes on Antarctica and its associated ecosystems (Secretariat of the Antarctic Treaty, 1991, article 5, 1.a.). There have been different initiatives, (e.g. workshops, expert groups meetings) and international efforts, but the progress so far has been slow and patchy (Xavier et al., 2019). During the last IPY (2007-09), polar education and outreach (PEO) was highlighted as a major achievement of this international scientific programme. Aided by digital communication and online technology, thousands of scientists, educators and the public engaged in educational and hands-on activities throughout the world to learn more about the Poles (Salmon & Priestley, 2019). The legacy of IPY in education and outreach efforts is best illustrated with the creation of initiatives such as Polar Educators International and the Association of Polar Early Career Scientists, volunteer organizations that help to bridge the gap between poor or non-existent government policies for PEO on the Polar Regions (Salmon & Priestley, 2019). Yet, experts in polar education identify there are concerns and voices missing in this seemingly successful topic. For instance, the majority of participants of PEO are from Anglophone and other European countries; there are no formal evaluations, reporting or incentives (such as funding) on the PEO activities undertaken by Antarctic researchers, hence scientists are driven to reward scientific endeavours rather than community-based projects (Salmon & Priestley, 2019; Salmon & Roop, 2019).

The above evaluation does not contemplate all education programmes that occur at Antarctic states, but it highlights problematic aspects of PEO that may influence the perception of feeling excluded from Antarctic knowledge, expressed by gateway communities in this research. Broadly speaking, the five gateway cities have formal and informal PEO⁸² activities, which have been identified in this work (see Chapter 6, cultural opportunities). However, the nationwide school education programmes at the South American gateway countries include the study of Antarctica with a rather strong nationalistic rhetoric (Benwell, 2017; Jaramillo, 2012; Salazar, 2013a). Are these nationalistic agendas imposed onto nationals through state-led education preventing the non-English speaking Antarctic states from integrating the global efforts on PEO? And how is the multiculturalism of South Africa and gateway communities' indigenous knowledge included in PEO's 'global' initiatives? Although Antarctica has no native

⁸² Education and outreach includes participation in a variety of public engagement activities, from school visits by an Antarctic scientist, public lectures, science festivals, workshops, art-science collaborations, teacher- researcher collaborations, etc. (Salmon & Roop, 2019) .

population, our understanding of the connections with the South from the indigenous communities' perspectives deserves greater scholarly consideration⁸³.

Concerning Antarctic policy and scientific knowledge, Dudeney and Walton (2012) argue that the claimant and semi-claimant countries lead the production of papers presented at ATCMs. Unsurprisingly, Antarctic knowledge production is dominated by researchers from leading academic countries (with greater resources than others). A bibliometric analysis of highly cited scholarly papers spanning over 50 years of Antarctic science literature indicates the US leads knowledge production, followed by European countries (e.g. UK, Germany and France), Oceania, Asia, and in decreasing proportion are Africa and South America (Fu & Ho, 2016). Many of these publications are multi-author papers, which may include authors from Antarctic gateway countries. However, if they were not the primary author, their contributions may not have been taken into consideration in the above study. As others have noticed, Antarctic knowledge production is an expensive and time-consuming affair and often a matter of national pride, influencing where and in what language scientific knowledge is shared (Elzinga, 2017). Also, the *lingua franca* for big science projects and the SCAR community's academic publication is English, which is another limitation in knowledge production and dissemination among non-English speakers. For instance, Latin American scholars are active in scholarly production but face funding constraints as well as linguistic, geopolitical and cultural hurdles in how they represent Antarctica. These are barriers that create inequalities, which the Anglophone polar academic community has yet to address (Howkins & Lorenzo, 2019).

Another aspect to consider is the impact of Antarctic tourism at the gateways. Does the tourism industry have a responsibility to bring Antarctica closer to the communities from where they launch their operations? Beyond commercial activities, how much do the Antarctic tour operators engage with the people at the gateways? Antarctic tourism facilitates the largest number of people traveling to Antarctica every summer, exceeding the number of NAPs staff since 1991 (Carey, in press). For instance, over seventy four thousand tourists visited Antarctica in 2019-20 season, and 99% of those travelled by ship (ibid.). The gateway communities are aware of this activity happening from their shores; governments and local media proudly promote being a tourism destination and an Antarctic gateway. Also, even if people are not informed through mainstream media, the presence of elegant cruise ships and their passengers are noticed in these port towns, particularly when these maritime terminals are located in central areas of the small-size cities.

⁸³ A recently launched research project led by Māori scholars is focusing on their cultural relationship with Antarctica (Māori and Antarctica, n.d.).

What are the impacts of Antarctic tourism in the local communities at the gateways? One of the obvious answer is the economic benefits associated with international tourism, seen as a generator of regional and national economies (Hall, 2000). However, some gateway communities feel there is an imbalance on the shares of these profits and the generation of jobs, believed to benefit mostly foreign companies who hire local services and some local workforce (Herbert, 2014). This perception is supported by the work of Vereda et al. (2016), who found that Antarctic tour operators employ a small number of tour guides from Ushuaia for polar voyages, particularly as replacements staff. In general, Antarctic tour operators favoured staffing guides from native English-speaking countries (similar to the origin of the passengers), while the hire of Ushuaia locals was serendipitous, through word of mouth and without training (Vereda et al., 2016). It demonstrates that Antarctic tour operators are not actively seeking to engage in the education and training of the local workforce at the gateways, only procuring staff as a last resort. Also, regarding the Antarctic tourism contribution to the gateways' economy, there are no detailed economic impact assessments available to date. However, analysing the business model of the Antarctic cruise ship industry, most passengers arrive to the gateway in organized groups (some even in charter flights) and spend a minimum amount of time in Ushuaia pre and post Antarctic cruise (Vereda, 2008). The time-efficiency of the Antarctic tourism operations leave the gateways out of the equation: tourists have little time for exploration and appreciation of the town and its people, or spending extra money other than the cost of the Antarctic voyage (Daverio et al., 2008; Zuev & Picard, 2015).

Antarctic tourism turnover is estimated in hundreds of millions of dollars per annum (Tin & Center for Environmental Philosophy, 2017). It is an expensive holiday for discerning and wealthy travellers (Carey, in press). As this research has shown, communities at the gateways understand this is high-end tourism, which is prohibitive for many. Moreover, strains between gateway residents and Antarctic tourism is intensified by marketing strategies, such as 'last chance tourism', which use as a selling point the opportunity to visit Antarctica before it disappears (Eijgelaar, Thaper, & Peeters, 2010). As the local residents cannot afford Antarctic travels, resentment grows towards the foreigners who can visit the southernmost extension of the *imagined homeland* before irreversible changes occur.

Finally, Antarctic tourism promotes the benefits of educational travel, endorsing the concept of ambassadorship among tourists visiting Antarctica, which results in the development of awareness and positive attitudes towards environmental issues (Alexander et al., 2019). Although there are opposing views among scholars on the tangible changes in lifestyle and approaches to environmental issues shown by Antarctic *ambassador* tourists, education programmes aboard polar cruise ships enhanced the ambassadorship concept and are valued by the passengers, becoming a motivation for some in choosing the right tour company

(Eijgelaar et al., 2010; Vila, Costa, Angulo-Preckler, Sarda, & Avila, 2016). Considering that Antarctic tour operators carry the resources needed for education programmes (e.g. educators and materials) aboard the tour vessels when they travel to and from a gateway city, there are missed opportunities for the industry to engage with these cities communities and contribute to the knowledge of Antarctica by all: visitors and those who live on the periphery of the Antarctic. Examples of these unexplored interactions include community-based environmental education projects, providing support for educational resources for local schools (e.g. polar books, maps, board games), creating scholarship funds, and motivating the community to improve their environmental practices, such as recycling and water resource management. These initiatives could be welcomed by gateways in developing countries. Moreover, environmental or scientific research groups run other initiatives supported by the polar tourism industry, so-called citizen science projects, where polar tourists assist with the collection of data during their voyages. Participation in citizen science projects is professed to enhance the experience of the traveller and contribute to a greater understanding of the destination, while assisting scientific research (Farmer, 2019). Could Antarctic tourism operators expand their commitment to polar education to also include the communities at the gateways, or is their interest in ambassadorship (and their business model) only limited to their on-board customers? Collaborating with educational initiatives at the gateways could help change the perception of elitism of the Antarctic tourism industry, which portrays Antarctica as a playground for the wealthy, without addressing other societal issues of lifestyle inequalities.

The impacts of Antarctic tourism at the gateways is a topic that deserves further scholarly attention, particularly compared with the abundance of papers published on Antarctic tourism. As Elzinga argues, the delimitations of Antarctica are ambiguous and fluctuate, entangled in politics and human constructions (2017). Although there are some exceptions (for instance, see (Hemmings, 2016), it seems that academia also draws a boundary and excludes the Southern Ocean Rim communities when thinking on Antarctica.

8.4 Limitations and future research opportunities

Doctoral research projects involve many years of examining and reflecting on the work undertaken, starting with the researcher's curiosity for a topic and subsequently finishing the work with a greater understanding of the complexities of the pursuit of scholarship. As this research grew, so did my interest in the gateways and in the intricacies of urban life on the fringes of Antarctica.

While this research set out to fill in the gap in knowledge of Antarctic identities at the gateway cities, in doing so it uncovered further gaps in research, which represent opportunities for future work. For example, a limitation of this work was excluding the perspectives of Antarctic tour operators based at the gateways. Although I did seek their contributions to my research, the tour operators responded amicably but with hesitation over maintaining confidentiality in our discussions on gateway cities. Their main concern was a loss of anonymity. As there are only a handful of Antarctic tour operators at a gateway, and in some cases only one company in town, the tour companies were reluctant to share sensitive information with me that could identify them and which in turn could create potential conflicts with local governments who also represent business partnerships to them. The potential tensions between private and public Antarctic stakeholders at the gateways has not been explored but it warrants further attention.

Another example for future research is to look at more-specific demographic variables among participants (e.g. gender, age, education, race, employment), to understand whether Antarctica generates strong connections with all communities at the gateways, transcending ethnicity and socio-economic barriers. In addition, engaging traditional knowledge from the indigenous communities at the gateways to understand their relationship with Antarctica has yet to be studied in depth.

To my knowledge, this thesis is the first to examine human connections with Antarctica from the perspectives of the five gateway cities. Employing CGT as the method for research places the researcher as an active agent in the process of generating knowledge, to construct an interpretative portrayal of the social problem studied. The inherent subjectivity of the interpretative rendering of participants' views may be seen as a limitation of this method, and therefore of this research. However, CGT's procedures are rigorous and systematic. The iterative and comparative actions involved in the analysis are non-linear, engaging the researcher in strategies to maintain a reflexive and neutral stance throughout the process. I encourage other researchers interested in exploring Antarctic identities and who have a constructivist worldview like me to adopt CGT approaches to research. An opportunity to expand this research is to apply a similar research framework to investigate to what extent does Antarctica generate a special connection in communities with Antarctic activities in a city not identified as one of the five gateways. Understanding the motivations, narratives, and imaginaries individuals construct with the Far South may assist decision-making into matters of environmental action and polar governance in the future.

8.5 Contributions of this thesis

This thesis addresses the multi-layered interactions at Antarctic gateways that influence human connections with Antarctica. The research deconstructs the prevailing assumptions that the communities at the gateways have a strong connection with Antarctica as result of their role in supporting access to the southern polar region. Instead, this thesis argues that while Antarctica does generate a special connection with some individuals, it does not reach all members of the gateway city equally. The polar connection is strongest in those who have had the opportunity to experience Antarctica. Visitors to the White Continent seem to have established a strong association with the South, which is facilitated, but not affected, by living in a city with Antarctic gateway status. The multi-layered connection is constructed and reconstructed by the individual, and inspired by his or her own associations with Antarctica. But, effectively, the connection is not fostered by the city. People who have forged a connection with Antarctica will have this bond regardless of where they live. However, living in a gateway (and through the city's associations with Antarctica), the individual reinforces the bond. For some people, the strength of the bond contributes to the construction of an identity as an *Antarctican*.

In addition, this thesis also contributes to the studies of nationalism in Antarctica, Antarctic values and imaginaries, and the place of Antarctica in transport geography, all of which are understudied fields deserving of further academic attention.

Finally, this thesis reveals that the common interpretation of the concept of gateway, in the Antarctic context, is based only on transportational facilities and services available at these cities. Hence, the gateways are measured against each other according to their infrastructure, services, logistic operations, and business partners (e.g. NAPs, tour operators). This leaves much outside the gateway concept, such as social interactions and the rich exchange of culture, knowledge, environmental matters happening on the periphery of Antarctica. Moreover, the views of the research participants indicated the current definition of *Antarctic gateway* does not fulfil their expectations, senses of responsibility, and ambitions placed in their cities and in those cities' associations with Antarctica. These participants represent the views of their communities, who see Antarctica restricted by political and economic structures in their cities. In times of increasing global political and environmental changes, and growing interest in human activities in Antarctica, it seems relevant to rethink the functions of the Antarctic gateway.

Consequently, this thesis proposes a different definition for the concept of Antarctic gateway, which goes beyond the transportational hub function. The Antarctic gateway is (re)defined here as the following:

A city located within close proximity to the Antarctic region, culturally connected with the South, host to a dynamic community where knowledge of Antarctic science, policy, management, technology, and logistics is manifested in everyday activities, and having the necessary transport network and infrastructure to offer comprehensive access to Antarctica, and, in return, to benefit from its polar linkages.

In this concept, I draw attention to the multifaceted relationship that the gateway establishes (or can establish) with Antarctica, incorporating the capabilities the city has on offer to local and international stakeholders, including the competencies of a community engaged with the Far South. The linkages that the city maintains with Antarctica seem to resurface repeatedly in political discourses and media reports, aiming to reinforce the cultural imaginaries of polar heritage and territorial ambitions. However, these discourses often disregard the significance of the intrinsic and extrinsic values that people assign to Antarctica. Local governments are yet to capitalize on the strength of the human connection by creating practical actions to foster advocacy for Antarctica that transcends economic, political, and nationalistic interests.

An Antarctica gateway should foster a “dynamic community” of engaged and visible groups that construct knowledge in different fields with interests in Antarctic matters, from policy-making to science and to cultural expressions. The engagement with Antarctica in the city is maintained over time through employment, education, economic investments, and entertainment, to give some examples. In exchange, the Antarctic gateway benefits from its polar linkages, generating economic advantages for the city, regional growth, cultural exchanges, collaborations in science, education and training, national political recognition, and exposure in international forums.

8.6 Practical recommendations for Antarctic gateway’s governments

This research demonstrated the weak connection between the communities at the gateways and Antarctica. The assumption that people living at the Antarctic gateways have a unique identity with the Far South could not be substantiated in this work, despite the many links these cities have with Antarctica and the kinship that local governments claim to have with the South. So far, the gateways have centred their efforts to enhance the political and economic growth of their Antarctic connection, working with groups of interested parties, but have neglected community engagement with Antarctica. Similarly, city brandings and gateway development policies have kept the public away from input on how they see their connection with Antarctica.

Considering these five cities are known worldwide as Antarctic gateways, and that Antarctica inspires enduring connections between people and place, these municipalities have the opportunity to place the Antarctic region at the heart of their communities' core values, beyond politics and economics. Having an engaged community with Antarctica can lift the city's profile nationally and internationally beyond marketing campaigns. Also, it has the potential to address other societal and environmental issues on attitudes and behaviours, for example towards climate change, that will ultimately benefit all. Understanding communities values and narratives has been identified as essential to engage people that are apathetic to environmental issues into serious conversations (that may prompt positive action), which otherwise would be seen polarizing and confrontational (Lucas, 2018).

In order to create community engagement (and consequently, construct community identity with Antarctica), the city must create a robust and long-term strategic plan focused on the benefits for their people on having Antarctica at its doorsteps. The strategic approach requires involvement and consensus from all sectors of the community, including indigenous voices. Private and public stakeholders must collaborate and provide feedback regarding community needs, concerns and expectations about the city's relationship with Antarctica, to arrive to common goals, to develop fair policies that can benefit many, and aspire to have an enduring impact over generations of gateway citizens. The gateway communities need to build their own narratives with Antarctica in order to nurture a construction of an identity with the place. These narratives cannot be imposed by politics but must be supported by government policy. Yet, scholars warn us regarding prescribed discourses on polar identity and why the participation and collaboration of the communities for the appropriate representation of its peoples' voices is critical (Medby, 2019).

There are many lessons learned from studies focused on community identity and environment that can lead the discussions for the construction of a common narrative regarding the communities' connections with Antarctica. For instance, research on indigenous communities reveal the value of community knowledge systems through learnings, mitigations and adaptations to environmental issues affecting their ways of life (Ramos-Castillo et al., 2017).. More specifically, the gateways governments can focus their narrative towards the concept of "Antarctic Ambassador⁸⁴" (Alexander et al., 2019) for members of their communities. This concept was developed by scholars with the aim to identify the characteristics of a popular but little understood moniker. Furthermore, the research project "Antarctic Cities and the Global Commons: Rethinking the Gateways" (Salazar, 2017), currently undergoing, focuses on the

⁸⁴ The scholars on this research offer an agreed definition for "An Antarctic Ambassadorship is someone [i.e., individual or group] who has a connection to, knowledge of a passion for the Antarctic (as a space, place, or idea), who represents and champions Antarctica and its values, and who supports Antarctica through communication and behaviour" (Alexander et al., 2019, p. 503).

concept of custodianship of Antarctica from the gateway cities. The project explores the potential change of urban attitudes and imaginaries towards a reorientation of values based on Antarctic principles of cooperation, collaboration and environmental conservation (Salazar, 2017). Christchurch, Hobart and Punta Arenas are working in partnership with this research team.

This far, community identity has been studied mostly within territorial boundaries (Colombo & Senatore, 2005). However, the worldwide interest for Antarctica and the distinctiveness of the city's polar association provide the gateways with unique opportunities for promoting engaged environmental global citizens beyond the urban (geo)political borders.

Next, I suggest to consider the creation of a council of Antarctic gateways (AGC). As this research has found, discussions at an international level are needed to highlight the critical role the gateways play to assist the global Antarctic community in undertaking their activities in the South (beyond political boisterous agendas and polar shipping). The gateways see the largest concentration of Antarctic actors, transportation vehicles, goods, equipment, communications, scientific samples, etc. passing through their air and seaports during the warmer months for Antarctic travels. These cities also remain as the main point of contact with the polar continent during the winter. Notwithstanding, as a cluster, the gateways have no representation at high-level meetings of the ATS. The gateways are located outside the purview of the ATS and represent primarily Antarctic claimant countries. Hence, it is unlikely that non-claimant Antarctic parties would entertain the suggestion of discussing matters pertaining to the polar activities carried out at the gateways during ATCMs. As seen in Chapter 6, mentions of the Antarctic gateways at these decision-making forums are brief and usually dominated by political rhetoric rather than considering these cities as instrumental allies of Antarctica and its stakeholders.

The abovementioned proposal raises the question: *how could this AGC be integrated into the ATS?* I suggest the AGC is created as a proper international association (e.g. with a constitution, bylaws, statement of purpose, etc.). These formalities will secure commitment and guidance, which will enhance the prospect for an invitation to participate at the ATCMs as an Expert Group, in a similar capacity that the Antarctic tourism lobby group⁸⁵ has at these reunions. Within the ATS, the analogue example would be the Coalition of Legal Toothfish Operators, which cooperates with CCAMLR and participates in the Commission's annual meetings in the role of Observer (CCAMLR, 2019). As an Expert group, the AGC will be able to have a voice within the ATS and offer practical advice to Antarctic parties regarding the

⁸⁵ The International Association for Antarctica Tour Operators provide expert advice in tourism matters to the ATCMs.

extension and limitations of their capacities and services, provide insight on how do Antarctic policies impact their cities, as well as having the opportunity to introduce Information Papers for discussion at these meetings. The gateways benefits as result of AGC's participation at the high-level decision-making forums, getting invaluable insight on the latest resolutions and needs of the Antarctic community, which helps with their preparedness and planning.

The AGC should aim to maintain the Antarctic principles of international collaboration, to foster the sharing of knowledge, best practices and efficient connections between the cities, Antarctica, and its end users (e.g. the local communities, NAPs, science, tourism, fishing, etc.). The ACGs should establish common goals applicable to all gateways and employ an integrative approach for establishing standards on efficiency, logistics, and training of the workforce, as well as coordinating of efforts in science, policy, education and outreach. This network of gateways could assist the cities' governments on the implementation of long-term policies and to offer high-quality Antarctic-related services and business. An analytical framework will identify issues affecting the gateways competitiveness and ways to complement each other. Another useful tool could be a gateway certification accreditation for stakeholder who provide goods and services for Antarctic activities, in order to secure a certain standards that meet the demands of the international Antarctic community.

The recommendation for creating an AGC revisits previous efforts to engage the Antarctic gateways. For instance, in 1997, a New Zealand diplomat emphasized on the responsibilities the association with Antarctica conferred the gateway countries, and the opportunities for working together towards the implementation of common environmental goals that will benefit Antarctica, such as a Southern Hemisphere Nuclear Free Zone (Prior, 1997). Another attempt to create a gateways' network was through the Statement of Intent signed in Christchurch by representatives of all five Antarctic cities, under a similar collaborative scheme concept between cities (Christchurch City Council, 2009). Moreover, there are plenty of examples where the Southern Hemisphere countries hosts to gateways have forged successful regional partnerships in Antarctica (Colombo, 2019) and the Southern Ocean (Lorenzo & Roldan, 2020), laying out the groundwork for a regional partnership such as the AGC.

In summary, these are the key practical recommendations for Antarctic gateways:

- Create a long-term strategic plan focused on the city's Antarctic connections and its benefits for all community groups, including indigenous voices.
- Construct a common narrative on the connections of the local groups with Antarctica, integrating knowledge systems, mitigations and adaptations to environmental issues.

- Integrate community values with Antarctica’s international cooperation, peaceful purposes and environmental protection, through schemes such as ambassadorship or custodianship of the polar South.
- Create a council of Antarctic gateways to have a representation as an Expert Group within the ATS, to participate and contribute to the high-level discussion meetings for the better management of Antarctica.

Considering the threats to Antarctica’s present and future (Rintoul et al., 2018), and issues on security, law enforcement and port state control have not been resolved within the ATS (Rothwell, 2012; Swanson et al., 2015), it seems negligent to ignore the relevance of the Antarctic gateways in contributing to the better management of the southern polar region.

Postscript

As I am finishing the last revision of this thesis, the world is affected by a pandemic. COVID-19, a respiratory disease caused by a new strain of coronavirus denominated “SARS-CoV-2”, has caused hundreds of thousands of deaths worldwide; countries have closed their borders and stalled economies, ordering their citizens into lockdown to manage the spread of the disease.

Antarctica is thought to be the only continent that has not reported a positive case of COVID-19 thus far (Letzing, 2020). As winter set in in Antarctica, access to the continent was limited and personnel changes were reduced, thus keeping the winter-over, virus-free inhabitants isolated. This offered Antarctic states a few months to make decisions on how to manage human activities in the Far South to keep the virus out. However, as Hemmings (2020) points out, the ATS rules of procedure may be the first barrier to overcome; the ATS high-level decision-making process requires in-person attendance at meetings, and these may not be possible under the current international travel restrictions.

At this stage, one can only speculate, but if Antarctic states can overcome procedural difficulties and adopt universal mandatory measures to keep Antarctica free of COVID-19, these decisions will change how we travel to the southern region, and, consequently, the Antarctic operations at the gateways. Currently, all Antarctic gateways (and their countries) are affected by the pandemic and they have adopted different strategies to mitigate the health crisis, with varied results. Will the Antarctic international community evaluate the gateways by the success (or failure) of their responses to the pandemic? Will a gateway’s health infrastructure and services (e.g. public health policies, medical specialty services, intensive care hospital units, facilities for isolating large numbers of people) change how, and where,

Antarctic stakeholders choose to operate? Will the ATS identify the need for viral mitigation measures outside the purview of the AT and designate the gateways as control points for Antarctica? Will Antarctic states consider limiting or banning access to Antarctica until a vaccine is developed?

The response and preparedness of these cities to the new challenges that lie ahead will be critical to determining their value as gateways, to the different Antarctic stakeholders. While the world awaits the development of a vaccine against the novel virus, new frameworks for safe travel zones between countries are being considered, while Antarctic science programmes are being halved in size for next season's operations. The future of the Antarctic gateways will be at a crossroads post-pandemic: the gateways will have to quickly adjust to the new requirements of the international Antarctic community if they wish to remain relevant in their gateway role, or remain unchanged and become superfluous to the rest of the polar world. Substantial changes are fast approaching for the Antarctic community as a whole. It may be the time for high-level Antarctic decision-makers to leave behind geopolitical fears and antagonistic approaches and recognize the real value and potential the gateway cities offer to Antarctica.

9 References

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Appendix

Human Ethics Committee's Letter of approval for research



HUMAN ETHICS COMMITTEE

Secretary, Lynda Griffioen

Email: human-ethics@canterbury.ac.nz

Ref: HEC 2012/14

19 March 2012

Gabriela Roldan
Gateway Antarctica
UNIVERSITY OF CANTERBURY

Dear Gabriela

The Human Ethics Committee advises that your research proposal “Searching for an identity in a gateway city: Christchurch (New Zealand) and Ushuaia (Argentina)” has been considered and approved.

Please note that this approval is subject to the incorporation of the amendments you have provided in your email of 14 March 2012.

Best wishes for your project.

Yours sincerely

A handwritten signature in black ink, appearing to read 'Michael Grimshaw'. The signature is written in a cursive, flowing style.

Michael Grimshaw
Chair University of Canterbury Human Ethics Committee

Interview protocol

- 1) Take note of the date, time, place where the interview is taking place, and name of the participant;
- 2) Thank the participant for agreeing taking part in the interview;
- 3) Ask the participant if they agree to the use of the voice recorder. Obtain signed consent form from the participant; ask for the email address where to send the transcription later;
- 4) Brief description of the purpose of the research; give the opportunity to ask questions

	Name of participant	Date
	Interview questions	
	Do you have a personal experience in Antarctica?	
Participant interest in Antarctica	Can you describe your first impressions of that visit, or any other memorable moments in Antarctica?	
	What does Antarctica mean to you?	
	What aspects of Antarctica are you most interested?	
	What makes you think of Antarctica in your everyday life?	
Engagement and participation local community	What is your role in the Antarctic community of (city X)?	
	Do members of your family and friends share your same interests regarding Antarctica?	

Role of the gateway city

The city you live in is an Antarctic gateway city. What does this mean for (city X)?

Where could I see or visit the (city X) Antarctic-related memorabilia, art in public spaces, landmarks, etc.?

Can you recommend a place where I can find more about your city's Antarctic connection?

Role of the country in Antarctica

Which community group with an Antarctic connection do you belong to?

How is Antarctica important to your country?

Additional comments



Gabriela Roldan
Gateway Antarctica
Centre for Antarctic Studies and Research
University of Canterbury
Private Bag 4800
Christchurch
New Zealand

Research participation consent form

*Searching for an Antarctic identity in the gateway cities:
Cape Town (South Africa), Christchurch (New Zealand), Hobart (Australia),
Punta Arenas (Chile) and Ushuaia (Argentina)*

I herewith declare that I have been informed about the general purpose and objectives of the above-named research project. I understand that my participation in this study may contribute to a greater understanding of the factors that contribute to shaping the Antarctic identity of a gateway city.

I am aware that my participation in this interview is voluntary and it is not expected to involve any risks greater than those encountered in daily life.

I am free to withdraw my consent and participation at any time without negative consequences. I can also withdraw any material I previously provided at any time. I also understand that I am free to withhold my response to any particular questions.

I am aware that the data obtained in this research will be included in a PhD Thesis. The results of the research might also be presented at conferences and other professional meetings and published in scholarly journals.

Before any publication will take place, I will be provided a draft transcript of my interview, which I will have two weeks to review for the purpose of verifying or correcting factual data, requesting removal of confidential information, and providing further comments and suggestions for consideration in the data analysis. The data gathered in this research project are confidential and my personal identity will not be disclosed unless I indicate otherwise.

I have been advised this project has been reviewed and approved by the University of Canterbury Human Ethics Committee.

I acknowledge that I understand my rights as a research participant as outlined above and consent to participating in this research.

Participant's signature

Participant's name printed

Date

Gabriela Roldan

Researcher's name printed

Gateway Antarctica
Centre for Antarctic Studies and Research
University of Canterbury Private Bag 4800, Christchurch 8140, New Zealand. www.canterbury.ac.nz
Tel: +64 3 364 2136, Fax: +64 3 364 2197 Email: gateway-antarctica@canterbury.ac.nz, www.anta.canterbury.ac.nz



Gabriela Roldan
Gateway Antarctica
Centro de Estudios e Investigación Antárticos
Universidad de Canterbury
Private Bag 4800
Christchurch, Nueva Zelandia

Carta de consentimiento para participar en un proyecto de investigación

Título del proyecto: *Buscando la identidad antártica en las ciudades puerta de entrada: Ciudad del Cabo (Australia, Christchurch (Nueva Zelandia), Hobart (Australia), Punta Arenas (Chile) y Ushuaia (Argentina)*

A través de la presente declaro que he sido informado/a acerca del propósito general y de los objetivos del proyecto de investigación aquí nombrado. Comprendo que mi participación en este estudio contribuirá al mejor entendimiento de los factores que contribuyen a la formación de la identidad antártica en una ciudad puerta de entrada.

Estoy en conocimiento de que mi participación en esta entrevista es voluntaria, y se desconocen motivos de riesgos asociados con la participación en este estudio, mas allá de los riesgos impredecibles de la vida cotidiana que escapan al conocimiento del investigador. Tengo el derecho de retirar mi participación en cualquier momento que así lo desee, sin consecuencias desfavorables para mi persona. Además, entiendo que puedo retirar cualquier material que he provisto para este estudio en cualquier momento, como así también tengo el derecho de no responder a ciertas preguntas que considere irrelevante. Entiendo que los resultados de este estudio serán incluidos en una Tesis de Doctorado, como así también podrán ser usados en presentaciones para conferencias u otras reuniones profesionales, y podrán ser usados en publicaciones académicas.

Antes de que alguna publicación tenga efecto, seré proveído/a con una copia del manuscrito de mi entrevista. Tendré dos semanas para revisar, verificar y/o corregir datos y acontecimientos revelados durante la entrevista, o solicitar que se remueva información confidencial, o para proveer comentarios adicionales y sugerencias que considere pertinentes para este estudio. Los datos obtenidos en este estudio son confidenciales y la identidad personal de los participantes no será revelada al público, a menos que el participante así lo apruebe.

Declaro entender mis derechos como participante de este proyecto de investigación, tal lo expresado anteriormente en esta, y doy mi consentimiento de participación. Asimismo, he sido informado/a que este proyecto ha sido aprobado por el Comité de Ética Humana de la Universidad de Canterbury (Nueva Zelandia).

Firma del participante

Aclaración de la firma

Fecha:

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