

“It’s Beyond You, But You’re A Part of It”: Mountaineering in the Southern Alps of Aotearoa New Zealand



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Abstract

This thesis provides a phenomenological exploration of the lived experience of mountaineering in New Zealand. Based on fieldwork completed in the Southern Alps and Mount Ruapehu, it offers an analysis into how mountaineers construct the mountain environment through their climbing, while also being shaped in turn by the vital mountain. At the heart of this thesis is the movement of mountaineering. I argue that the experience of mountaineering cannot be divorced from our embodied sensory perception. Through climbing, mountaineers build a depth of embodied, living knowledge, making sense of technical information and strengthening their judgement to help them climb and manage the risks. That knowledge transforms the mountains for experienced mountaineers. Furthermore, I argue that the vibrant and potentially deadly fluxes of the mountains form their agency and thus the vitality that my participants sense. To climb in the mountains is therefore to enter into a reciprocal relationship with the vital mountain environment. The mountaineers ultimately become a reflection of the mountains in which they climb. This thesis comprises a written thesis and immersive podcast recording. The episode can be found in the link below.

<https://drive.google.com/file/d/12m9TD6xTSWoDu6OCdj0LwnwMyQfpu2MH/view>

All work included in this thesis is my own, except where otherwise stated.

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To my wife Coraline, I cannot thank you enough for your support in a myriad of ways. Embarking on this thesis required sacrifices from the both of us and it meant that you had to spend all of your time in the city, while I wrote about the mountains. Without your encouragement, reading, reality-checks and all-around support I would not have completed this thesis. You are and will always be a continuous inspiration. I want to thank my mother, Robyn for her proof reading and the interest she took in my writing, as well as the support from my father, Jim and sister, India. I would also like to thank Willow Milligan, for our discussions at Raglan Roast on sensory ethnography and the works of Steven Feld during undergrad, that helped to inspire the podcast component of this thesis.

To the mountains I owe the impetus for this thesis. Through my time spent in their forests and on their fractured glaciers I have been shaped into the person I am today, learning not only to climb and endure, but also to be still and open myself to a world full of beautiful possibilities.

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Introduction

In this thesis I consider how the mountaineers construct the mountain environment as they climb, while also, in turn, being acted upon by the mountain. I focus on mountaineering, mainly in the Southern Alps of Aotearoa New Zealand with a group of Pākehā mountaineers¹. As all of my participants, myself included, are Pākehā, my thesis explores mountaineering in Aotearoa New Zealand through a distinctly Pākehā genealogy. I therefore do not enter into discussions of the naming of mountains, the tapu or sacred nature of some summits as it is not something that arose from my research with my Pākehā participants or with the wider and largely Pākehā mountaineering community. A thesis that engaged with Māori mountaineers would likely yield a very different set of conclusions and provide a host of important insights. While all of my participants have climbed internationally, the Southern Alps are their 'home ground' and have both literally and figuratively defined them as mountaineers. My research places the lived and sensorially embodied experience of mountaineering at the center. Mountaineering is an intensely embodied experience. When my participants climb, they bring with them a mountain epistemology shaped by the developments of mountaineering style, ethics and technology. Through their countless hours of climbing in the mountains, their epistemology is reworked as they form a relationship with the mountains' vitality that is otherwise negated by the very structures of the enlightenment-influenced English language (Cruikshank 2010). My participants embody and internalize a wide degree of experiences and skills through climbing that transform the mountain environment and their potential to interact with it. As I argue in this thesis, to climb in the

¹ As I detail in my fieldwork section, I conducted a two-day trip to Mt Ruapehu in addition to the fieldwork I completed in the Southern Alps. The mountaineering I am focusing on is therefore not high-altitude mountaineering, as Aotearoa New Zealand's highest mountain, Aoraki/Mt Cook is only 3724 metres high. What it does entail though is a variety of disciplines. All of my participants practice multiple disciplines both for training and enjoyment, such as rock climbing, climbing mixed ice and rock routes in winter, tramping, long distance mountain running, ice climbing, ski touring and mountaineering. For example, climbing ice can be seen as training for encountering ice on a technical mountaineering route, or it can be the goal itself.

mountains is to enter into a reciprocal relationship with a vital environment. In an attempt to bring my analysis closer to the relationships my participants have with the Southern Alps, I have also created a podcast episode as part of my output. This utilizes the specific sounds of mountaineering to offer an immersive and sensorial mode of analysis.² As anthropologist Sarah Pink writes, “sound is inevitable in ethnography and even silences are laden with meanings” (Pink 2009, 13).

Background

Sitting around a small table on the banks of the Yangtze river, in Sichuan, China, I was first introduced to anthropology by one of the Americans I was sharing a barbeque with. He was an anthropologist from California and after we chatted that evening, he suggested that I should think about taking anthropology. The following year, when I started university, I not only found anthropology, but also the mountains through the Victoria University Tramping Club. My thesis is the product of those two trajectories. Especially influential was a three-month traverse of the Southern Alps that I completed the year before commencing this Post Graduate degree. During those sixty-three days in the mountains, my wife and I experienced the intensity of the Southern Alps. Fierce storms, flooded rivers and mountaineering ‘epics’, were contrasted with indescribable beauty, meditation in movement and peaceful mossy forests. By finishing our traverse, which we had thought about abandoning multiple times and during which we had to change plans, we gained a deeper relationship with the mountains that encompassed a blend of love, fear, awe and respect. Returning to Wellington I was more than ever transfixed by the complex interaction of mountain and mountaineer. This thesis is my exploration of that experience through the lens of phenomenology.

Methods and Methodology

My research consists of a mixture of participant observation, autoethnography, sensory ethnography and interviews, all of which were grounded in a methodology that sought to

² A full discussion on the role of the podcast in my thesis can be found below in the Podcast section.

explore the lived experiences of mountaineers. Following in the footsteps of the Phenomenologists Edmund Husserl, Martin Heidegger and Maurice Merleau-Ponty, alongside the modern scholarship of anthropologist of Dance and Movement Studies Brenda Farnell, my thesis is theoretically grounded in the idea that no experience can be divorced from the sensory perceptions of a person in the environment (Farnell 2012).

As Merleau-Ponty writes in his 1945 treatise, *Phenomenology of Perception*, (1962 [1945]) the “body is the vehicle of being in the world” (82). In his scholarship he seeks not the “objective, detached knowledge of the body”, but that “other knowledge which we have ... by virtue of its always being with us and the fact the we are our body” (206). The phenomenological focus on the body and its movement is a reaction against the dominant school of Cartesian Dualism, which separates the mind and body and relegates the body to a physical thing, a conduit (Ingold 1996, 114). This theoretical lens has its origins in Greek thought with Aristotle and Plato and is popularized by the French philosopher René Descartes (Solnit 2001). What is interesting about this view is that its origins contradict its own premise. As author Rebecca Solnit (2001, 18) notes, Aristotle’s school of thought was called Peripatos, derived from the covered walk-ways that scholars consistently walked to develop their thinking. The idea of the mind being separate from the body was then conceived through the movement of the body, the action of the human organism as a whole, whose wholeness gives rise to abstract thinking (Solnit 2001, 18). From Aristotle’s balmy strolling to Wordsworth’s misty pacing, thought is “embodied and enacted”, rather than the technology influenced, abstract conceptualization we were taught to comprehend (Lave 1988, 171; Ingold 1996).

While I explore the theoretical genealogy of phenomenology in the second chapter, in my fieldwork I focused on extensive participant observation and autoethnography to make sure that my “ideas emerged out of, and were reworked and enriched through direct embodied experience” (Lorimer and Lund 2003, 131). I conducted a seven-day and five-day fieldwork trip to climb in the Remarkables and at Wye Creek above Queenstown, as well as in the Mt Brewster region. In the North Island, I completed a two-day trip to Mt Ruapehu. In mountaineering the ethnographer’s engagement is not only with the participants, or the movement of climbing, but with the mountain itself (as I explore in the third chapter) (Lund 2005). The length of these fieldwork trips and the small number of participants is a

fundamental feature of mountaineering. A high degree of experience, but also trust is required to be able to commit to being responsible for each other's lives when entering into the mountains. My own positionality as an experienced climber gave me ability to complete my fieldwork with a full degree of participation. Without my experience, the places I went with my participants would have been greatly altered, with no access to the more technically difficult ground that makes up modern mountaineering. My positionality also had the potential to introduce bias into my research. As Pink writes, the reflexive sensory ethnographer needs to be not only aware of how he or she participates in other people's practice, but to have an awareness of how he or she is involved in the constitution of place and to be able to "identify the points of intervention of her or his own intentionality and subjectivity" (Pink 2009, 50; 2007). My fieldwork also effectively extended before and after the trips as I met with my participants to plan the trip, discuss objectives, gauge each other and reminisce and make sense of the experience afterwards. Each trip was spent entirely in the company of my participants, climbing, eating, chatting and generally living together in close quarters. My participants took an active interest in my research. We discussed experiences each night after climbing and on the drive the next day.

My role as both a researcher and experienced mountaineer meant that the use of autoethnography as the "use of a researcher's personal experience to describe and critique cultural beliefs, practices and experiences" was critical (Adams, Holman Jones, and Ellis 2014, 1). Every evening I recorded fieldnotes with a sound recorder, in which I tried to include as much of my own experience, including feelings, emotions, as well as more standard fieldnotes. During the second trip to Queenstown, in August, I transitioned to written notes as the continuous close proximity to my participants made it hard to find a space to record voice notes and also required me to awkwardly separate myself. Furthermore, the tactile process of writing and my analytic practice in that mode made writing fieldnotes the better option. I also attempted to capture as much of my own sensory experience as possible in my fieldnotes, which is advice I have received in a Masterclass with the anthropologist Michael Jackson (2017). Combined with my inspiration from the American anthropologist and ethnomusicologist Steven Feld's recordings of the Bosavi rainforest in Papua New Guinea, I not only wanted to create a podcast using my fieldwork mountaineering soundscapes, but I also wanted to include sensory ethnography as part of my methodological approach. Here, I

followed scholars like Paul Stoller (1989; 1997), Michael Jackson (1996; 1983) and Nadia Serematakis (1996) who understand the importance of the body for understanding human experience. In my fieldwork and later in my analysis, I view the body not as a text to be read, but rather as the foundation to which all experience is inextricably linked (Jackson 1996, 201). Detailed fieldnotes that described my sensory experiences of mountaineering, alongside the emotional and practical components, were therefore necessary.

Participants

I had four main participants for my research that I spent the most time either climbing with or interviewing. I also spent one day ice climbing and sharing dinner with two friends of Sam's at the Touchdown area on the South Face of the Double Cone, in the Remarkables. On the North Island trip to Mt Ruapehu, Sam and I were accompanied by four friends of his. I also spoke briefly with several other people during the social evenings at the Remarkables Ice and Mixed festival, which I detail below. All participants, except my wife Coraline, have been given pseudonyms for anonymity.

Sam

Sam has a background in Religious Studies and showed a real interest in discussing my research on both a personal experience and academic level. He is an energetic mountaineer of over ten years' experience, possessing an abundance of what climbers would call 'psyche' or enthusiasm. I have known him for a long time and knew that he had a vast deal of experience, especially in wilderness terrain, having crossed remote icefields such as the Garden of Eden and Garden of Allah, as well as the Olivine ice plateau. I reached out to him via Messenger to ask if he would be willing to let me accompany him on a mountaineering trip for my research. He promptly accepted. Together, we completed a seven-day trip to ice climb in Wye Creek above Queenstown in July 2019. His relentless optimism in the face of issues such as losing an EFTPOS card before buying supplies or as finding our accommodation already occupied by another group was a great help. He was kind in balancing his desire to get as much

climbing done as possible, with my research goals, such as recording mountaineering soundscapes.

Jack

Jack is a dedicated mountaineer who seeks out his physical limit in what he calls the playground of the mountains. His mountaineering training started ten years ago during his time at University. His deeply tanned skin bears witness to the regular climbing and training he logs in the mountains and on the trails. He is the most accomplished mountaineer in my research, both in the Southern Alps and internationally, having climbed in Europe, America and South America. I had been in contact with him previously on messenger, asking for trans-alpine mountaineering advice for a trip that he completed and found him to be enthusiastic and very experienced. From those conversations, I understood that he had thought deeply about his climbing experiences and hinted at an interesting philosophy of mountaineering. I asked him on Messenger about him being interviewed for my research and was excited when he accepted. While I was not able to climb with him, I got to spend time socializing with him at the Remarkables Ice and Mixed Climbing festival in Queenstown on my second fieldwork trip in August. Our first interview almost did not happen as Jack messaged me five minutes before, saying that he was still busy setting up for the festival. He asked if we could reschedule. Once he learnt that I was already waiting outside, he invited me in. I spent the next few hours setting up tables and posters with him, while also getting to talk with the other festival organisers and climbers. Working together broke the ice between us. We then managed to find a spare hour before the festival began to complete our interview on the bleacher seats above the Remarkables Park. He described the interview as almost cathartic and clearly enjoyed getting to discuss his passion and vision of mountaineering in-depth. He highly values the experiences of pushing physical and mental endurance to their limits through mountaineering and the experience that moving quickly over complex terrain brings. He was gracious in offering to do another interview before the end of the festival, which we managed to complete via phone while I was waiting for my flight at the airport.

Mark

Mark is an Australian climber who works in rope access part of the year, then spends his winters in Queenstown, living out of his van and climbing. On the first evening of the Remarkable's Ice and Mixed Festival, he introduced himself and asked if I wanted a partner to climb with the next day. He had actually decided to attend the festival last minute in the hopes of finding a partner to climb with over the weekend. Attending in the open climbing category myself, I was also hoping to find a partner to climb with and happily accepted. I was glad to have found such an experienced partner. Ten hours later, at 5:30am, he picked me up to go climbing and we established an easy rapport, sharing climbing stories on the drive up to the Remarkables Ski Field. He proved himself to be a capable mountaineer, leading the first and hardest pitch of our chosen route, Saturday Morning Special, M3+, 170m on the West Face of the Remarkables.

Coraline

Coraline is my wife and a climber in her own right. She has been climbing in the mountains for five years, with a family background of hiking in the French Alps. In the summer of 2019, we completed a three-month long traverse of the Southern Alps, in which we both experienced the full force and beauty of the mountains. With that in mind, I conducted an interview with her because I knew she had an interesting perspective on the mountain's vitality. I was also keen to include a female perspective, as while I climbed with female climbers during my fieldwork, none of them were core participants.

Fieldwork



Figure 2 – Map situating fieldwork trips from figure 3 and 5

Fieldwork 1

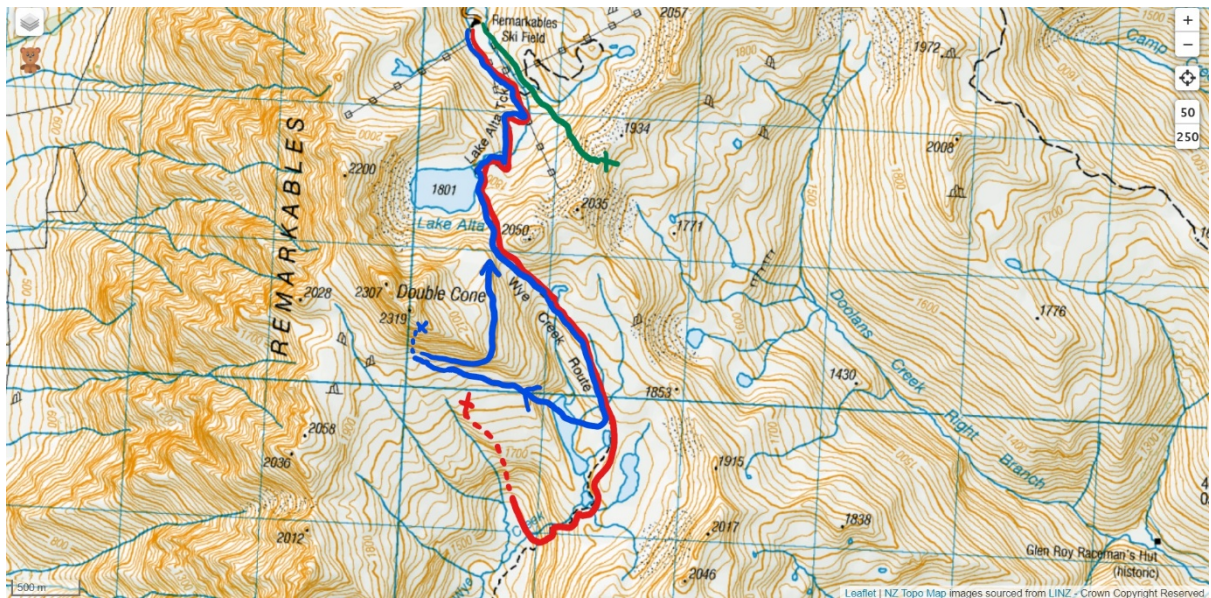


Figure 3 – Map of ski touring and ice climbing at Wye Creek during fieldwork 1

The first research I conducted was a seven-day field trip to Queenstown to ice climb in the Remarkables from the 29th of June to the 6th of July. This trip was undertaken primarily with

Sam, an experienced mountaineer and trumper from Wellington. This first fieldwork trip also provided an unexpected opportunity to take a more third-party researcher view, due to my absence from the mountains that year pursuing this thesis. On the first day, after I had flown into Queenstown and picked up the rental car, I picked up Sam from the roadside he had hitchhiked to and went straight to the Remarkables Ski Field. Before leaving the car, I was already slower than Sam who had packed in five minutes time and was ready to go. I on the other hand took 15 minutes to find and pack the right gear, only to realize that I had forgotten my ski goggles. When I finally made it to the ski field for a quick ski-tour to Doolans saddle (represented in green on figure 3), Sam's fitness compared to my tiring legs was quickly apparent. My unforeseen period of reacquaintance with the realities of mountaineering actually allowed for the full spectrum of mountaineering to be experienced during the trip. It provided me with an opportunity to step outside of my own positionality as an experienced and competent climber. As the anthropologist Leah Zani (2019, 1) writes, fieldwork is about recognizing the rhythm and resonance of an experience. My first fieldwork trip was an experience of the tumultuous space between the rhythm of the city and that of the mountains, which helped to ground my fieldwork in a positive reflexive mindset.

On the second day we ski-toured to Wye Creek and spent the afternoon climbing a 170 metre ice route called Blue Velvet, WI2 (represented in red on figure 3). The snow had a thin crust with powder beneath which made the ski descent to Wye creek rather interesting. The ice on Blue Velvet tended to shatter into dinner plate sized pieces with each ice tool hit, but further up the route, the quality increased. It was dark by the time we finished the route and reached our skis. We then ski toured back over the saddle and down the ski field, dodging the groomers on the slopes as we skied by the light of our head torches. After a rest day, in which Sam hitchhiked to another ski field to amuse himself, we joined forces with two of Sam's friends to climb at the Touchdown area, at the bottom of the South Face of the Double Cone (represented in blue on figure 3). We ski toured over the same saddle into Wye Creek, then climbed a ridge and traversed to the bottom of the South Face. There was an array of ice routes to climb on and we spent the day climbing on a mix of grade WI 2 and 3 routes. The ice was of a much better quality at Touchdown, being higher in altitude than Blue Velvet and throughout the day I recorded soundscapes as we climbed and skied. To exit, we decided to climb onto the shoulder of the South Face via a couloir, rather than loose altitude by returning

the way we had come. By this point I was very tired and my desire to record soundscapes slowed me down even further. Thankfully the group was in high spirits and we later shared dinner together, discussing my thesis and their experiences into the night. We spent the next day waiting out a fierce storm, which caused us to change our plans due to the increased avalanche risks.



Figure 4 – Map of the climb of Mount Armstrong with Sam during fieldwork 1

On the 4th of July, Sam and I drove to Haast Pass with the intention of climbing Mt Brewster. After climbing to Brewster hut and viewing the peak, we realized that it too, had a high avalanche risk. Assessing our options during our evening at the hut, we decided instead to climb the easier Mt Armstrong (represented in red on figure 4). It was horrifically windy the next morning, but very beautiful. On the upper slopes we were struck by spinning vortexes of snow, flung against us by the wind. The views remained clear and we could see all the way to Aoraki/Mt Cook from the summit, as well as down to the Tasman Sea. We raced down the mountain and then down the forested ridge to the car in order to drop off a snow shovel that we had hired in Wanaka, in case of an avalanche (another item I had forgotten). I flew back to Wellington on the 6th of July. My legs remained sore for the coming week.

the next early start. I interviewed Jack on the first day, before the festival kicked off. The next morning, I climbed an M3+ route called *Saturday Morning Special*, 170m on the West Face of the Remarkables (represented in red on figure 5) with Mark, the Australian I had met the night before. For this trip I had decided not to record soundscapes and instead focus on my participant observation and sensory/auto ethnography. In the evenings I was able to talk with a variety of climbers and also listen to the various presentations that were made. On the third day, Mark's van would not start, causing us to alter plans. When he managed to fix the issue himself, we salvaged the day by climbing at a dry-tooling crag, which entailed the use of ice tools on dry, often bad quality rock. It is normally used as a form of practise for the ice and mixed rock climbing of winter mountaineering. We both completed an M6 route called *Rub it till it's Pink*. During our climbing and walking to the crag, Mark and I discussed the experience of mountaineering and his motivations and experiences. Being a climber myself, it gave me access to these ethnographic moments especially after climbing, where a level of trust had been gained and conversation on more personal subjects flowed naturally. On the fourth and last day of the festival I attempted to complete a Grand Traverse of the Remarkables (represented in green on figure 5) with my friend Rob, who had also travelled down to the festival. However, we only completed half of the traverse as we encountered a waiting line of novice climbers who were bottlenecked at the crux of the route. After waiting 20 minutes standing on a ledge, we down climbed the route back the way we had come. We took our time, enjoying the views and had various conversations on the way down. The last day was spent consolidating fieldnotes and completing another interview with Jack via phone as I waited for my flight back to Wellington.

Fieldwork 3

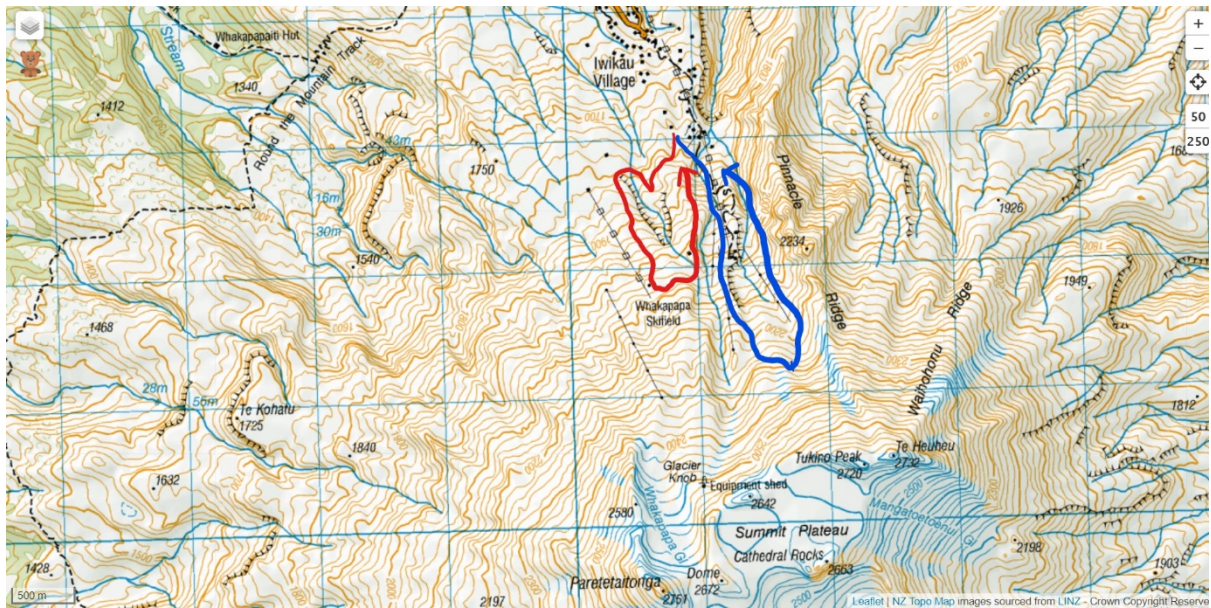


Figure 6 – map of ski touring on Mount Ruapehu

My third and final research trip was conducted over the course of a weekend at Mount Ruapehu, in the central North Island. This trip consisted of a larger group of participants, five in total, staying at the Tararua Tramping Club hut, on the Whakapapa Skifield. My research objectives were to record mountain soundscapes, but also focus more on recording conversations and interactions as per my original plan for the podcast. My plan was aided by the atrocious weather which meant that we only achieved two short ski-tours up the ski field (shown in red and blue on figure 6). The ski field itself was closed. The wind had stripped any fresh snow away, leaving only hard icy slopes. On this trip I focused on the auto and sensory ethnography aspects as I dealt with the experiences of bad weather. These I recorded on my sound recorder, attempting to focus on the feeling and senses of these experiences. During the car ride to the mountain and back, as well as in the copious time spent sitting inside the hut, I recorded and engaged in many in-depth conversations with my participants.

Because of the extensive fieldwork that I conducted, I only recorded four interviews. Two with Jack, one with Sam and one with Coraline. These were done in a semi-structured format, with a list of questions that I used as a compass for the interview. I tried to focus on being comfortable with silences and allow my participants to speak, which due to my own depth of

interest was hard at times. The positive aspect of my personal mountaineering experience was that I could cultivate a friendly and comfortable environment. For example, I could use climber's jargon and understood wider cultural references.

Situating the Research

My initial idea was to focus on the issue of death in the mountains as the most obvious contradiction of mountaineering. Yet by researching, I found that the sensational nature of death made it the main focus of most mountaineering scholarship. Notably, the anthropologist Sherry Ortner (1997; 1999) uses a Geertzian analysis of meaning and agency in her work focused on Mt Everest in the Himalaya. In her book, *Life and Death on Mt Everest: Sherpas and Himalayan Mountaineering*, Ortner (1999) provides an insightful analysis into the experiences of death of both Sherpas and western mountaineers. She shows how the role of orientalism in the Western mountaineer's relationship with the Sherpas, alongside the Sherpas own cultural constructions of power, contextualizes the staggering number of deaths on that mountain (Ortner 1999, 135). The anthropologist Marcos Mendoza deals with the risk of death in alpine-style mountaineering in his book, *The Patagonian Sublime: The Green Economy and Post-Neoliberal Politics* (Mendoza 2018). While Mendoza also explores a wider eco-tourism narrative, as well as the history of the Patagonian region, he provides a useful engagement with the realities of death in mountaineering. He highlights how the global influence of sponsored athletes creates a culture of "one upping" competitiveness and an increased valuing of risk amongst mountaineers (Mendoza 2018, 35)³. Sitting behind these exemplars is a wider category of scholarship that focuses on risk and sport. For example sociologist Stephen Lyng's (1990; 2004) risk concept of Edgework uses a structural approach inspired by Marx and anthropologist Margaret Mead to understand the commonalities between those who take voluntary risks in sky diving, and later free BASE jumping. James Hardie-Bick and Penny Bonner's (2016) sociological work on flow state and risk in sky diving and climbing develops this work by using Csikszentmihalyi's notion of flow state to show how flying site and mountains become spaces for meaningful action⁴.

³ See also the anthropologist Paul James and Recreation and Leisure Studies scholar Maggie Miller (2017) for an analysis of death in mountaineering.

⁴ See also (Bunn 2016; Fletcher 2008; Abramson and Fletcher 2007).

Seeing how death and risk in mountaineering are well developed by scholars, I decided to focus on why, despite these risks, climbers climb. Through my personal experience, I knew that the actual movement and immersive experience of climbing was extremely important. The majority of the scholarship on mountaineering does not focus on these actual movement of mountaineering. Scholars such as Professor of Humanities and Arts, Peter Hansen (2000; 1995; 2013), and Historian Michael Reidy (2015; 2010) deal with historical formation of mountaineering during the Golden Age, which I touch on in chapter one. Others focus on gender roles and the hyper-masculine construction of mountaineering, for example, anthropologist Susan Frohlick (2002; 2006; 2005; 1999). The work of sociologists Jillian Rickly (2017) and Penelope Rossiter (2007) on rock climbing focus more on the body, and I used their work to influence my mountaineering analysis. As I continued my research, I found some interesting work that use phenomenology to analyze the experience of weather and mental toughness in high altitude mountaineering from the sociologists Jacquelyn Allen-Collinson, Lee Crust and Christian Swann (2019; 2016; 2018). Yet, their use of phenomenology only extends as far as phenomenological-inspired interviews. The work of the anthropologist Katrín Lund (2005; 2003) is the main study I found early in my research that creates a grounded phenomenological analysis from ethnographic fieldwork with Scottish hillwalkers. Lund shows how through walking, the mountaineer's senses are embodied and thus affected by movement. As she joined her participants in climbing, she experienced the expansion and contraction of her vision as she climbed the mountain and focused on the immediate terrain, then stood on its summit and took in the grander views (Lund 2005, 40).

To pursue the movement of mountaineering, I looked into the Anthropology of Dance. After finding interesting work on rock climbing and hiking by Sally Ann Ness (1992; 2011a; 2011b; 2016), I eventually drew on the work of the Dance and Movement Studies Anthropologist Brenda Farnell. Working as part of a second somatic turn in anthropology, Farnell (2012) concentrates on kinesthesia as part of her theory of dynamic embodiment. Kinesthesia derives from the combination of movement (kinetic) + sensitivity (aesthesia) (Farnell 2012, 119). It forms our sense of our bodies in space and thus is a fundamental precondition to all movement (Farnell and Wood 2017). Dynamic embodiment leads to her statement that the semiotic can be somatic and that the somatic is necessarily semiotic as multisensory

perception is ever present in agentic movement (Farnell 2012). In her book titled *Dynamic Embodiment for Social Theory: I Move therefore I Am*, Farnell (2012) touches on the various scholarship of how vision was viewed as the noblest of senses and used by early anthropology as part of a racist agenda of Western supremacy (Herzfeld 2001). Western valued senses of vision and hearing were placed at the pinnacle of the supposed hierarchy of senses, while the supposedly base senses of touch and smell were given to societies labeled primitive (Farnell 2012, 119). After noting the classic literature on the body from Descartes, Merleau-Ponty and the philosopher and psychologist John Dewey, Farnell (2012, 120) suggests that the reason kinesthesia was excluded as a sense from this academic literature was due to a lack in conceptualizing personhood as dynamically embodied.

As my analysis developed, I found that I was no longer just looking at the movement of the mountaineer, but also at the movement of the mountain itself. I could not find any literature that dealt with mountain's vitality, except in the field of Indigenous cosmologies. There, scholars such as the Peruvian anthropologist Marisol De La Cadena (2010) and American anthropologist Melissa Baird (2013) use attention to human-nonhuman relations to show how different ontologies undermine the dominant Western mode of politics by including nonhumans as actors. While I had looked at the anthropologist Eduardo Kohn's (2013) *How Forests Think*, earlier in the year, after working through drafts, the new clarity of structure I had gained and the advice of my supervisors lead me to the wider field of nonhuman agency⁵. Starting with the French anthropologist Phillipe Descola (2013; 2014) I explored various works of ecological agency and nonhuman relations, such as the Canadian anthropologist Julie Cruikshank's work on glaciers (2010) and Nicolas Lescureux's interdisciplinary work on human-wolf relations (2006). To develop the reciprocal aspect of the mountaineer's relationship with the mountains, I looked at the work of various sociologists, such as Allen-Collinson, Crust and Swann (2019; 2018; 2016) who deal with experiences of the weather in high altitude mountaineering, Phillip Vannini et al. (2012) on weathering, or Neil Lewis (2000) who first talked of mutual inscription in rock climbing literature⁶. In their work, a living and

⁵ I also completed a review of the concept of human agency in anthropology and the social sciences to inform my wider exploration, from Locke to Foucault and Saba Mahmood. The review can be found in the third chapter on the Mountain's vitality (Emirbayer and Mische 1998; Keane 2003; Mahmood 2005).

⁶ His work later influenced Rossiter (2007), Ness (2011a) and Rickly (2017), whom I referenced.

agentive relationship between humans and the world around them takes shape. When combined with the anthropologist Jane Bennett's (2010) argument for the vibrancy of matter, the full extent of the powerful mountaineering experience my participants treasure can be seen. A full engagement with these scholars and an application of their work to the themes that arose from my fieldwork is undertaken in my upcoming chapters.

Podcast

As this thesis is an exploration of the experience of mountaineering, I wanted to complement the written analysis by utilizing the medium of sound, to try and create an immersive experience that would complement my phenomenological approach to this research (Feld and Brenneis 2004). My inspiration came from Feld's (1991a; 2001; 2019) work with the Kaluli of Papua New Guinea. By utilizing sound recordings of the mountain environment and human interaction with that environment, sound is able to bring the lived experience of the ethnographer closer to the listener than written text (Feld and Basso 1996). While written academic text allows for the dissection and thorough analysis of a subject, its highly specific terminology and prose can create an elitist medium if unchecked, even if published freely. Anthropologists have tackled this issue in various ways, from blending literature and academia, like Jackson (1989; 1996), to ethnographic poetry with Adrie Kusserow (2017), Miles Richardson (1994), and Renato Rosaldo (2016) among many others. Their scholarship is something I incorporate, taking inspiration for the written portion of my thesis to be more accessible, yet also more resonant in both sensation and thought, as the anthropologist Unni Wikan (2012, 56) writes of in her comprehensive book, *Resonance: Beyond the Words*.

The format of a podcast, as a medium outside of the text-dominant centre and firmly aligned with the 'creative' side of anthropology, offers a different, accessible perspective. I wanted to make something that was accessible to the Aotearoa New Zealand mountaineering community with whom I conducted my research. I also wanted for the insights that arose from my analysis to be fed back to that community to hopefully be used, debated and thought over. The content of mountain soundscapes lends itself to an accessible experience (when the voices are stripped away) as to listen to the sound of the wind or footsteps on the snow

is not a learned system of language, but rather an embodied understanding of what those sounds are and importantly, what those sounds feel like. Even if someone has never walked in crampons on the snow before, the rhythmic nature of walking still grounds the experience to the listener and the exotic sounds can be accepted within that framework of experience.

As an aural medium, a podcast is an immersive experience for the listener – creating the potential to sink more fully into the content, due to the lower baseline effort needed to comprehend the content (Jiménez-Castillo, Sánchez-Fernández, and Marín-Carrillo 2017). When this is combined with accessible content and not just an aural version of academic discourse, you have the ability to reach a far wider audience. As the anthropologist Veit Erlmann writes, eighteen years after the scholar James Clifford's (1986, 12) side note asking "what of the ethnographic ear?", anthropology's intended paradigm shift into sound "certainly produced more utterances" (Erlmann 2004, 1). Yet the majority of those utterances tends to be fixed in an archival and preservationist style (Samuels et al. 2010a). Rather than pursue an archival style, I have structured my podcast to emphasize the experience of mountaineering by a cultivation of soundscapes and quotes. In taking this approach, I aim to create an experience that immerses the listener in the relationship between my participants and the mountain, rather than dictating it to them.

The podcast began from 15.5 hours of recordings I took during my three fieldwork trips. On completion of the last field trip I began the lengthy process of logging each of the recordings into an excel spreadsheet. I notated any sections I thought would be useful with a timestamp and description that was as specific as possible to help in the ease of finding when creating the podcast. For example, 'aesthetic wind', 'ski touring no wind' or a section of the quote contained in the section. The highly specific coding allowed me to use the search function to scroll through and find all the various versions of the soundscape or specific noise I was looking for. I then used the program GarageBand to create the podcast.

In my analysis, I was searching for what Richardson calls the "luminous instant...that silence that shakes every ethnographer" (Richardson 1994, 84). This meant that I went through and coded my interview quotes with multiple iterations as the themes developed. My first draft of the podcast was structured around a day out climbing in the mountains and formatted in

an interview cut away style. As a main theme, I wanted to provide the aural context of the mountains via the soundscapes. The term soundscape itself has its origins with the Canadian composer Raymond Murray Schafer, who in 1977 is concerned with the noise pollution of modern technology and creates the term to give a “total appreciation of the acoustic environment” (Schafer 1993, 4). Confusion arises with the use of the term in musical studies as a cover term to describe the auditory context that music exists in – a usage that loses Schafer’s total appreciation (Samuels et al. 2010b). As the cultural studies scholar Jonathan Sterne writes, “the dominant phenomenology of Western science and religion is that hearing is a sense that immerses us in the world, whereas vision removes us from it” (Sterne 2003, 626). To use Schafer’s soundscapes is to utilize this immersive power. Steven Feld, who’s work inspired me to create a podcast, in fact does not use the term soundscape and prefers to reflect on the human interactions with the environment through acoustemology and creating recordings in collaboration with the rainforest (1991b; 2004). While I recognized and attempted to follow Feld’s ideas of collaboration, I used the soundscape concept as it was easier to comprehend within the timeframe of my thesis, than what a full deep dive into acoustemology required. When working with an auditory format, there also needs to be an acknowledgement of the learnt aspects of hearing. As the anthropologist Stefan Helmreich (2007) writes, there is a built infrastructure of hearing around us. From the technical audio infrastructure, such as Mp3 files that transduce sound from one medium to another, to Erlmann’s example of correct listening in Islam being an active listening disposition to be able to hear the words of god amongst orator’s talking, the ways in which we hear are variously shaped (Helmreich 2007, 621; Erlmann 2004, 12).

One of the interesting features that I discovered by listening back to my recordings was the quality and variations of sound it recorded. In this way, Helmreich’s (2007) transduction is very clear as the recorded soundscapes, for example of the nature of the wind funneling around the recorder head, create their own aesthetic noise. The wind heard in the podcast is a transduction, a converted version of the natural phenomenon (Helmreich 2007). The transduction in this case is a creative process, as a degree of new sound is created. At one point, my own heart-beat could also be heard in the recording, quiet and unobtrusive. The unconscious nature of our ever-beating hearts, when transduced and played back is an unsettling experience and adds an unforeseen depth of embodied experience into the

podcast. Another facet of the soundscape that is worth noting is that it is a temporal experience that has been captured and transduced from the natural acoustics of the environment into an mp3 file, which is itself an agent in analyzing and converting as studied by Sterne (Helmreich 2007; Sterne 2003). If the process of recording is as the anthropologists David Samuels et al. (2010a) believe - an interpretive and creative statement, from the choice of when and when not to record, to the quality and distortion of the recording - then each recorded soundscape represents the ethnographer's vision.

With these theories in mind, I realized that the experience of listening to the 'one day in the mountains' podcast style I had created was not as immersive as I would have liked. Upon attempting a new version, I re-read my notes from Feld's (1991b) work in the Bosavi rainforest. In it he takes up Erlmann's (2004) call to convey actual practices of listening and "shapes a way of Kaluli listening, dialogically mixed with listeners and artists" (Samuels et al. 2010a, 335). I then asked myself: what would a mountaineer's way of listening sound like and how does the mountain environment speak? This refocused my efforts to let the soundscapes that I had recorded in the mountains not only speak for themselves, but also speak to the experiences my participants spoke of. I went through a reorganization of my quotes to lighten the recording. Once I had all the useful quotes categorized, I chose the most impactful ones to create my podcast with. This selection process was influenced by scholars such as Rosaldo (2016), Kusserow (2017), and Richardson (1994), who bring to light poetry's ability to carry a weight far heavier than the lines of text it takes up. Then I arranged the quotes inside the mountain soundscape in a way to achieve a slower pace that left space for reflection and a locus of resonance for the experiences conjured up by the interview quotes. This meant less voices, less speaking and more of the sounds of a human interacting with and moving through the mountain environment. For this podcast, it is the potent silence that each quote leaves behind as a new mountain soundscape emerges that is my analysis. In this sense, I provide a composite that links the climber's reflections with the actual sounds of the mountain environment to extend my main argument about the co-construction of climber and mountain. The podcast does not aim to present a "real climb" but to evoke the experience of climbing, of making and being made in the mountains. Aside from the introduction, I do not provide analysis of my own. In reality, my curation of the quotes and creation of the podcast around those quotes formed my analysis. In this sense, it is an analysis that stays closer to the

ethnographic moment. I present moments of my research, completed with the sonorous happenings and context, the inflections of tone and stutters of my interviewees to the listener as a story-board.

Chapter Outlines

Chapter 1: Mountain Knowledge through history

This chapter provides the context of mountain knowledge through the historical development of mountaineering in Europe and Aotearoa New Zealand. I argue that the mountaineering my participants pursue emerged as a product of the scientific revolution, Victorian era masculinity and British Imperialism. I first discuss how the mountains were reconstructed during the Victorian era as spaces to explore as part of the new scientific vision of the earth; to define the Romantic masculine self against nature; and to enact the imperial conquest of wilderness and terra incognita. Then I follow the major events of the Golden Age of mountaineering in Europe that lead us to the application of its mountaineering to the Southern Alps of Aotearoa New Zealand. By exploring the various histories, I show how it was both continued and adapted by Pākehā as influenced by their colonial identity and the rugged mountains. I then trace the development of mountaineering through the 1970s and 1980s to the present day to show how a focus on style, of how one climbed, rather than just what one climbed, came to define the mountaineering my participants pursue. These histories then form the mountain epistemologies that my participants bring to the mountains, which both construct the mountains they climb on and also are altered in turn, through climbing.

Chapter 2: Embodied Knowledge through climbing

The second chapter shifts from the mountain histories to the movement of mountaineers themselves to argue that mountaineering creates embodied knowledge through all of the senses, which helps the mountaineer manage the vital mountain environment far better than any conceptual ideas could. To ground this chapter theoretically I first define embodied knowledge through the phenomenology of Brenda Farnell. I provide an in-depth analysis of

my fieldwork experience of ice climbing to analyze how all the senses are acting and receiving, forming a kinesthetic intelligence. Then I show how a practical mastery of mountaineering is formed through a combination of risk and judgement, using my fieldwork climb of Mt Armstrong with Sam. These analyses allow me to discuss how the embodiment of various living knowledge constructs the mountain environment in such a way that it becomes a different mountain for my participants.

Chapter 3: The Vital Agency of the Mountains

This chapter moves from understanding the human constructions of the mountains to the mountain environment itself. I begin by outlining the history of human agency in anthropology and the development to the scholarship on nonhuman agency, such as Descola and Kohn, and on agency of matter, such as Bennett and Cruikshank. Using Bennett's theory of the vibrancy of matter, I argue that the mountains are not an inert mass, but instead possess a vibrant materiality of both geology and weather. As the mountaineers immerse themselves in that environment, they are subject to the vibrant agency of that matter, bringing both affordances and risks. Through that interaction, my participants experience the agency of the mountain as a vitality that can be simultaneously overwhelming and beautiful. Mountaineering is then an interaction of human and nonhuman agency that mutually inscribe both the body of the mountaineer and the mountain. As I argue, my participants have become literal and figurative expressions of the Southern Alps.

Chapter One

Climbing in the Shining Snows: The History and Developments of Aotearoa New Zealand Mountaineering

I distinctly remember one winter evening packed into a crowded hut on Mt Ruapehu when I was a novice mountaineer. After a day out on the mountain, a friend and mentor at the time, told a story about the legendary New Zealand “hardman” Bill Denz. With his aviator-sunglasses and checked shirt, Denz seemed like a mythical figure. By then he had been killed in an avalanche on Makalu in the Himalayas. My friend, himself bearing a remarkable resemblance to Denz, told me the story of how Denz had soloed (climbing by himself, in a single push) the South face of Aoraki/Mt Cook. Armed with nothing more than two ice screws to drill into the ice and create an anchor point, and a repurposed jar of Greg’s Coffee filled with water, Denz soloed the face confidently. The story of this climb is well documented by the Wellington climber and author Paul Maxim (2011), who includes that on arriving at the South Summit, Denz also placed his unopened water jar on the summit and leaving it, continued to descend to the Hooker Glacier.

Compared to the first ascent of the same mountain, which was motivated by the idea of conquering a summit, Bill Denz’s ascent was motivated by style and experience. Emphasizing climbing style over summiting, Denz’s accomplishment highlights how mountaineering is not simply about conquering challenging peaks, but about moving through them. As the British mountaineer, Alex McIntyre writes “the summit was the goal, but the style was the obsession” (Scott and MacIntyre 2000, 21). Denz embodies the self-reliance and colonial spirit of Aotearoa New Zealand mountaineering. His minimal use of gear, the fearless solo climbing and physical endurance make him seem almost inhuman. Combined with his style of attire and mastery of his own body and the mountain, he represents the hyper-masculine pinnacle of mountaineering; one that takes the courage of Hillary and adds these layers of style,

technical brilliance and wild commitment. At the time, the tale summarized everything that I aspired to in mountaineering. At the same time, it displays how various histories have influenced ideas about what mountaineering is in Aotearoa New Zealand, who practices it, and how. Although, dynamic, these histories still shape how my participants and I think about climbing as modern Pākehā mountaineers in Aotearoa New Zealand. This chapter explores this history of mountaineering and mountain thought in Aotearoa New Zealand, both to contextualize the worlds of my informants, and to argue that these histories contribute to the epistemological worlds that mountaineers carry with them as they climb, recomposing mountain environments along the way.

I begin with an analysis of the mid-19th century ‘Golden Age’ of mountaineering in the European Alps – seen by most as the birth of mountaineering and the historical origin of the mountaineering my participants pursue (Hansen 1995; Macfarlane 2009). By doing this, I contextualize how the mountains were constructed during the Victorian era as spaces to explore as part of the new scientific vision of the earth (Shapin 2018). I analyze how mountaineering played an important role in transforming the Victorian masculinity from a focus on morality to the physical masculinity that still influences mountaineering today (Reidy 2015). Next, I turn to the history of climbing in Aotearoa New Zealand where these new mountaineering techniques were beginning to be applied. Through this analysis, I show how Aotearoa New Zealand mountaineering came to be defined more by *how* one climbed rather than *what* one climbed. As I examine, contemporary mountaineers emphasize their movement, their being in landscape, and their experiences on the mountains in their stories and relations to climbing.

Early Mountaineering in Europe: Science and Masculinity

To understand the developments that led to Europe’s Golden Age of mountaineering from 1854 to 1865, I need to contextualize it in the Scientific Revolution, 15th to 17th century. Before this revolution began, the dominant vision of nature and thus of the mountains in Europe, was that of the Christian Church (Hollis 2019). As literary scholar Marjorie Nicolson (1997) explains in her seminal work, *Mountain Gloom and Mountain Glory*, the vision of nature that

existed in the 17th century was tied to Biblical account of God's creation of the Earth and the Deluge or Noah's Flood. Various estimations of the Earth's age according to this Biblical timeframe had been made over the centuries. The most popular of these came from the Irish Archbishop John Ussher's 1650 publication, *Annales Veteris Testamenti*⁷, which calculated that the first day of Creation was on the 23rd of October, 4004 BC (Ussher 1650). As part of this Biblical narrative, the mountains were variously represented. One version that Nicolson notes is from the English Theologian Thomas Burnet (Nicolson 1997, 98). In his provocative book, *The Sacred Theory of the Earth* (1816), Burnet describes the mountains as the wreckage of the old Earth. They were piled heaps that had washed up from the Great Flood in which God cleansed the Earth and began again with Noah and his family (ibid, 98). Yet at the same time she notes that Burnet fluctuates between this vision of piled wreckage and great waves of stone as places that can elicit higher spiritual feelings (ibid, xiii). This Christian perception of mountains as spaces to be revered and appreciated is developed by the literary scholar Janice Koelb (2009) and historian Dawn Hollis (2019; n.d.; n.d.) respectively. They argue that Nicolson's seminal description of a primitive Christian distrust of the mountains is too heavy-handed and argue that voices such as Burnet are actually vocal outliers. Instead, they discuss various positive literature descriptions of the mountains through history, such as Dante's "delectable mountain" in his Purgatorio, Quintilian's 1549 rebuke of the mountains as a "rocky wart," or the Albanus Mons, the sacred Roman mountain (Koelb 2009; Quintilian 1892; Alighieri 1892; Hollis 2019). These debates reveal the contested terms upon which mountains were understood in Christian Europe prior to the scientific revolution.

However, this vision of the Earth from the Church's narrative was challenged in 1543, by Copernicus's theorizing of the sun as the centre of the universe (Shapin 2018). His theory marked the beginning of the scientific revolution and gave a scientific vision of the Earth (Shapin 2018). From this challenge rose the modern scientific process as those who believed in this new vision sought to reconceptualize the world from this mechanistic standpoint (Merchant 2006). A key tenet of this revolution was that a phenomena has to be both

⁷ Full title, *Annales Veteris Testamenti, a prima mundi origine deducti, una cum rerum Asiaticarum et Aegyptiacarum chronico, a temporis historici principio usque ad Maccabaicorum initia producto* (Annals of the Old Testament, deduced from the first origins of the world, the chronicle of Asiatic and Egyptian matters together produced from the beginning of historical time up to the beginnings of the Maccabees).

observable and measurable – this effectively banished the Renaissance concept of ‘natural magic’ in which the process behind a phenomena is not comprehensible, and replaced it with the mechanistic scientific process of experimentation and rational analysis – the scientific method (Shapin 2018). This new vision of the world and humanity’s place in it, of course greatly contested by the Christian Church, created a new relationship with nature. As the Welsh Marxist theorist and novelist Raymond Williams (1972) analyzes, instead of nature being conceptualized as part of God’s creation, in which humans are part of this thread of relations that ultimately relates them to their god, nature became viewed as separate from humanity. Under Williams Marxian analysis, this separation allowed for the alienation of workers from the modes of production and thus the transition from feudal to industrial society (Williams 1972). This notion of nature also repositioned natural environments as sites of production and leisure. This new relationship with nature was reconfigured as one of examination and exploration.

With new assessments of the Earth’s age from the Geological sciences, the mountains could be viewed within this Geological vision of millennia extending far back beyond history and conceivably forward as much again (Shapin 2018). In 1863, D.T Ansted published his work, *The Great Stone Book of Nature*, describing the Earth in Geologic terms as a ‘stone book’ to be read, a library of facts and phenomena which with “careful personal observation and acquaintance with the language of Nature” you can read, decipher and comprehend (Ansted 1863, 23). Where better to comprehend this book than in the ‘great stone waves’ of the mountains which are, as the author and mountaineer Leslie Stephen (1871, 34) notes, “the slow workings of stupendous forces of nature over the millennia”.

Scientists such as the Genevan Horace Bénédict De Saussure, Swiss Louis Agassiz and Scotsman James David Forbes examined this natural world closely through their work in the Alps (Hansen 1995). Mapping of topography, studying of Glaciology and experiments on heat, cold and atmospheric pressure, were all carried out in the Alps throughout the 18th and 19th centuries (Reidy 2015). De Saussure though, was instrumental in progressing the scientific vision onto the highest peaks of Europe. De Saussure was engrossed after seeing Mont Blanc, the highest peak in Europe at 4807 metres, on his first visit to Chamonix in 1760 (Saussure 1807). After making a failed attempt to climb the mountain, the scientist offered a reward for

the first ascent of the untouched summit (Saussure 1807). 26 years later, a local doctor, Michel-Gabriel Paccard, and crystal hunter, Jacques Balmat, claimed the prize money by summiting on August 8th, 1786 (Freshfield 1989). The first ascent that had been conceived by De Saussure as a scientific expedition to take measurements and complete experiments from the summit, also revealed a passion for the ascent itself. Balmat who had decided to climb for the reward and had made a preliminary attempt before meeting Paccard, described becoming obsessed by the mountain. He would fall asleep every night, just to dream of the attempt on Mont Blanc (Hansen 2013). While scientific discovery continued to be a feature of early mountaineering, the instruments that mountaineers took with them later became secondary to the obsession of the ascent itself (Hansen 1995).

It was not until 1854 that the shift towards mountaineering primarily as a sport happened (Braham 2011). That year, the Englishman Alfred Wills engaged the services of three guides to climb the Wetterhorn (Wills 1856). After camping under a rock bivouac, on the 28th of August 1854, the group crossed the glacier carrying their alpenstocks⁸ and began their ascent (ibid). Climbing through a rock section that Wills called “the worst piece of scrambling I ever did”, the group surmounted a steep ice slope to access the summit (ibid, 286). Wills’ ascent of the Wetterhorn marked the start of the short, but vibrant, ‘Golden Age’ of British-led mountaineering in the European Alps, from 1854 to 1865 (Braham 2011). Climbing the Wetterhorn was heavily publicized as it was significantly more difficult than Mont Blanc, fanning the flames for harder ascents that had previously been thought impossible (Braham 2011). The tinder that this new fire of mountaineering rested on, however, was not only composed of scientific exploration, but of a shifting Victorian masculinity.

While the scientific revolution had reimagined the mountains as a ‘great stone book,’ and created a new interest in them, the pursuit of masculinity in the early 19th century catalyzed the Golden Age of mountaineering (Reidy 2015; Ansted 1863). As the English Professor, James Eli Adams writes, the industrial landscape of Britain had created a masculinity based on spirituality and self-restraint (Adams 2018). The image of the idle aristocrat or showily-

⁸ the larger precursor of the modern ice axe, used by shepherds in the alps

dressed 'dandy' was disparaged in favor of the hardworking, earnest husband who was devoted to his god and protected his family (Adams 2018). By the late 18th century, the increasing industrialized society had formed a mobile upper class of Britons (Hansen 1995). As the Historian Peter Hansen writes, with the increase of leisure time, these Britons devoted more effort to the pursuit of sport and for new status symbols. At the same time, he notes that the British Empire was facing challenges to its authority, such as the Crimean war, the second Opium war against China, and the Indian Mutiny (Hansen 1995). Responding to these challenges, Victorian masculinity began to shift towards the cultivation of moral character through physical activity, exertion and bravery (Reidy 2015; O'Gorman 2000; Adams 2018). Mountaineering was the ideal site for this transformation. Through the popularization of Alfred Wills' *Wandering Among the High Alps*, and the touring Mont Blanc show of Albert Smith, Hansen writes that mountaineering became "uncoupled from Romantic appreciations of nature and inspired Professional men of the middle classes to climb..." (Hansen 1995, 304). While there were numerous female climbers of the upper classes during this period, such as Henriette D'Angeville of France, Elizabeth Hawkins-Whitshed (Irish) and American 'Meta' Brevoort, their voices and publications were subsumed under that dominant masculine construction of the mountains (Braham 2011). Even when authors such as Jane Freshfield subverted the gender roles of the time by focusing on her personal mountain explorations, the way she discusses the bravery of her guides and their playing with danger is still from within the masculine meta-narrative (Reidy 2015; Freshfield 1862). As the historian Michael Reidy, in his examination of Mid-Victorian masculinity and mountaineering notes, one Scottish magazine excerpt of the time highlights the dominance of masculinity. Conflating the physical and mental attributes attained from mountaineering with the masculine body, the authors write: "to attain the perfect balance of body required for difficult glacier and rockwork brings one, very near at least, to the perfection of physical manhood" ([*Blackwood's Edinburgh Magazine* 1865, 343] cited in Reidy 2015).

Mountaineering also fitted snugly into the development of what Hansen calls an "assertive" masculinity serving the British Empire (Hansen 1995, 304). As Lee Davidson, a Recreation and Leisure Studies scholar, clarifies, when the British Alpine Club was founded at the beginning of the Golden Age, it "adopted the language of exploration and adventure from imperial explorers in Africa and the Arctic, and recast mountains and mountaineering in relation to

masculinity and British power” (Davidson 2006, 7). The men and women of the Alpine Club then set out to conquer all the major peaks in Europe (Hansen 1995). Through these ascents, and those of the continental mountaineers, mountaineering continued to grow in both popularity and technical difficulty. The culmination of this growth in the Golden Age is the greatest ‘conquest’ and tragedy of the age – the first ascent of the Matterhorn on the 14th of July 1865 (Reidy 2015). The Matterhorn was the last of the 4000m peaks, and most difficult one to be climbed in Europe, and thus marked the end of the Golden Age’s quest to conquer the high summits of Europe (Reidy 2015). Led by the British mountaineer Edward Whymper, a team of Englishmen and Swiss guides began their attempt on the imposing Hörnli ridge on the Swiss side of the mountain (Whymper 1873). After climbing through the lower ridges that had “looked entirely impracticable” from below, the group summited the Matterhorn at 1:40pm the next day after continuous, yet manageable difficulties (ibid, 151). The last major and iconic peak of the Alps had now been ‘conquered’, yet it was on the descent that the mountain bared its fangs. Roped together, the lesser experienced Hadow slipped and dragged three others with him, until one section of rope snapped. The Swiss Guide Taugwalder, his son, and Whymper were left clinging to the mountainside (ibid). The aftermath of this tragedy saw many prominent figures, such as the author Charles Dickens, rally against the wanton waste of life of Britain’s young men on the cold glaciers of the Alps (Reidy 2015). In the tragic conquest of the Matterhorn, the imperial training ground had become all too real.

Despite the media furor, the potential of death did not deter many mountaineers, which is a feature that continues to define modern mountaineers (Reidy 2015). By facing death, the mountaineers of the Golden Age were further authenticated as heroic individuals and continued to climb. The end of the golden age of mountaineering with the ‘conquest’ of the Matterhorn was indeed only the beginning as mountaineers such as Whymper took their new skills to new corners of the British Empire and to the new wilderness of Aotearoa New Zealand (Hansen 1995).

To the Shores of Aotearoa New Zealand: Early Mountaineering in the Southern Alps

The arrival of mountaineering in Aotearoa New Zealand can be seen as both a continuation of British mountaineering and an adaptation of it. It began as part of the imperial/colonial project of conquering and mapping new lands (Bayers 2003). Starting with James Cook's cartographic charting of Aotearoa New Zealand in 1769, European explorers and surveyors such as Charles Douglas and Edward Sealy continued the Colonial project of integrating the wilderness of Aotearoa into the British empire (Douglas and Pascoe 2000). As part of their work, these men (and they were all men, I discuss the greater presence of women in mountaineering later) would carry their survey equipment through some of Aotearoa New Zealand's most rugged terrain to set up a "trig station" on a summit to map the surrounding area (ibid). When this was not possible, sketches would be made, or views taken in to later inform drawings. The changeable weather and frequent storms of the Southern Alps made this a challenging job (ibid). Through the creation of maps and naming of key features, this work served to further the colonial mapping of the landscape, incorporating it into the British empire by making sense of it through science.

This work was justified as the rational progress of civilization (Claeys 2000). Through popular interpretations of Darwin's theory of evolution, the British who emigrated to Aotearoa New Zealand saw themselves, and therefore their work, as more evolutionally developed than Māori (Paul 2003). This position justified the colonial process, such as re-naming and erasing of te ao Māori or the Māori world, as helping the growth of Civilization. Though there are differences between iwi, the Māori world consists of Mauri, which can be incompletely translated as lifeforce (Henare 2001). All-natural phenomena, from the water to the mist and rocks have mauri and therefore te ao Māori or the Māori world is comprised of deep interconnection between human and nonhuman existence. Māori relationships to the mountains are complex and form variously. For example, Aoraki/Mt Cook is the physical manifestation of Ngāi Tahu whakapapa or ancestry and as such is the root of their claim as

tangata whenua or people of the land⁹. As the New Zealand historian Giselle Byrnes describes, the idealized hierarchy of European civilization above te ao Māori was a colonial tool to “domesticate, tame and ultimately possess the new environment” (Byrnes 1998, 22). Highlighting the assumed power of this mode, she quotes the explorer and surveyor Charles Douglas writing “It has always been an acknowledged right of an explorer to affix names to places” (Douglas 1860, 23).

While fulfilling this colonial role, these men also developed their own personal relationships with the Southern Alps. As Douglas himself wrote in his Waitatoto-Copland Notebook:

Fools say that knowledge can only be acquired from books...and call me a fool and even worse for wasting my time in mountain solitudes...I have now been wandering about the uninhabited parts of New Zealand for over five and thirty years always finding something in nature new to me and the world (Douglas and Pascoe 2000, 266).

In Douglas’s relationship with the mountains, the growth of the colonial identity and its focus on physical activity and wilderness can already be seen. At the same time, he also shows the inclusion of the scientific project that predated and then joined forces with mountaineering in Aotearoa New Zealand.

In 1882, the Irish Reverend William Green brought recreational mountaineering to Aotearoa New Zealand. Two Swiss guides, Ulrich Kaufmann and Emil Boss, accompanied Green. That year they attempted to make the first ascent of Aoraki/Mt Cook, however, the group, ascending via the Linda Glacier (now the standard route) turned back only 60 meters from the summit (Green 1883). The unfortunate trio spent a night standing on a ledge, reciting hymns to stop themselves from falling asleep and thus falling off the mountain (Green 1883). The first ascent was later made in 1894 by Tom Fyfe, George Graham and Jack Clarke, self-taught Pākehā who climbed on their days off work. To this day, my participants tend to disparage guided climbers in favour of the self-reliant amateur, just getting out and doing it. After hearing that American climber Edward Fitzgerald and his well-known guide, Matthais

⁹ For further reading see Durie 1998; Panelli and Tipa 2007; Henare 2001.

Zubriggen, had arrived in the country to claim the first ascent, Fyfe and Company decided to make another attempt (Haynes 1994). Climbing the North Ridge (that did not see a second ascent until 1955), the group displayed excellent rock climbing abilities and summited at 1:30pm, Christmas day (ibid). The first ascent of Aoraki/Mt Cook being completed by Pākehā was an important moment in the developing of the Aotearoa New Zealand mountaineering culture that my participants and I embody (Davidson 2006). Where the work of surveyors such as Charles Douglas was in service of the British Empire, the beating of the international mountaineers by self-taught colonials was a symbolic victory (Haynes 1994). While not all commentators of the time agreed, this act paved the way for an Aotearoa New Zealand mountaineering culture. It demonstrated what Davidson (2006) and the Religious Studies scholar Lisa Eyre (2012) identify as the colonial pioneering spirit. Comprised of a self-reliance, ingenuity and hardiness in dealing with the rugged and remote Southern Alps, it was encapsulated by Fyfe and Company's ascent of the grandest mountaineering prize in the country (Eyre 2012). As Fyfe himself was quoted, "one would indeed need to be phlegmatic to not get a little excited on such an occasion" (Wilson 1968, 99).

During this period, before the inter-war boom of amateur mountaineering, it is necessary to mention the climbs of the Australian Freda Du Faur. Similar to Freshfield and D'Angeville, Du Faur's exploits have been quietened under the dominant masculinity of mountaineering. Her story not only highlights the presence of women throughout mountaineering history, but also the trials of a woman to forge her own path in the Southern Alps, outside the defined Victorian mountaineering gender roles (Irwin 2000). Du Faur not only wore a skirt, knickerbockers and long puttees (gaiters) to climb, but was also required by the Victorian gender roles to take a second guide in the role of a chaperone (Langton 1996). Nonetheless she proceeded to define a new progression of mountaineering in Aotearoa New Zealand from 1906 to 1913, as both a woman and a talented mountaineer. With guide and chaperone Peter and Alex Graham, she completed the first female ascent of Aoraki/Mt Cook, the first Grand Traverse of the one kilometer summit ridgeline of the same peak, as well as five first ascents and two second ascents covering all the major peaks (O'Donnell 1981). As Du Faur herself is quoted after her ascent of Aoraki/Mt Cook in 1910: "I was the first unmarried woman...to climb in Aotearoa New Zealand, and in consequence I received all the hard knocks until one

day when I awoke more or less famous in the mountaineering world, after which I could and did do exactly as seemed best to me" (Sim 1938, 388).

Du Faur's story is important as it challenges and subverts the dominant physical Victorian masculinity that was brought to the Southern Alps. By constructing the mountains as a masculine space in which men define themselves through bravery, parameters are set defining who and how mountaineers should experience the mountains (Ortner 1999). As I explore in the next two chapters, the experience of actually climbing in the mountains is always on the level of personal relationship, as evident in Du Faur's writing of "the passionate longing to touch those shining-snows, to climb to their heights in silence and solitude, and feel myself one with the mighty forces around me" (Du Faur 1915, 27). What these parameters do though, is to discourage those who do not fit within them from mountaineering, and even when a talented climber such as Du Faur achieves what she did, her ascents are largely silenced by the dominant masculine narrative.

Expanding on Ortner's (1997) take on masculinity in the mountains, the anthropologist Susan Frohlick (1999) writes that masculinity is fluid. Influenced by Feminist scholar, Judith Butler, she describes masculinity as always being enacted and performed in varying ways and contexts (ibid, 2). This is not only for male climbers, but also for female and LGBTQIA+ climbers (the latter including Du Faur). This construction of the mountains-as-masculine therefore creates a pressure for all climbers to conform to its ideals, such as stoicism. Those who rebel can never be fully accepted. This was true for Du Faur and her companion Muriel 'Minnie' Cadogan. Their plans for climbing in the Greater Ranges were cut short by World War I and by Cadogan's family's forcible separation of the pair while living in England (Irwin 2000). Cadogan committed suicide in June 1929 and Du Faur followed five years later in Sydney, in September 1935 (Irwin 2000). Her grave lay unmarked until December 2006, when a group of New Zealand climbers installed a memorial plaque on Greywacke stone from the area in which Du Faur had climbed (Monument Australia 2010).

In the inter-war period amateur mountaineering in Aotearoa New Zealand started to boom (Davidson 2006). There were various factors that contributed to this popularity, such as the widespread acceptance of the crampon that allowed amateur Pākehā climbers to explore

remote ranges without the services of a guide cutting steps, government promotion of outdoor recreation, and a desire to temporarily escape an increasingly bureaucratic, rationalized society (Davidson 2002). Davidson (2006) focuses on the Pākehā attempt to build a national identity. As Eyre (2012) writes, building relationships with the unique landscapes of Aotearoa New Zealand was a way for Pākehā to try legitimate their belonging in Aotearoa New Zealand. Mountaineering was one way to connect with those landscapes, and many young Pākehā “headed for the hills”, forming tramping and alpine clubs that helped mountaineers explore the remote regions of the Southern Alps (Davidson 2006, 87). The popularization of mountaineering in the Southern Alps culminated with Sir Edmund Hillary’s first ascent of Everest with Tenzing Norgay in 1954 (Morin, Longhurst, Johnston 2001). Hillary’s beginnings as a beekeeper and his rugged charisma made him an ideal representation of the Aotearoa New Zealand mountaineering culture and wider colonial mythologies. He received international recognition and was knighted by the Queen, becoming the “national archetypal hero” of Aotearoa New Zealand. In 1992, his face replaced the Queen’s on the five dollar note (Morin, Longhurst, Johnston 2001). While Hillary had contributed to local mountaineering by completing the first ascent of the South East ridge of Aoraki/Mt Cook, his time on Everest created an international regard for Aotearoa New Zealand mountaineers and thus gave it a form of maturity (Morin, Longhurst, Johnston 2001).

Modern Mountaineering in the Southern Alps

Hillary’s ascent of Mt Everest marks a shift in mountaineering in the Southern Alps. The culture of conquering peaks continued, especially through Aotearoa New Zealand mountaineers travelling to the Himalaya. Back at home, there was an increased progression of technical difficulty. Following the progression seen in Europe, hard technical ascents were a way to climb new terrain on a peak that had already been ascended (Hansen 2013). Aesthetics became focused on a striking line of possible ascent up a mountain, rather than the entire peak itself (McDonald 2017). Davidson (2006) identifies the 1970’s as the period in which there was a specific change of attitude towards risky ascents and new climbs. As one of her climbing informants is quoted, “some of it was new equipment...but...we tried to do things that were probably beyond what we should have been doing...but we just kept on going

[and] got away with it" (Davidson 2006, 283). One of the key climbers who pushed those boundaries is Bill Denz, with whom we started the chapter. As Maxim (2011) describes in his biography of Denz, *Bold Beyond Belief*, Denz was a visionary, complex, and committed character. While in his later years, Denz climbed extensively throughout the world's greater ranges¹⁰, he first made a name for himself on the storied slopes of Aoraki/Mt Cook (ibid). From 1971 to 1983 Bill Denz made the first solo ascents of the Grand Traverse of Aoraki/Mt Cook, Mt Tasman, soloed the South face and Caroline Face of Aoraki/Mt Cook, and made the first ascent of the supremely technical Balfour Face of Mt Tasman (ibid). For Denz, only the most technically difficult climb would reduce him to the standard slow pace of mountaineering. Anything else would be confidently and with speed soloed in a day. Through the adoption of a fast and light style, Denz was able to continue a progression of mountaineering on the same peaks. Mountaineering in the upper echelon became a game of style and ethics – *how* you climbed was now as important as *what* you climbed. Through the 1970's and 80's the push for further progression led Aotearoa New Zealand climbers to a new style: winter ascents of steeper and steeper faces (ibid). Bill Denz was again at the head of this movement and made the pinnacle ascent of that style in the winter of 1983, climbing the South Face of Sabre Peak with Kim Logan in the Darrans mountains, near Fiordland (ibid). They named their route Hongi's Track, which consisted of a crux of 80 degree ice through a band of overhangs. It was climbed after "twelve hours on the face and two biv[ouacs] in a storm on the descent" (Jefferies n.d.). The fieldwork winter climb of Mt Armstrong that Sam and I completed is a continuation of that same style.

For my participants, the shift of eras between Hillary and Denz marks the difference between the term mountaineering and alpinism. Mountaineering is seen as defining the technically easier climbing, such as Hillary's ascent of Mt Everest, whereas Alpinism or Alpine style represents the harder, technical climbing, and encapsulates the ethics of style such as fast and light. Denz's solos and winter ascents were a perfect example of fast and light alpinism, where Denz climbed quickly with minimal gear and balanced the danger of doing so with the increased speed of ascent (Maxim 2011). It requires an intense degree of personal mastery

¹⁰ He almost made the first solo ascent of Cerro Torre after enduring six days of storms in a coffin-like ice bivouac high on the mountain

of fear and of your body, while also needing a technical mastery of the modern climbing technology of ice tools and crampons. While soloing progresses these aspects, it further entrenches the hyper-masculinity of mountaineering by an increased focus on a solitary hero figure. As the technical difficulty of new ascents in the Southern Alps increased higher and higher, the mountaineering community remained male-dominated. In 1985, the Dunedin Pākehā Carole Nash attempted to create a better learning environment for women by forming the climbing network, Women Climbing (Nash 1985). Taking inspiration from the Feminist movement and a touring American mountaineer, Arlene Blum, Nash's vision was to better enable women "to climb safely in the mountain with whoever [male or female] we want" (Nash 1985, 41). Pat Deavoll, a leading Pākehā Alpinist writes in her memoir of climbing through the 1980's to the early 2000s, *Wind From a Distant Summit*, about the pressure she felt to keep up with her male companions (Deavoll 2011). Climbing in an all-male environment, even if many of her climbing partners were accommodating, drove her to the height of Aotearoa New Zealand mountaineering, yet left her grasping for acceptance. Even after completing a solo first ascent of a 6000m summit in the Karakoram, she still experienced the pressure of having to mold herself to the masculine ideals that the community demanded (Deavoll 2011). Lydia Bradey, the first woman and only New Zealander to date to make a supplemental oxygen-free ascent of Mount Everest writes similarly of the drive to prove herself in the mountaineering world (Fearnley 2015).

With all of these new opportunities, alpine-style mountaineering continues to be progressed in the Southern Alps today. One of my participants, Jack, is one of the best New Zealand Alpinists of this style. When taking a break from writing this thesis on January the 15th, 2020, I scrolled through Facebook to see a post from Jack. His sun-tanned face grinned in the photo as swirl of icy white peaks and glaciers spread out below him and his climbing partner. Reading the description I was engrossed: "The ridge line from the Low to High peak [of Aoraki/Mt Cook] is Aotearoa New Zealand's highest and most exposed mile providing the most spectacular and famous traverse in the Southern Alps" (New Zealand Alpine Team, Facebook 2020). The day before, Jack and his female climbing partner had completed a Grand Traverse of Aoraki/Mt Cook in 23 hours and 47 minutes of continuous climbing and running. Following the ethics of speed ascents developed in Europe, they started and finished at the same point and were self-sufficient, carrying the minimal amount of gear, food and clothing on their

mission. Starting at midnight, the pair “took advantage of [the] perfect weather and climbed the NW Couloir on Low peak and completed the [Grand Traverse of Aoraki/Mt Cook] in amazing conditions” (ibid). This ascent is the fastest known time for a Grand Traverse of Aoraki/Mt Cook and the first to complete a full loop, as per the ethics of speed ascents.

When Jack completed his record Grand Traverse of Aoraki/Mt Cook, the mountain he climbed on was composed of all of the aforementioned histories. The mountain epistemology that Jack has learnt and built is founded upon the ascents of Fyfe, Du Faur, Denz and even Whymper. It traces back through the development of winter ascents, face climbing, the popularization of amateur climbing in Aotearoa New Zealand and the topographical mapping of Douglas, all the way to the scientific revolution and its new conception of the natural world. There is a vast body of mountaineering literature that Jack understands. Through this literature and history, he has developed his own position using the medium of his alpine-style climbs. He sees fast and light alpinism as a way to achieve a “purer” interaction with the mountain. After reading the post, I immediately sent Jack a message to congratulate him. After our interviews in August, I knew that this achievement was exactly what he strove to find in the mountains. As he told during our interview in Queenstown, “to me it’s the overall satisfaction that you get afterwards...doing something big, tough and long...is not really that fun or sweet in the moment, but it sustains you long term.” I could picture him, the day after, physically drained and yet overflowing with that deep contentment a day like that in the mountains can bring. From what I had learnt of him, he was likely dreaming about new possibilities already.

Conclusion

While the lived experience of climbing is the direct mediator, these histories shape the epistemologies and theoretical resources by which Jack, my participants and I make sense of the mountains environment and mountaineering itself. The scientific revolution that led to a new vision of the mountains; the Victorian masculinity that has become the dominant culture and narrative of the mountaineering community, these threads are used to construct the mountain environment and make sense of it (Shapin 2018; Reidy 2015). As the society

surrounding mountaineers changes, so too does the epistemological construction of the Southern Alps. Compared to Hillary's triumphant "we knocked the bugger off", Jack enjoys talking about 'breathing in' the mountain on longer trips (an experience that I cover in the third chapter) and how just interacting with the mountain is a reward in itself – yet at the same time he is driven by records and competition (Hillary 1975, 162). As I explore through the next two chapters, the more time you spend in the mountains, the more this abstract knowledge is complemented by, and ultimately contested by the sensorial, embodied knowledge of the experienced mountaineer. As every mountaineer mentioned in this chapter - from Fyfe, Du Faur, to Denz or Deavoll, understands, the physical movement of climbing and being present in the mountain environment creates a unique mediation of experience. The epistemological worlds that my participants carry with them as they climb, are then both continuously composing mountain environments and in turn acted upon by the mountain itself. That experience forms a very real and personal relationship between each climber and the Southern Alps as they "climb their heights in silence and solitude and... feel at one with the mighty forces around them" (Du Faur 1915, 27).

Chapter Two

Climbing in the Mountains: Practical Mastery through Embodied Knowledge

The ridge beneath my feet rose straight out of the river. Like a blade covered by mossy beech forest it stood above the Haast Highway. In front of me, Sam was climbing consistently. He was like a metronome dictated by the balance of his physical strength and the mountain terrain. Dry beech leaves scrunched under his boots. He breathed rhythmically, climbing instinctively at a speed just below his aerobic threshold, a pace he could sustain for the entirety of our climb. Every so often he shifted his over-burdened pack, giving a moment's respite to tired shoulders or adjusting the balance between his two shoulder straps.

Our conversation had gradually died. While we were both moving at the same pace, we each tended to choose slightly varied routes within the track. Sam took a more direct, efficiency-through strength line: tackling steep steps and convoluted root structures head on. I chose the path of least resistance. It allowed me to spend less energy, though I needed to increase my speed whenever I chose a longer route than Sam.

Korimako and miromiro sang above us in the trees. Though absorbed in the rhythm of walking, I heard their calls with a distinct clarity. My legs retained a light burning sensation as we steadily climbed. Only when I was forced to high-step powerfully under the weight of our climbing and avalanche safety gear did the burn intensify. From experience I knew that if I continued climbing at a medium intensity without any bigger steps, it would gradually subside back to its previous level – until the next big step. A biting, cold breeze swept through the forest. It highlighted the sweat built up against my pack and caused a shiver to run over my bare arms. The Beech trees started to grow shorter, thinned out and covered in a variety of mosses. The treeline had to be close. The ground underfoot transitioned to a mixture of loose,

yellow rock. Patches of snow, hidden from direct sunlight, started to appear. Leaving the forest, strands of tall golden tussock brushed against our bare legs as we moved higher and higher.

I spotted it first, a bright white pyramid poking out from behind the far ridge. Sam was sceptical, but as we gained a higher vantage point my guess was proven correct. “Oh...dear!” he exclaimed. There before us was Mt Brewster, heavily laden with a voluminous quantity of fresh snow. It looked high, dangerous and altogether rather unfeasible. We had spent the last few days checking the weather and avalanche forecasts religiously and debating various options while a storm hammered outside. We had surmised that Mt Brewster, due to its position further North and its aspect, was our best bet for safe travel; perhaps not. There was a large quantity of fresh snow sitting on the peak. It meant that storm slabs and point release avalanches would be a real threat, not to mention the arduous nature of wading through deep powder snow.

We continued to stare in agony for a few more moments, each assessing the risks and internally debating them. Then I shifted my gaze to the view around us. Taking a deep breath-in, somewhat consciously, I let it out slowly. Smiling for half a second, I readjusted: these are the mountains. I wanted to achieve something, but even if we did not, just being here would be worth it.

Sam seemed to reach a similar conclusion as he launched into volley of new ideas – “what if we get up early and tried to climb that point over there, what’s it called?” We resumed our climb, our voices mixing with the frozen gusts to be carried out over the dark beech canopy and towards the far snowy peaks.

As our experience above the Haast Highway highlights, mountaineering is an activity that teaches you to become attuned to your body and the environment around you. In the first chapter I explored the histories that influence and inform the mountain epistemologies of my participants. In the current chapter, I explore the movement of mountaineering itself to show how it not only constructs the mountaineer, but also simultaneously constructs the mountain. I begin with a discussion of Brenda Farnell’s (2012) theory of dynamic embodiment to show

how living knowledge is constantly being constructed and informed through movement. Then by analysing my fieldwork experience of mountaineering with my participants, I show that climbing builds embodied knowledge through all of the senses. The embodied knowledge helps the mountaineers progress in difficult terrain, while managing risk through their judgement. In practical mastery of mountaineering, my participants construct the mountain environment through their intimate connection.

Phenomenology in the Mountains

Theoretically, this chapter follows the scholarship of the Anthropologist of Dance and Movement Studies Brenda Farnell (2012) and her theory of dynamic embodiment. Farnell develops the theory from her mentor the anthropologist Drid Williams' (1990; 2004) concept of semasiology in which meaning is derived from human movement as "moving, signifying persons" (Farnell 2012, 10). It relies on the Philosopher of Science, Rom Harré's Causal Powers theory, which states that "embodied human agency [is] a *generative causal power to act*" grounded in our body's materiality (Farnell 2012, 2; Harré 1975; 1973; 1996). Movement is seen as the enaction of causal power (Farnell 2012). By positioning "moving and thinking through movement [as] foundational to being a body that is alive", Farnell's concept allows me to explore how the physical movement of mountaineering builds embodied knowledge (Farnell 2012, 2).

Farnell uses the British Anthropologist Tim Ingold in support of her theory, who writes that human activities "[bind] practice, representation, doing, thinking, talking and...show that everything takes place...on the move" (Ingold and Vergunst 2008, 3). The mountaineer climbing in the Southern Alps is not 'just' climbing, but instead is interweaving movement, thought, sensory information and technical knowledge, in the binding process that is human movement. Farnell elaborates that through movement, it is not a "mind thinking while a body experiences", but the person as a whole organism that experiences (Farnell 1996, 318). When climbing in the mountains the mountaineer's senses are then constantly interacting "in a practical engagement" with the mountain environment (Farnell 2012, 120). Consequently, a detailed sensory knowledge is embodied as the climber engages with the challenges of

mountaineering – from climbing ice, to rock climbing or rappelling as I discuss next. The knowledge is constantly being re-worked and deepened through the physical act of climbing – both derived from and in turn generating movement (Farnell 2012; 1996).

While Farnell uses Ingold to help develop her theory, the foundation can be found in the work of phenomenologists, tracing back to the German Philosopher, Edmund Husserl. Husserl initiates the phenomenological approach as a form of descriptive psychology in his 1900 work, *Logical Investigations* (Husserl 2001 [1900]). He views phenomenology as systematic inquiry into consciousness and the phenomena that appear in it (ibid). His approach attempts to break from the rationalist Greek theory that has dominated Western thought by opening the focus to include a person's lived experience (Husserl 1999). With Husserl's view, the intentionality of a person's consciousness can be investigated, without any rationalist reduction of scope (Husserl 2001 [1900]). While Husserl continues to develop his theory towards transcendental phenomenology, Martin Heidegger broadens the scope by insisting that consciousness is not the sole determinant of existence (Heidegger 2002). Through his work on being-in-the-world or *in-der-Welt-sein*, Heidegger offers a phenomenology that includes both conscious and peripheral phenomena (ibid).

Anthropologists have since applied phenomenology to enact a somatic turn within anthropology back to the body. Inspired by the works of the existential French phenomenologist Maurice Merleau-Ponty, scholars such as Drid Williams (1990; 2004), Michael Jackson (1989; 1996; 1983) and Thomas Csordas (1994; 1993) seek to bring a focus to the "body as our vehicle of being in the world" (Merleau-Ponty 1962 [1942], 82). By doing so, the first somatic turn challenges the philosophical dominance of Descartes. Through his 1641 *Meditations on First Philosophy*, Descartes popularized the concept of mind/body separation, in European thought (Descartes 1993 [1641]). In what became his most famous quote "I think, therefore I am", Descartes's dualism came to represent the superiority of the mind over the body (Descartes 1998 [1637], 18). His theory dismissed the body and its senses as a mere container of our consciousness (Farnell 2012). The body was then understood in the same terms as the mountains - a text to be read and dissected (Ansted 1863). As a consequence of that characterization, the vital role of our sensory perception was diminished in most philosophical writing about knowledge. Farnell's (2012; 2009; 1996) work constitutes

a second somatic turn in anthropology. It seeks to develop phenomenological anthropology past a focus solely on the body by seeing human movement as the foundation of our being-in-the-world (Farnell 2012). I use this approach in my analysis to draw attention to Mountaineering as an embodied practice that links the climber to the mountain in a reciprocal relationship.

The Embodied Knowledge of Mountaineering: Kinesthetic Intelligence in Ice Climbing

As I detailed in the vignette from the Mt Brewster track, mountaineering involves a variety of forms of movement. Here, I turn to an in-depth analysis of the technical realm of ice climbing to show how mountaineering knowledge is embodied through both kinesthetic intelligence and bodily inscription.

Three days before Sam and I set off for Haast Pass and Mt Brewster, we spent a day ice climbing at Wye Creek in the Remarkables. After ski touring over the Wye saddle and suffering from my lack of mountain fitness, Sam and I dropped into the Upper Wye Creek. After arranging our ice tools (modern ice axes, crampons, and a variety of safety equipment), we uncoiled the rope so that it would feed out smoothly. I threaded the rope through my belay device, used to catch the lead climber as he or she ascends vertically, placing a line of protection along their way. By looping the rope through the device, which was attached to my harness, Sam was now on belay. If anything happened and he fell, the protection and my rope handling would catch him. "Oh well, this looks easy" Sam grinned as he stepped onto the ice. We both laughed a little hesitantly, knowing all too well how looks can be deceiving in the mountains.

Hours later my calves were burning. I was on lead. I readjusted my cramponed feet, 'thack thack,' on the iridescent blue ice. With my two ice tools secure above me, and my other foot to balance, I kicked into the ice. Sam had finished his lead and I was now tackling the corner in front of us, placing protection as I went. Sam was below me securing the rope. The ice had become hard and old on this upper section. It resisted my attempts to securely lodge the front

points of my crampons on my boots. My supporting foot felt insecure, but I tried to remind myself that it was placed well, that I just needed to trust it. The first kick fractured the ice a little. Then I could feel the second kick sink in securely. While there was only an inch or so of the metal fang inside the ice, I could feel that it was a good placement. As I weighted it there was no side to side movement or crumbling and I could let my heel sink down to relax my burning calf. I sensed that my toes were becoming numb. It did not matter though; they could warm up when we were done climbing. As for my hands, I had purposefully changed into a new, dry pair of gloves at the start of the climb. Numbness in the hands is much more of an issue than in the feet.

Looking upwards, I freed my right ice tool by torqueing it side to side. Quickly scanning the ice, I located a small bump that would make a good next placement. Generating force from my shoulder, I lifted the ice tool up and back while eyeing the bulge. Then, contracting, I sent the tool forwards. Trying to keep the pick from swaying, I whipped my wrist forward at the last moment to sink the small, sharp head of the pick accurately into the top of the bulge. The reverberation of the blow travelled up my arm. It felt just right - not too jarring to indicate the ice was too hard and I needed more attempts, but not too soft either and likely to break. The sound it made was a good solid 'thunk', not a light 'ping' or a hollow 'thock'. These sonic differences might seem obscure, but through experience, they become engrained. Attention to sound allows climbers to move fluidly without inspecting each placement visually. You can ascend by listening and feeling the ice through the tools. The quality of my placement was confirmed as I weighted it, and finding it trustworthy, began to shift my feet up again. It was a very quiet afternoon and somewhere below I could hear Sam, cursing on a section of steep powder snow over blank rock.

As the vignette details, ice climbing requires the attention of various sensory modalities¹¹. The popular understanding is that humans have five senses (plus a mysterious sixth). The five senses idea originates from the theorizing of Aristotle (Matthen 2015). Modern scientists on the other hand suggest up to 21 different sensory modes (Matthen 2015). Some of these

¹¹ Listen to the podcast to experience and envisage some of these modalities, including the recorded soundscape made during the ice climbing recounted in this vignette.

'new' senses include interoception, the sense of the internal state of the body; thermoception to assess the temperature through our skin; proprioception as the awareness of our position through proprioceptors in our muscles, tendons and joints; and kinesthesia as the awareness of those muscles, tendons and joints in movement (Matthen 2015; Craig 2002). As the anthropologist Nadia Serematakis (1996) writes, these senses have always been with us. They have been cultivated in various ways throughout history but it is only now that they are scientifically recognized and labelled, that we single them out for individual analysis (Serematakis 1996).

If I analyze my foot placements in the ice, these various sensory modes become apparent. Firstly, I was balancing on my other foot while I kicked, which used my sense of equilibrioception (Pavan et al. 2015). Then as I drew my foot back and kicked, I was using both the sense of proprioception and kinesthesia. When I kicked my crampons into the ice, I was using my kinesthetic awareness to direct the metal fangs into the ice at the same point as my last strike, especially avoiding sending them into my other calf (putting holes through loose over-trousers is a common issue). The proprioception can be better seen through the more complex action of swinging my ice tool. Through the swinging movement, the ice tool becomes an extension of my arm as I maintain a kinesthetic awareness of its position and velocity through the forces in my hand, wrist and down into the shoulder. An experienced climber learns to swing the ice tool in the most energy efficient and productive way. Swinging requires the proprioception of the muscles around the shoulder joint and scapula to 'pack' the shoulders down and provide stability for the arm. The stability allows the swing to be generated with the least effort possible as the work is shared by more muscle groups. The complexity of movement is seen in the moment just before impact. At that point it is best to release that tension through the upper arm and shoulder to spare them the force of the impact. Only the wrist maintains tension to assure that the pick lands where planned and transfers its force into the ice. The more detailed instruction was actually given to me two days later when ice climbing with a retired mountain guide. Due to my already developed proprioceptive awareness of the shoulder through rock climbing, I was able to apply his technique and could feel the immediate increase in efficiency.

These sensory engagements not only enabled my movement, but also composed the terrain of our route in intimate new ways. As Jack told me in our second interview, mountaineering is all about efficiency. In the mountains, he said, speed is safety. The more time you spend exposed to the hazards of the mountain environment, the higher likelihood you have of something going wrong. While mountaineering also requires abstract knowledge of various systems and forces, it is the embodiment of knowledge that is key as it allows for greater speed of movement. These abstractions become real in movement. The texture, age, and quality of the ice is only known through these various senses interacting with each other. The ability to be an efficient mountaineer is therefore the sum of the embodied sensory memories of every mountaineering experience the climber has had (Serematakis 1996; Farnell 2012).

Farnell describes the sum of embodied sensory memories in her work on dance with the choreographer Robert Wood as kinesthetic intelligence – defined as the specific embodied knowledge of movement (Farnell and Wood 2017, 79). Compared to my ice climbing ability, an experienced mountaineer like Jack has a highly developed kinesthetic intelligence that allows him to climb with efficiency over steep alpine terrain. His embodied intelligence allows him to rely less on his analytic mind, to act more intuitively in relationship with the terrain and therefore to move with less effort (ibid). It was a point made clear to me by a friend I was boarding with during my fieldwork at the Remarkables Ice and Mixed. On the second night of the festival, he remarked to me that all the instructors (of whom Jack was one) would teach their courses ‘by the book’. They would instruct using the safest methods, whether it was climbing ice or mixed ice and rock routes. Then in the evenings, when they discussed their own climbing, these standards seemed to disappear. In his words they would “teach by the rules, then go off and do wild sh*t” in their own climbing. One might be tempted to read that this tendency to teach one thing and do another might be evidence of an overly conservative style of teaching. However, thinking through these different sensory engagements we might say that greater experience and skill allows experienced climbers to actually climb *different mountains* than beginner climbers because they move differently in that terrain. The section above highlights that ability of experienced mountaineers by showing how kinesthetic intelligence is living knowledge. Through their extensive mountaineering experiences, Jack and the other instructors have embodied such a large amount of kinesthetic knowledge that certain levels of climbing no longer need to be consciously thought about (ibid). They can, for

example, be comfortable climbing without a rope on 50-degree ice. Confidence then makes greater efficiency. Instead of taking an hour to lead a pitch, sort the rope and have the belayer follow, both climbers can pass through in a fraction of the time. A high level of kinesthetic intelligence is an essential skill on more complex and committing climbs.

Forming a Practical Mastery of Mountaineering: Risk and Judgement

As I analyzed at the start of the chapter, knowledge is alive and grows in dynamically embodied persons (Farnell 2012). Mountaineers like Jack and Sam are continuously growing their capability to manage the risk inherent in mountaineering. Mitigation from both embodied sensory memory and technical knowledge can be clearly seen in Sam's and my climb of Mt Armstrong. When we left Brewster Hut that morning, it was bitterly cold. The pastel-pink sunrise seemed frozen in the dawn. We could see the wind whipping up vortexes of snow on the sun-lit summit slopes and understood that even though we would be in the sun at that point, it would be just as cold. With our packs full of spare clothing, we left the hut trying to wear as little as possible. I was wearing thermal pants beneath a windproof over trouser, a thermal top beneath my raincoat and gloves, plus a beanie. Sam was wearing similar. Reaching the consistent snow line, we stopped to put on crampons and fill our bottles from a partially frozen stream. The icy water ran slowly down my throat and we shared some chocolate to chase it down. After climbing through a steeper section and avoiding any avalanche prone south eastern aspects, we were nearing the summit. We stopped in a sheltered lee to add our down jackets under our raincoats and zip up our hoods above our helmets then we moved on to the final slopes. The wind was terrific; picking up last night's fresh snow and blasting it against our faces. Though it continued to hammer us, we spent at least ten minutes on the summit soaking in the views and going through the last of the chocolate to keep us warm. Finally, beginning to shiver again, we turned back towards the glistening blue of the ocean, now visible behind the snowy mountains and descended towards the hut.

It is the culmination of the variously embodied knowledge, technical information, and the climber's judgement of both, that helps Sam and I to manage the potential of death in the

mountains. I need to begin by contextualizing the concept of risk in the mountains. Sam, Jack and other climbers I met during my fieldwork, all frame the “existential danger of placing the body in the vertical realm” through the concept of risk (Mendoza 2018, 26). As anthropologists Abramson and Fletcher write, risk is ever present as “every move in vertical [or steep] terrain has potential to preserve or kill the climber” (Abramson and Fletcher 2007, 6). In his *Risikogesellschaft*, translated as *Risk Society: Towards a New Modernity*, the German Sociologist, Ulrich Beck (1992) argues that modernity has increased hazards and insecurities due to technological and societal developments. Modern society, Beck argues, can be defined as a risk society due to the energy now devoted to risk management within Capitalism (Beck 1992). The word risk was originally associated with a defined probability of subsequent losses or gains, as seen in the work of the Economist Frank Knight (Knight 2012 [1957]). The risk that my participants and I now discuss is both what the Anthropologist Mary Douglas describes as a “decorative flourish on the word ‘danger’” and as the original meaning (Douglas 1992, 40). For example, in my fieldwork and personal climbing experience I have heard risk used as a replacement for danger, ‘well that was risky’. I have also seen it used more like the original term such as ‘that’s a pretty big risk to take’, denoting the probability of a bad outcome. For my thesis, I find that contextualizing the term and continuing to use it, does more justice to the role it plays in how my participants construct the mountain environment.

On that note, it is necessary to mention the popular risk management framework of subjective and objective hazards used by the mountaineers I met. These two categories come from the daring Austrian mountaineers, Emil and Otto Zsigmondy and their classic book, *Hazards in Mountaineering*, originally published as *Die Gefahren der Alpen, Praktische Winke für Bergsteiger (The Dangers of the Alps, Practical Hints for Climbers)* (Zsigmondy and Zsigmondy 1886). In it, these authors define subjective hazards as the risks within the mountain environment that are controllable, such as navigation and climbing errors. Objective hazards are defined as the uncontrollable risks of the mountain environment, such as avalanches and rockfalls. Subjective hazards are able to be controlled through the mountaineer’s embodied knowledge (Zsigmondy and Zsigmondy 1886). The divisions of course become blurred in practice, as objective hazards can be partially mitigated through a combination of technique and embodied knowledge. In the end though, objective hazards

are functions of the mountain's agency and are all too powerful and unpredictable to be fully managed. The effect is seen in the deaths of even the most experienced mountaineers and is the focus of my next chapter.

Throughout our climb of Mt Armstrong, Sam and I were consistently managing the very real subjective hazard of hypothermia through various actions. Firstly, there was the issue of clothing. Stepping outside the hut door to test the temperature, we were able to assess the conditions against the embodied sensory memory of previous experiences (Serematakis 1996). Through the thermoception (sense of temperature) through our skin, we were able to compare and contrast how cold we felt before climbing increased our core temperature, against how many layers of clothing we were currently wearing (Matthen 2015). Combining our technical knowledge of the wicking versus insulation properties of our clothing options, we were able to decide that a windproof raincoat over a light thermal layer would be ideal. It would hopefully strike the balance between not getting hypothermic but also avoiding the build-up of sweat. Our decision was proved correct that morning as we soon warmed to a manageable temperature, which we maintained for the next two hours without having to stop and lose time changing layers. The challenge was a well-loved pastime of Sam's. While his everyday clothing was eccentrically op-shopped, Sam's mountaineering layers and gear were carefully chosen and analyzed for their technical qualities and weight. Our brief and efficient layering debate that morning was an exercise of Sam's and my judgement. Through our time spent learning from more experienced mountaineers, reading books, articles, researching and buying clothing, we had gathered a large amount of technical knowledge. That knowledge had subsequently been discussed over various trips, debating the pros and cons of each item of clothing – merino vs synthetic, which shell brand had a better hood for helmets, which jacket would be the warmest when wet? In these discussions and the experiences that spurred them, Sam and I had made sense of the abstract knowledge we had gained against lived experience and sensorial information. Our correct decision that morning was a display of the judgement we had built through those experiences.

Another way Sam and I managed hypothermia through our judgement was by eating enough calories. As Jack said in our first interview, "calories are the currency of the mountains". Not only do they allow you to maintain your energy levels and strength in your muscles, but they

are also crucial in regulating your body's core temperature (Danzl and Pozos 1994). If Sam and I had not refuelled during the climb, our bodies would have become incapable of maintaining their warmth in the arctic temperatures, even though we were moving. Mountaineering is especially dangerous as the physical exertion and cold temperatures dull your appetite. If you do become hypothermic your body begins to shut down and you lose your sense of hunger as it redirects the remaining energy to vital functions (Danzl and Pozos 1994). As Sam had taught me, the best way to combat the onset of hypothermia is through sugar. Chocolate, jelly-snakes and soft lollies in fact make up the mountaineer's most effective remedy against the cold as they are calorie dense and easily digestible.

During the climb, I had to combine the use of interoception (the sense of your inner body state, or as Farnell would say, your inner kinesthetic sense) with abstract knowledge of how the body responds to hypothermia and exertion (Craig 2002). With the judgement I had gained from experience, I understood paradoxically that when I completely lost my sense of hunger, I needed to eat immediately. I found that Sam is very adept in his judgement of hypothermia, both for himself and for me. Through his personal preferences of very long days, tricky navigation and canyoning, he has a much more developed experience of hypothermia, which was embodied and remembered. It allows him to walk closer to that fine line of hypothermia, while maintaining a higher degree of safety. Our base of physical fitness also inscribed more resiliency through the storing of intra-muscle fat (House and Johnston 2014). As compared to an untrained individual, Sam's mountaineering body has learnt to store fat within the muscles to be accessed during climbing. He can then climb for longer periods of time without food and therefore carry less weight (ibid). In Jack's word, Sam has more calorie 'currency' stored within his mountaineering body.

The third modality we used to combat hypothermia was hydration. While sugar is the emergency go-to for hypothermia, drinking water throughout the climb is another necessary link to maintaining strength and endurance (ibid). In such cold conditions, our sense of thirst was extremely dulled. Acknowledging it through our experience, we made ourselves drink from the small icy stream. The issue with cold water is that it takes energy from the body to warm it up, before being absorbed. Experienced climbers do not eat snow or ice even when very dehydrated, as the energy expended to melt the snow/ice by the body, negates the

hydration received. Sam and I instead had a hot drink with breakfast and then drank only the minimum stream water necessary when we felt warm enough during our climb. By combining technical knowledge with embodied sensory information, we were able to judge our relative dehydration and each opportunity to drink against the risk of hypothermia.

As my discussion shows, Sam's and my climb of Mt Armstrong required a high level of judgement to manage the subjective hazards of the winter mountain environment. Drawing from the work of anthropologist, Marcos Mendoza (2018), it can be seen as a practical mastery of mountaineering. In his book, *The Patagonian Sublime: The Green Economy and Post-Neoliberal Politics*, Mendoza defines the concept of resolve as a "practical mastery that climbers cultivate to confront, adapt, and improvise within the uncertain conditions of the mountain environment" (ibid, 26). He identifies resolve as a key symbol of the mountaineer's identity, because it is only demonstrated through confronting the possibility of death (ibid). Here, I am choosing to use the practical mastery term as it focuses the concept on the mountaineer's practical engagement with the environment that I have explored. Through a depth of mountaineering experiences, Sam, Jack, and I, as dynamically embodied persons, have cultivated both a kinesthetic intelligence and a highly developed judgement of subjective risks. Combined, these two abilities allow us to act creatively, – to "adapt and improvise" with a practical mastery in the face of the risks of mountaineering (ibid, 26). The more experienced a mountaineer is, the more highly developed their capability becomes, to the point where danger can be detected on the subtlest levels (Crust, Swann, and Allen-Collinson 2016). Mountaineers call it a 'gut feeling' or a 'sixth sense'.

Looking through the analysis I have conducted throughout this chapter, it becomes clear that the 'sixth sense' ability is instead the pinnacle of judgement that any mountaineer strives for. As Crust, Swann, and Allen-Collinson, quote from their interview with a K2 expedition leader, gut feelings are "all those little...danger points that you recognise... subconsciously" (Crust, Swann, and Allen-Collinson 2016, 16). From my analysis it can be understood as the highly "attuned and responsive" senses, in conjunction with the vast store of experience-tested knowledge, of a "person acting, not a mind thinking, while the body experiences" (Mendoza 2018, 26; Farnell 1996, 318). In an environment that, as I fully explore in the next chapter, has

the real potential of death through the mountain's powerful agency, the practical mastery can help save the climber's life.

Conclusion

By climbing in the mountains, the mountaineers build an embodied knowledge through movement (Farnell 2012). That knowledge consists of a kinesthetic intelligence that allows the mountaineers to move efficiently through once difficult terrain (Farnell and Wood 2017; Lewis 2000). The mountaineers also develop their judgement by assessing technical, abstract knowledge against lived experience of climbing in the mountains. The culmination of these is a practical mastery that helps the mountaineers to manage subjective risks in the mountains (Mendoza 2018). As much as the mountains shape the climbers through diverse sensory experiences, the knowledge that is embodied also constructs the mountain environment for the climbers. Compared to a non-climber staring up at the mountains, the mountaineers instead see a rich environment full of possibilities of interaction, including its risks to be managed. Even between experienced mountaineers and novices, the practical mastery of the experienced climbers is such a deep sedimentation of lived experience that they are no longer climbing the same mountain. Analyzing mountaineering through phenomenology then realizes our constant engagement with the world through the senses. The practical mastery of an experienced mountaineer is a recognition of the fundamental unity of mind and body (Farnell 2012). Mountaineers can then take their expanded knowledge of the self into the rest of their lives. In that first interview with Jack, he mentioned that if he is not able to go into the mountains every few days, whether for a trip or a trail run, he feels out of balance. Mountaineering for him, is no longer a hobby that he 'just' does, instead mountaineering and the mountain itself have become a part of Jack through the knowledge he has embodied. As I discuss in the final chapter, that knowledge is also combined with the experience of the mountain's powerful agency, forming a deep, personal relationship between the mountaineer and the mountains.

Chapter Three

The Vital Agency of the Mountains

On the first day of my first fieldwork in Queenstown, Sam, in his typical fashion, did not want to waste a second on flat land. After hitchhiking into town, he suggested that we sneak in a quick ski tour on the Remarkables Ski Field. Heading for Doolans saddle, Sam took the lead. The sky was a great mass of dark, thick clouds swirling over the western mountains. We stopped to talk to a couple of fellow ski tourers who were coming down – the wind is crazy up there, they said. They had turned back before the saddle. Sam and I shared a glance. A few minutes later we were zigzagging up the steep slope and then it hit us like a jet engine. Funneled by the valley, the wind was constant, frozen and harsh. Stopping on the saddle, we had to fight to not be blown over the far side. My beanie was blown off my head into the Doolans valley. Huddled close to the ground, we removed our ski skins before escaping back down to the ski field. After our first day in Queenstown I was feeling shaken by the ferocity and the cold of the mountains. I had not been in the mountains since I started my Masters five months before, and it showed. That night, the mountains felt very harsh and removed from me, nothing like the relationship I have come to expect from years of experience. Sam, with his unshakable motivation, had to work hard to convince me to get up at 5am and go ice climbing at Wye Creek.

The next morning, we arrived at the base of the ski field slopes, beside the not yet opened café. I stood in my touring skis, wearing only long johns and a thin thermal layer to combat the negative temperatures. I looked to the Wye saddle high above the ski field and then to Sam, practically bouncing with stoke beside me. I shifted under the weight of my pack and smiled; this is going to hurt, I thought. My ski boots creaked, as the velvety skins slid up the frozen slope. I moved slowly up the mountain, grinding under the weight of ropes and the assorted ice climbing paraphernalia in my pack. At the saddle, last night's howling gale had left as quickly as it had come, leaving a basin of wind-scoured snow and a thin crust over

powder for us to clumsily ski over. Weighted with our packs and dealing with these tricky snow conditions, we fell multiple times. My legs burned and Sam giggled in his unrestrained way. When we reached the frozen lake, Sam was still optimistic. At least the ice should be in good condition with these temperatures, and the growing cloud cover will reduce some of the afternoon melt, Sam offered. As long as that storm does not come in early, I grinned as I stared up at the South Face of the Double Cone. Sam muttered something hopeful as he turned to climb the small ridge. We continued into the shadow of the mountain.

Everything that Sam and I did that day was an interaction with the various temporal forms of water that define the alpine mountain environment – snow and ice. Though there was not as much as Sam and I would have liked, the snow covering the mountain allowed us to ski tour over otherwise complex and rocky terrain. Even then, its composition changed throughout our journey. The howling gale from the night before had scoured certain slopes clean, leaving bare icy slopes that caused us much trouble. In Wye creek, that snow had been redeposited over the harder icy layer, melted a little, creating unfavorable skiing conditions. The ice we were seeking to climb was itself a product of that snow melting on steep faces and forming small water streams that froze, melted and re-froze multiple times. That process forms ice sheets, curtains and pillars of different textures and thicknesses. As we both experienced, each section of ice was slightly different, depending on the vagaries of the weather, from bullet hard to ideal ‘styrofoam’ textures. The variability of the mountain highlights the continual interaction of the mountain weather and geology - building layers, subtracting and reforming. In its consistent movement lies the foundation of the vitality that my participants sense in the mountains. The experience of that vitality then forms a relationship between my participants and the mountains – both constructing the mountain environment and the climbers themselves. Where the previous chapters have discussed my participants’ mountain epistemologies and the embodied movement of mountaineering, I now turn to the mountain environment itself. After locating debates on agency beyond the human in anthropology, I argue that it is in the interaction between the climber’s movement and the mountain’s vibrant matter that the mountain environment takes shape for Aotearoa New Zealand’s mountaineers.

The Concept of Agency in Anthropology: Human, Nonhuman, Beyond-the-Human

Notions of human agency in anthropology have a long and diverse history, which stem from the wider structure versus agency debates that permeated the growth of the social sciences. The founding of modern Anthropology in the 20th century began by focusing on the individual instead. As the anthropologist Keane Webb writes in his article, *Self-Interpretation, Agency, and the Objects of Anthropology: Reflections on a Genealogy*, one of anthropology's founders, the German-born, American Franz Boas emphasizes human agency by "focusing on the singular [person] as worthy of attention for [their] own sake" (Keane 2003, 225). His work in the late 19th and early 20th century predisposed anthropology to be anti-foundationalist and thus allowed for human agency (ibid).

Anthropologists then took up the question of structure and agency. While early anthropologists were concerned to understand the ways social and cultural structures shaped human life, later scholars turned towards the kinds of agency individuals had to work with within structures or had to produce themselves. Led by Victor Turner, Clifford Geertz and Mary Douglas, anthropology gave human agency a central role as a kind of self-interpretation people made within the structures of their culture (ibid, 235). Through the 1960's, 1970's and 1980s anthropologists took varying approaches to agency, such as Sherry Ortner (1984) viewing it as a form of reflexive social activity and the Marxian anthropologists Sidney Mintz (1986) focusing on the modes of production in his insightful book, *Sweetness and Power: The Place of Sugar in Modern History*. As the anthropologist Webb Keane writes, conceptions of human agency in modern anthropology fluctuate between placing agency on the individual, such as Lila Abu-Lughod's (1991) *Writing against Culture*, or on the collective, as in Akhil Gupta and James Ferguson's (1992) *Beyond Culture: Space, Identity, and the Politics of Difference* (Keane 2003)¹². These studies situate individuals working within and against the

¹² Using Foucault's work, the underlying assumption of agency as a Western concept has also been critiqued by Anthropologists such as Saba Mahmood (2005). In her book, *Politics of Piety: The Islamic Revival and the Feminist Subject*, she writes of an agency that is removed from emancipatory politics and submission or resistance (Mahmood 2005). Instead, influenced by the Feminist scholar Judith Butler, she locates agency as an ethical formation within power structures, dealing more with the Islamic concept of responsibility than a Western free will (Mahmood 2005).

structures they live in. The French philosopher Michel Foucault has also been influential for the concept of agency in anthropology, seeing it as a minimal freedom under authoritative power structures (Mahmood 2005). Jean-Paul Sartre similarly describes freedom as the “small movement which makes...a totally conditioned social being, someone who does not render back completely what [their] conditioning has given [them]” (Sartre 2009, 80). This sketch of the genealogy of ideas of human agency in anthropology is useful, but for the purposes of my thesis, I want to highlight how for much of the history of the debate, agency has been a capacity ascribed to humans rather than nonhumans.¹³ Indeed, the fact that agency is often understood as a distinctly human capacity has marked the question of human capacity and character of human abilities to act as one of the central debates within the discipline.

In recent decades there has been a proliferation of scholars seeking to locate agency beyond the human¹⁴. Here scholars seek to “de-centre” the human and consider the way that nonhuman others—spirits, trees, rocks, animals—have the capacity to act of their own wills. Mountaineering offers a unique vantage point from which to consider nonhuman agency. To outline the vital agency of the mountains my participants feel, I begin with the work of the French Anthropologist Phillipe Descola (1996; 2013; 2014). Through his fieldwork with the Achuar people in the Ecuadorian Amazon, Descola learnt that “the notion of nature and culture was absolutely senseless to make sense of what these people were doing when [they were] interacting with the nonhumans around them” (Descola and Latour 2013, 16:52-17:03). He defines Nature as a term that is created only in contrast to human work and activities (Descola and Latour 2013). He offers four ontologies, of animism, totemism, naturalism and analogism, by which to understand humans’ relations with the world around them. In her insightful book, *Do Glaciers Listen? Local Knowledge, Colonial Encounter and Social Imagination*, Canadian Anthropologist Julie Cruikshank writes of the pre-industrial European relationship to the world around them that was more similar to the Achuar Descola describes (Cruikshank 2010). Referencing Elizabeth Povinelli (1995), she states that “a country that

¹³ For mountaineering literature examples, see the Influential American Mountaineer Steve House on climbing and anarchy (House 2007), Mark Twight’s (2002) *Kiss or Kill: Confessions of a Serial Climber*, or philosophy of Polish Voytek Kurtyka (McDonald 2017).

¹⁴ For example, anthropologist of Art Alfred Gell (1998) defined material objects of art as social agents. Social Anthropologist Heonik Kwon has written about the agency of the dead, of the ghosts of those who died an unjust death (*chet can*) in Vietnam as agentive “invisible neighbours” (Kwon 2006, 86). In Aotearoa New Zealand, Manuka Henare (2018) has written of the agency of Māori taonga or treasures as physical objects.

listens” was present in Europe before the industrial and scientific revolutions affected people’s lives, beliefs and ultimately language (Cruikshank 2010). Now “the very conditions of the Western material and cultural world are underpinned by language that rejects [the] possibility” that “rocks, mountains and other landscape features, like glaciers, might listen” (Cruikshank 2010, 4). As De la Cadena (2018) writes of in her book, *A World of Many Worlds*, there is a great diversity of ontologies beside the Western industrial one. In the Peruvian Andes she learnt that a mountain is a being and that animals in the Paraguay forests are “spirit masters of their own world” (de la Cadena and Blaser 2018, 2). Furthermore, my inspiration for the podcast, Steven Feld considers that he made his *Voices of the Rainforest* recordings in collaboration with the Bosavi rainforest as the forest (1991b; 2001). The anthropologist Charles Varela (2009) traces one of the main causes of the removal of nonhuman agency in European thought and language to the misconstruing of Isaac Newton’s First Law of Inertia. The law states that an object remains at rest or in steady motion, unless acted upon by an external force (Earman and Friedman 1973). Varela writes that it was mis-interpreted to mean that material objects are inert and therefore have no agency of their own, thus construing the natural world as devoid of causal powers (Varela 2009).

In his book, *How Forests Think*, Eduardo Kohn attempts to combat the rejection of nonhuman agency within Western academia by discussing how nonhuman agents are able to use semiosis, both communicating with other nonhumans and humans (Kohn 2013). Working in the same district of the Amazon as Descola, Kohn states that the forest, or even a mountain or a lake, has a semiotic network (Kohn 2013). The limitation though, that Descola points out, is that Kohn’s focus on semiosis-capable agents as *selves*, “conflates agency, thought and semiosis” and “leaves a great many nonhumans unaccounted for” (Descola 2014, 271). A semiotic network does not account for the agency of the alpine mountain environment, where a vast majority of the interaction is not with other lifeforms, or *selves*. Instead as Descola continues, “the stones upon which I stumble ‘do things’ in the world” (Descola 2014, 271). Here is where I want to take a separate path from the animate ontologies of Descola and De la Cadena, to instead focus on the mountain’s interaction of geology, weather and its constantly shifting world.

Looking at Varela's interpretation of Newton's first Law, he highlights that the Law states that objects *continue* to move under their own power, unless acted upon by an outside force (Varela 2009; Farnell 2012). All matter therefore has the causal power to act within itself (Varela 2009). Complementing and expanding greatly on Varela's interpretation is the work of Jane Bennett (2010), specifically in her book, *Vibrant Matter: A Political Ecology of Things*. She writes of the vibrancy of matter as the "capacity of things not only to impede or block the will...of humans, but also to act as quasi agents or forces with trajectories, propensities or tendencies of their own" (Bennett 2010, viii)¹⁵. When the seemingly 'innate' matter of the mountains is viewed with Bennett's vibrancy in mind, the vitality and 'aliveness' that my participants feel becomes apparent as a kind of agency of the mountain. The mountain's weather and geology are thus vital agents. While this could be considered as an ontological claim, I leave the larger debates surrounding the limits of nonhuman agency open and focus on the relationship between the agentive mountain and mountaineer. I want to consider how the snow that my participants wade through cursing, ski over easily, or how the cracks in the rock that climbers jam their fingertips into, are all a kind of engagement with a vibrant geological and meteorological matter. The scale and vertical relief of the mountains mean that the vibrancy of its matter can manifest in the deadly fluxes of the mountain, such as avalanches, rockfall, and extreme weather events. As I explore, the vitality of the mountains is a paradoxical experience for mountaineers. It draws them to climb and forms a personal relationship through their experience of the mountain's vibrancy, yet, at the same time could also end their life.

The Vital Force of the Mountains: Weather and Geology

When my wife, Coraline, talked of her relationship with the mountains, she said that "even how small I am compared to them, that's where I feel like I belong. Because of their strength and the soul they have". Likewise, Sam talked passionately of the "overwhelming evidence of

¹⁵ Archaeologist WH Walker provides a similar definition. He labels Object agency as the "causal consequences objects...have on the course of human activity as well as the performance characteristics of material things (e.g. thermal shock resistance of pottery)" (Brown and Walker 2008, 298).

nonhuman agency” in the mountains¹⁶. Their “sheer beauty” transcends his daily life and value systems. To comprehend the vital forces of the mountains that are so meaningful and important to Coraline and Sam, along with all my other participants, one must understand the symbiotic nature of the mountain’s geology and its weather. On my first climb of the Remarkables Ice and Mixed Festival in August 2019, the interaction of these two features was easily seen. At 5:30am on a Queenstown winter’s morning, by the lake, everything was quiet. The lack of stars suggested clouds above, and no leaves moved on the trees. I saw a van pull up under the streetlamp and idle, conspicuous in the still morning. I grabbed my pack and headed out the door. Mark greeted me sleepily as he polished off a pie brought from a petrol station on the way. We had met at the festival social evening ten hours earlier. Soon, we were chugging up the switchbacks to the Remarkable’s Ski Field, under the bright waxy light of a full moon. Mark swigged coffee from a thermos cup and shifted down a gear as we discussed the forecast. Contrary to the quiet lakeside morning, we knew that high on the Remarkables, the wind was howling and redistributing the freshly fallen snow. Knowing that the temperature drops roughly one-degree Celsius per 100 metres of altitude gain, it would be well in the negatives. Any precipitation that fell would fall as snow and the moisture-laden wind itself would be forming rime ice as it impacted the West face, covering the rock. Soon enough, that same process would form on our jackets and faces. Once at the base of the ski field, prepared, we started walking and chatting. We learnt about each other as various stories spilled out and helped fill the time as we approached the West Face. Mark was curious about my thesis and we soon fell into discussing the winter mountain environment. “It’s such a changeable environment” he offered. “There’s all of these shifting, temporary mediums that we come to climb. Even when you climb, it can be changing, snow drift pouring down a gully, the sun melting the ice or a big storm breaking and just dumping on your head”. We both grinned as we separately recalled past experiences. Our conversation fell silent as we continued walking higher. Nearing the ridge, we could hear the wind roaring and I made sure that my multiple hood layers were zipped tight.

¹⁶ A curated experience, including both of these quotes can be found in the immersive podcast component of this thesis.

The extreme difference in weather, from the house Mark picked me up from, to the West Face of the Remarkables is due to the interaction of both geology and weather. The Remarkables themselves are part of the Southern Alps, which are one of the fastest growing mountain ranges in the world, rising by 11 centimetres each year (Ballance and Cotterall 2017). Their growth is due to the up thrust of the Australian plate above the Pacific plate. At the same time, due to a combination of the fractured base rock type of the Southern Alps - called Greywacke - and the changeable weather of the South Pacific, they have such a high rate of decay that the net result is a very small increase in height each year (Adams 1980; Nathan 2006). The instability of Greywacke is referred to affectionately by climbers as 'choss' or 'weetbix' – in reference to its physical appearance of fractured, loose blocks. The large vertical relief of mountains amplifies and attracts extreme weather, which in Aotearoa New Zealand is frequent and ferocious. The Remarkable range culminates at 2319 metres (Land Information New Zealand n.d.) and the route Mark and I planned to climb began around 2000 metres. Sixteen hundred metres above Queenstown on the mountain was a different world.

As I discussed earlier, according to Bennett's definition, all matter has its own vibrancy in its capacity to block or impede humans (Bennett 2010, viii). Yet as the Remarkables, along with the entire chain of the Southern Alps, demonstrate, that vital capacity also acts upon other matter, such as the weather. As the anthropologist Tim Ingold discusses, the reality of weather as a material force has been distanced from academic thought by equating the "solidity of things with their materiality" (Ingold 2011, 138). Through that error, we have "contrived to dematerialize the medium in which [we] are primordially immersed" (ibid, 138). The wind then becomes a "semi-mythical experience, we can feel it, but we cannot place it, we cannot locate its materiality" (ibid, 138). If we pay attention, the interaction of the geology and weather can remind us of the powerful materiality that is constantly shaping the mountain environment.

The same storm process that was hammering the Remarkables that day had first impacted the West Coast of the South Island. In a vibrant cycle that continues to shape the island, rain falling on the Western side of the Main Divide becomes a mighty torrent, carving valleys. At higher altitudes, rain falls as snow. It melts to feed the rivers, avalanches to destroy forests and landing on the high glaciers, slowly compacts under the weight of new snow to form

glacial ice within several years. Glaciers themselves are frozen rivers, slowly carving out the valley floor and literally grinding the bedrock to flour which creates the vivid blue colour of the glacial lakes in the Aoraki/Mt Cook region (Takamatsu et al. 2010). As the water permeates between the rocks, the freeze-thaw cycle pushes rock out from the cliffs. When the afternoon sun returns, these are loosened as the ice melts and fall out. The pressure changes in the air from these storms also creates the wind that sculpts the snow, forms wind-slab avalanches and tears loose rocks from the cliffs - even mountain huts, as the unfortunate occupants of the original Barron Saddle hut experienced on the 30th of January 1977 (Whanganui Chronicle 2017). This hut was nestled on a saddle right beside the main divide in the Aoraki/Mt Cook National Park. In a display of the true materiality of the wind in the Southern Alps, gusts exceeding 300 kilometres per hour ripped the hut off of its foundations and over the saddle. It was found deposited 1000 metres below, its occupants dead on impact (ibid). I have spent time there myself in the rebuilt hut, sitting transfixed watching clouds appear out of thin air as the wind hit the divide, tumbling out over the Mackenzie basin. From floods, avalanches, rock avalanches, wind and earthquakes, many huts in the Southern Alps have likewise been destroyed, some multiple times. Modern alpine huts now feature industrial strength cable strapping that is bolted into the rock.

Mountaineering can be described as the interaction of the climber with these shifting material mediums of the weather and what the psychologist James Gibson calls affordances of the environment (1977, 119). These are the opportunities of interaction that an environment presents an animal/human and for mountaineers (ibid). Mark's and my climb on the West Face of the Remarkables was made possible by those affordances. As Mark and I crossed the ridge, the wind screamed past our faces, lashing us with snow. I snapped a quick shot with my iPhone using my gloved hands and we continued along the precarious ledge between the ice-covered cliffs and snowy gullies leading down to Lake Wakatipu 1600 metres below. Being the more experienced climber, Mark 'racked up', taking the gear and I created an anchor for myself in case Mark should fall. After tying onto the end of the rope, he started up a gorgeously technical section of thin ice over rock. While there were thick drifts of powder snow and rime ice all around us, the conditions of the season so far had only created a thin layer of ice on the rock step. Mark gingerly tapped his crampons into the ice and standing up to place a tool higher, fell back down as the ice gave way. "Ha ha, it's a bit thin eh? This should

be fun!” Mark said, now smearing his crampon point onto the freshly exposed black rock. His next attempt was successful, and he carefully began tapping his way up the ice flow. Once Mark finished his length and secured himself, I dismantled my anchor, removing the camming devices from the cracks in the fractured, yet solid schist rock.

Compared to my experiences in the Aoraki/Mt Cook region, climbing on mountain schist, even if it had to be excavated under layers of fresh powder and rime ice, was a lovely change in rock type. It was my turn to climb, belayed from above. I managed to tic-tac my way up the remaining ice and found myself on a comparatively gentle sheet of more reassuringly thick ice. After removing an ice screw that Mark had placed, I romped up the ice, enjoying the warmth returning to my limbs. The effects of the recent/current storm were visible, and I followed Mark’s footsteps up a steep powder drift, wallowing up to my knees. Mark greeted me with a grin at the belay he had manufactured off to the side of the gully (to avoid falling ice/spin drift). My gloved hands, now wet from punching through the snow and relieved of the pressure of the blood being forced out by gripping my ice tools above my head, were experiencing what mountaineers like to call ‘screaming barfies’ - a colloquial term describing the painful sensation of blood rushing back into hands (like an extreme version of what most people experience after a day skiing) and the subsequent bodily reactions to it. Mark laughed empathetically as I both grimaced and laughed myself.

As the vignette highlights, mountaineering is the interaction of the climber with the shifting world of mountain and its textures. By climbing our chosen route on the West Face of the Remarkables, Mark and I immersed ourselves in the vital mountain environment that was constantly changing as the weather interacted with the mountain, and now with our bodies. The affordances defined earlier allowed us climb: the thin ice covering the otherwise blank rock, the packed snow that afforded easy travel up the upper gully. Those affordances were also changing as we climbed. Fresh snow was being redistributed by the wind, filling the cracks that we had to excavate to place protection and loading the lower angle slopes for us to wade through. Rime ice was forming on the black schist and every so often a river of spin drift snow would pour down the gully. The experience of seeing the interaction of wind, snow, rock and then feeling that same causal power against the body, in the frozen hands or feet creates the sense of vitality of the mountain that me and my participants feel. It is the enfolding that

Ingold (2011, 129) attempts to describe by writing that we feel *with* and *in* the wind. At the same time, the scale of the mountain environment is such that the mountaineer is a fragile blip, compared to the fluxes of the mountain.

The same forces that create the snow to ski over, ice to climb and cracks to place gear in, also culminates in deadly hazards. Even though Mark and I had listened to the snowpack and weather analysis at the festival opening evening the night before, its conclusion that climbing would be possible still held the potential of objective risk – just at a low enough percentage possibility to be acceptable. As the festival organizers finished, the decision to climb a certain route is ultimately up to the climber's own judgment. The inherent hazards of mountaineering are in fact a product of the same vibrant forces that create the affordances for climbing. Its presence creates the cognitive dissonance my participants feel of being attracted to the mountain's icy faces, while also knowing that one day you could be killed. As the popular mountaineering rationalization goes, the dead climber was just 'in the wrong place at the wrong time'. The fatalism of that statement is a recognition of human insignificance. In the previous chapter I discussed the risk management strategies that mountaineers apply for what they term subjective risks as the risks a mountaineer has some control over. The deadly fluxes of the mountain on the other hand are categorized separately as objective risks – those which the mountaineer has no control over (Zsigmondy and Zsigmondy 1886). Inherent in the objective risk categorization is the acknowledgement of the mountain's vitality; its causal power beyond the human. Mountaineers can attempt to use their skills to manage objective risks, yet the ultimate truth is that if you are exposed to the full force of the mountain's agency, not even the best can survive, as made evident by the now too numerous deaths of experienced climbers on ascents such as Everest and K2. Both Sam and Jack have had friends die in the mountains. Jack told me of one such death while he was climbing on the granite spires of Patagonia. One of his climbing partners had been planning on climbing the Supercanaleta route on Fitz Roy when a group had been 'racking up' and preparing at the base of the route. Before they had even started climbing, a sizeable stone, released from high on the mountain, hit and killed one of the climbers. Even witnessing a large avalanche or rockfall from a distance, reminds the mountaineers that they have entered a world of causal power that dwarfs their own.

A Relationship of Mutual Inscription: The Mountain and the Mountaineer

Immersing themselves in the mountain's affordances and risks, a reciprocal relationship is created in which both the mountaineer and the mountain are inscribed by the act of climbing. The Sociologist Neil Lewis calls it an act of mutual inscription (Lewis 2000)¹⁷. Through climbing our chosen route and immersing ourselves into the vibrant weather and geology of the Remarkables, Mark and I were both inscribed by the mountain and we also inscribed marks of our passing on the mountain. I shivered, bridging my cramponed boots across the small gully that I was belaying from. Mark had since started another pitch, stemming his two legs on either side of a small roof to disappear out of sight. The twin ropes snaked through my belay device, hanging lazily. They led up through a quickdraw, continued over a small roof and onto the snow slope above. There was nothing but the sound of the wind scouring the gully and blowing cold air up my shell pants. Chunks of snow and ice fell down from above, letting me know that Mark was making progress. He must have been climbing again to be dislodging that much material. Unfortunately, the belay was not as well placed as the previous one and so I was directly in the firing line. A wave of spin drift washed down the gully and showered me in snow, adding to the rime ice that was forming on my jacket as the wind's moisture froze against it, slowly building up. Droplets on my eyebrows froze into stalactites and upon checking my beard, I instead found a solid mass of ice. Sitting in my harness, not moving, I felt like I was slowly being subsumed into the mountain. I circled my arms one at a time, trying to restore blood flow and warmth, yet not letting go of the rope to which Mark was tethered, somewhere high above in the swirling cloud. He had not moved for a minute and the rope hung lifeless. The cold tampered with my perception of time. Suddenly the rope came back to life, a subtle jerk, hesitant. I fed out more slack through the belay device as it pulled quickly through the snow and quickdraws. A faint warmth drifted back into me as I sensed that my time at the belay was coming to an end and that I would soon get to climb. If anymore ice grew on my face and jacket, I would feel more like an ice-covered piece schist

¹⁷ Similar terms have been used by the Cultural and Social Analysis scholar Penelope Rossiter (2007) who writes of body-memorying of rock climbing, as well as the anthropologist of Dance and Movement Studies Sally Anne Ness (2011a) and Tourism scholar Jillian Rickly (2017) who use the term mutual defacing.

rock, than a human. The rope tugged insistently now. Mark must have been on an easy snow slope. I fed out rope as fast as possible, watching it snake up the trench it had cut through the snow and tried to enjoy the situation again.

As I experienced on the West Face with Mark, the inscription came in many forms. It occurred in both short term and long term marking and adaptation. The ice that developed on our jackets, filled my beard and eyelashes was the inscription of the winter mountain's vibrant matter. The longer we spent hidden under the clouds and anchored to the wind-swept West Face, the more we slowly became expressions of the environment (Vannini et al. 2012). The inscription also occurred through the cold temperatures and wind chill, sapping our warmth at the belays. On the other hand, Mark and I also left a temporal mark of our passage up the mountain. A wandering line of crampon marks in the ice, holes punched into the snow and drilled into the ice, platforms stamped out for belays and snow excavated from cracks. As we climbed, we placed points of protection in the rock, such as small metal camming devices and shaped metal lumps called nuts. Into the ice we drilled hollow tubular screws with sharp serrated teeth to create an anchor to link the rope through. By the time the leader had gone as far as he could and created an anchor in some cracks he had cleared snow from, a linkage of metal, rope and wire had been created. Then, as the second climber followed, the construction would be dismantled, leaving only holes in the ice and footsteps up the snow. Like an accordion, Mark and I repeated the process, creating these ephemeral lines up the mountain's face until reaching the top. The vibrancy of the mountains and their continual fluxes means that the mountaineer's inscriptions, unless it is a piton hammered into a crack, are fleeting marks¹⁸.

The inscription of mountaineering also manifests in long term changes (Lewis 2000). When Mark stands on the front points of his crampons for hours of ice climbing, the muscles in his calves strain, forming micro tears from fatigue. Those muscles become stronger as he recovers after the climb. The swinging of ice tools above his head into hard ice, breaking

¹⁸ As part of the history of mountaineering that I detailed in the first chapter, as mountaineering grows in popularity and impacts there is a growing ethic of leaving as minimal inscription on the mountain as possible. Removable protection is the ideal and bolts are only to be drilled out of necessity. A full exploration of the ethical debates that surround these notions would be an interesting topic for someone.

through a thin crust over deep snow under the weight of a pack for hours on end, all wear Mark down. Each mountaineering trip is then a cycle of inscription. Not only are there ephemeral inscriptions, such as my ice-beard, but there are also the physical effects of the mountaineers challenging themselves against the vibrant, changeable matter of the mountain. Experiences that climbers call 'epics', where things go wrong and they are tested to the limits of their capability and endurance, create a large cumulative load of fatigue and literal breaking down of the body. The reason epics occur is due to the deadly agency of the vibrant mountain environment. As my experience of mild hypothermia showed, the mountain is not a place where you can often linger. The more time Mark or I spent on the West Face, the more we were exposed, not only to the inscription of the weather, but also to the potential of objective hazards. The nature of mountaineering is then of commitment as even if you decide to turn back part way, you still have to navigate out of that environment. As Jack noted in our interview "in other sports, like football...you don't have to worry about the risk of dying one day in a football match". It takes mountaineers multiple days to recover from an 'epic'. During that time, the mountain becomes more permanently inscribed as muscles, tendons and ligaments repair and strengthen (Ebbeling and Clarkson 1989). To adapt Lewis's (2000) term, the year on year culmination of these experiences creates the mountaineer's body.

The wealth of inscription that Mark and my other participants experience on the vibrant mountain adds many layers of depth to the mountains they construct. In their ever-deepening experience (which also includes the kinesthetic intelligence and practical mastery I explored in the previous chapter), all of my participants construct a personal relationship that seeks to make sense of the mountain's powerful, and sometimes deadly agency. Climbing with Mark the day after our West Face adventure, we got to talking about mountain experiences we treasured. Like Coraline, Sam and most mountaineers, he had spent time trying to understand his potentially dangerous relationship with the mountains. "You're standing up on this summit and you know, there's no one around for miles and it's just so wild...it's powerful". The relationships my participants have formed with the mountains all share a deep appreciation of the mountain's agency, experienced as a vitality and sense of 'aliveness'. The more they climb and are inscribed, the more they come to appreciate and value that experience. It explains part of the progression mountaineers experience from an initial focus

on achievement, to a growing appreciation of the experience of just being in the mountains, “feeling their strength” and witnessing their beauty.

Conclusion

By exploring the genealogy of human agency in anthropology and how it is being contested, developed and expanded, a new vision of the mountains can be understood. The Southern Alps of Aotearoa New Zealand are not an inert mass, but rather a vibrant environment possessing its own agency (Bennett 2010). The mountaineers who climb in these mountains experience that agency as a vitality. While some find expression through poetics, other dismiss their experience against what they see as the scientific verdict. The work this chapter has done instead offers a vision for comprehending the mountain’s vitality through the work of Descola (2013; 2014) and Bennett (2010). By locating that vitality in the vibrant interaction of the mountain’s geology and weather, the act of mountaineering is then the immersion of the mountaineer into the environment, creating both affordances and objective risks. As my participants climb in the mountains, they become physically inscribed by the mountain’s vital agency, both temporarily and more permanently. The mountaineer’s body that is formed is thus a function of the mountain and mountaineer’s agency interacting. The more powerful agency of the mountain inscribes more on the climber than the climber does in return, which forms the meaningful relationship my participants hold. As they climb, the experience of their own human insignificance is consistently interpreted and made sense of over countless trips. That experience can be both extremely uplifting or terrifying and often creates a complex blend of the two - as Sam said, “Its beyond you, but you’re a part of it”. Mountaineers therefore not only construct the mountain environment through their climbing, but they also become expressions of the mountains – physically, emotionally and spiritually.

Conclusion

The mountaineering my participants pursue is an activity that has been present in the public consciousness throughout its development. From the Golden Age ascents of the Wetterhorn and Matterhorn in Switzerland, to Sir Edmund Hillary and Tenzing Norgay's ascent of Mt Everest, modern mountaineering has been well publicized, criticized and in recent years, commodified on 8000 metre peaks. Through all of these ascents, the compelling experience of mountaineering that my participants pursue has been overlaid by the image of the high-altitude mountaineer standing on top of the world. Instead, in this thesis I have argued that the complex experience of mountaineering can be best understood through a phenomenological analysis that places the dynamically embodied mountaineer at its heart. Through the intensive participant observation and auto/sensory ethnography of my research I have been able to center my written thesis and podcast on that lived experience and use the interviews more as a triangulation device.

To contextualize the mountain epistemology that my participants bring to the Southern Alps, I began by tracing the development of modern mountaineering in Europe to the mountaineering my participants enact today. Far from being an activity removed from the world below, mountaineering emerged as part of a new scientific vision of the earth (Hansen 1995). Quickly though, the scientific mission came to be complemented by personal desire and mountaineers played a role in transforming the Victorian masculinity towards the soldier-like physicality valued by the aging British Imperial empire. The introduction of mountaineering to Aotearoa New Zealand saw the continuation of the empire, yet also an adaptation to the rugged nature of the Southern Alps and the colonial pioneering spirit that Davidson (2002) and Eyre (2012) identify. The mountain epistemologies that my participants and I myself hold contain these notions of self-reliance, tenacity and hardiness. The technological developments and paradigm shifts of the 1970's and 1980's in particular, led to search for new and compelling ways to break new ground on the same mountains. In contrast to the first ascensionists of Aoraki/Mt Cook, Tom Fyfe, Peter Graham and Jack Clarke, my

participants have come to value the style of ascent seen in Bill Denz that values *how* one climbs over *what* one climbs. The record Grand Traverse of Aoraki/Mt Cook completed by Jack and his female climbing partner represents that new vision of mountaineering in the Southern Alps.

To understand their ascent requires a deep dive into the embodied knowledge that mountaineering builds. Experienced mountaineers such as Jack, have combined the improved technology and techniques of mountaineering with years of dedicated climbing and training to achieve what Mendoza (2018) calls a practical mastery of mountaineering. After detailing Farnell's (2012) dynamic embodiment and thus the living nature of knowledge, I used the example of ice climbing at Wye creek to explore the complex and highly specific knowledge that becomes embodied through climbing. Through years of experience, mountaineers build a kinesthetic intelligence that allows them to move efficiently over complex and potentially deadly terrain. My participants also displayed with a highly developed judgement that combines embodied sensory memory and with technical knowledge to help manage the risks of the mountain environment. Through their variously embodied knowledge my participants seek to create Mendoza's (2018) practical mastery of mountaineering to not only manage risk, but also to keep broadening their mountaineering opportunities. As practical mastery increases, the depth of embodied knowledge and lived experience reconstructs the mountains to the point where the mountains they first climbed upon no longer exist. Instead of a horrific face of rock and ice, the experienced mountaineer sees a web of opportunities to interact with the mountain, each specific feature of which corresponds to the layers of embodied and technical knowledge they have lived and built.

To have a complete understanding of the lived experience of mountaineering, an analysis of the vital mountain environment itself is necessary. Throughout my research, my participants attempted to articulate an 'aliveness' of the mountains, a vitality or force. By using the scholarship of Jane Bennett (2010), which I have foregrounded in the history of agency in anthropology, the personal relationships my participants formed with the Southern Alps can be understood as interactions with a vital, agentic environment. Far from an inert mass, the Southern Alps consist of a vibrant interaction of weather and geology. By entering into the mountains, the mountaineers place themselves into an already vital environment. The

affordances of mountaineering and the deadly risks are both functions of the mountain's agency. While they can overwhelm and potentially kill the mountaineer, they also impart a profound experience of human insignificance. In their mountaineering exploits, my participants become inscribed by the mountain as they interact with its vibrant and often temporal matter. Climbing ice, snow, rock and all the subtle variations in between form temporary inscriptions, such as my iced beard on the West Face of the Remarkables, as well as long-term adaptation of the mountaineer's body. The vital agency of the Southern Alps therefore plays its own agentic role in shaping the experiences of my participants.

The mountain environment for my participants is the sum of the mountain epistemology they bring with them, the practical mastery they build through climbing and the experience of the mountain's vital agency. As I have analyzed, the practical mastery transforms the mountain. It is also influenced by the changing technology and ethics of style that construct my participants' mountain epistemology. It helps my participants to manage risk, yet also allows them to climb in more difficult and wild terrain, which exposes them to more potentially deadly fluxes of the mountain. All of these factors reveal mountaineering to be the fundamentally intertwined process of a "[climber] acting, not a mind thinking, while a body experiences" (Farnell 1996, 318). Even more so, the discussions of the mountain's vital agency construct a vision of mountaineering that is both a climber and a mountain acting. The more complex aspect of the mountain-mountaineer relationship arises in the conflict created between the risks of death in mountaineering and the desire to continue climbing. Even witnessing an avalanche from afar is an experience of recognizing human fragility in the face of the mountain's agentic fluxes. All of my participants have stories of close calls with various objective risks, whether it was a large rock impacting where they had just been, an avalanche triggered and avoided or a foothold breaking as they climbed. In his book *Enduring Patagonia*, the mountaineer Gregory Crouch summarizes the conflict created by this humbling experience, saying "the mountains aren't worth dying for, but they are worth risking dying for" (Crouch 2002, 66). In our interview, Jack expanded on this conflict within himself. Speaking of the soccer players on the field below us he said:

It's kind of annoying you know, because in other sports where there's no danger of dying... you can just go as hard as you possibly can and not have to worry about consequences that you

might die one day while you're in a football match. But in mountaineering you do have to give a bit more of a different perspective. You can't just go hard out and say I'm going to K2 next year...But that's also the beauty of it, [you're] practicing a real sport with real life, real consequences...it's not just a game. You can't just respawn every time you...[sigh]...make a mistake...

It is within this cognitive dissonance of both attraction and fear that Jack and others seek to make sense of their experiences of human insignificance. Jack fears the mountain's deadly agency, yet that same agency gives his climbing meaning. As the anthropologist Marcos Mendoza (2018) writes, mountaineers create a double meaning of death. While the potential of death is frightening, its presence also "ennobles life" (Mendoza 2018, 38). Placing your body under the mountain's agency and risking death creates what Mendoza identifies as an authenticity of experience (Mendoza 2018; Abramson and Fletcher 2007). As Jack noted, in the more intense moments, like in hard leads, you are forced to be calm because that calmness is what keeps you alive. The potentially life changing experiences of mountaineering work to construct the mountains as a profoundly important place for my participants. As Mendoza writes, the mountains become a place of "authenticity and exception from the conditions of everyday life" (2018, 38). They are a world in which, by climbing, the mountaineer is "literally and figuratively elevate[d]...above a quotidian existence" (Mendoza 2018, 38). Yet even when my participants return from the mountains, they carry with them the inscriptions of mountaineering. As Sam explained, when he returns to the city after long trips in the mountains, he feels more conscious and balanced. He is adjusted to a slower pace of life and the lower stimulus environment of the mountains. It actually creates a "slight disillusionment" with a world and its responsibilities that no longer make sense. While to some degree, he and my other participants readjust to city life, the years of "tracing lines up mountains with their bodies" and being inscribed by the vibrant mountain environment shapes them into expressions of those mountains.

It is my hope that this thesis and the accompanying podcast can contribute towards a better understanding of the complex entanglement of mountaineer and mountain. The vision of human relationships with the world around them presented in this thesis is one that can be hugely beneficial and also offers potential for further research. For example, the influential

role of perception in dynamically embodied mountaineers, the built relationship formed with fear or the experience of human insignificance. While mountaineering has its pitfalls and risks, it can also be a powerful tool for reshaping our relationships with the world around us and comprehending our continuous sensorial embodiment. Furthermore, I hope that this thesis can contribute to a more practical and complete usage of phenomenology, sensory and auto ethnography that truly centers and explores the lived experience of fieldwork through a variety of modes.

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