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From Place-Responsive to Place-Constructive Outdoor Education: A Case Study of the Port Hills, Christchurch, New Zealand

A thesis
submitted in partial fulfilment
of the requirements for the Degree of
Master of Social Science

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by
Ivor Heijnen

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Abstract of a thesis submitted in partial fulfilment of the
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The Port Hills in Christchurch, New Zealand, form a peri-urban area of volcanic hills that separates the city of Christchurch from the Lyttelton Harbour. The Port Hills are a place rich in history, ecological conservation and restoration areas, and outdoor education and recreation opportunities. This research used the Port Hills as a case study to explore how outdoor educators have developed a sense of place of the Port Hills, and how this relates to their outdoor education practice.

An interpretive research methodology was used to explore the lives of eight expert outdoor educators from a wide range of personal and professional backgrounds. Each participant was interviewed twice. First, in a semi-structured indoor interview, and second in a walking interview conducted in a location in the Port Hills of particular significance to the participant.

The main findings of this research support the increasing call for reorienting outdoor education practices such that the concept of place receives a central role. A focus on place allows outdoor educators to engage students in understanding how humans live in, experience, give meaning to, and develop relationships with particular locations. The research shows that participants have developed very strong relationships with the Port Hills that encompass all areas of their lives, and that these relationships are integral to their sense of wellbeing. Local approaches to outdoor education that integrate critical socio-ecological inquiry, embodied exploration of places, and build explicit connections between students' homes and the Port Hills, are valued strongly by the participants.

The thesis presents a model that conceptualises how outdoor educators can integrate place into their practice. As part of this conceptual model, it is argued that *place-constructive* outdoor education practices recognise that the student-place relationship is interdependent, and therefore that outdoor education practices should be both responsive, as well as reciprocal, to place. Such mutually beneficial approaches locate students within their socio-ecological communities, and allow for meaningful integration of both sustainability education and outdoor education outcomes and pedagogies.

Key words: Outdoor education; outdoor educators; place; sense of place; place-responsive outdoor education; place-constructive outdoor education; walking interviews; Port Hills; New Zealand.

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Chapter 1: Introduction

One of the main aims of any education programme is to support students to prosper in a complex and fast changing globalised society (Hill, 2012). It is well established that humans have changed the planet's ecosystems significantly over the last 60 years to meet the resource demands of a growing and wealthier population (Millennium Ecosystem Assessment [MEA], 2005). Although these changes have resulted in increased human wellbeing and economic development, there is now ample evidence to suggest that the increased demand on natural resources has caused significant environmental degradation (Hill, 2011, 2012; IPCC, 2014; Irwin, 2010; MEA, 2005). These impacts are so significant that scientists now question the continued ability of our planet to sustain future human generations (MEA, 2005; Rockstrom et al, 2009; Steffen, 2015). One of the causes of the issues described above is that "too many of us seem to have disconnected ourselves from nature and forgotten that our economies and societies are fundamentally integrated with the planet" (Stockholm Resilience Centre, 2017, p. 2).

The significant global socio-ecological issues mentioned above are also apparent in Aotearoa New Zealand. For example, New Zealand ranks fifth in developed countries in terms of income inequality (Wilkinson & Picket, 2009), and this inequality has significantly contributed to increased health and social problems in this country (Hill, 2012). Similarly, although New Zealanders pride themselves on the country's 'clean and green image', this is not reflected in its environmental record. As Park (2006) points out, while New Zealand may pride itself on its natural environment, it promulgated "world beating levels of native bird extinctions and wetland loss" and carried out "one of the most comprehensive transformations of indigenous nature the world has seen" (p. 196). New Zealand has nearly a third of its land area designated as conservation areas, however its lowland rivers, lakes, wetlands, and estuaries have continued to be heavily developed for urban and farming purposes. As a result of poor environmental regulation New Zealand has some of the developed world's highest levels of nutrient pollution (Proffitt, 2010). The more recent significant land use changes due to conversions to intensive dairy farming has increased these water quality issues (Parliamentary Commission for the Environment, 2012). Following from this, it stands that education in New Zealand has an important role in questioning, and indeed changing, socio-ecological practices

that do not significantly address the aforementioned issues at local, regional, and global scales.

1.1 Outdoor Education

Outdoor education has played a role in the New Zealand education system since the late 19th century (Lynch, 2006). Within the sector there are a wide range of perspectives on what outdoor education means, and it is often defined loosely as all education that is in, about, and for the outdoors (Mortlock, 1994). Although originally based on camping experiences and curriculum enrichment through nature studies, environmental education, and outdoor activities (Lynch, 2006), from the 1980s an outdoor education-as-adventure discourse has become dominant in New Zealand (Boyes, 2012; Hill, 2013). This thesis argues that this dominant approach to outdoor education is too heavily focussed on resource intensive adventure activities, which often take place in remote areas. As such these approaches are not well situated to address the complex web of socio-ecological issues currently facing society.

The issues relating to sustainability are systemic and will require a committed and ongoing societal focus for the foreseeable future. It seems clear therefore that significant attention should be given to developing approaches to outdoor education that enable and support more sustainable ways of living. Place-responsive outdoor education encompasses a coherent educational philosophy and pedagogy, which uses a critical socio-ecological stance and supports students' connection to local places (Hill, 2013; Wattchow & Brown, 2011). As such, it is well situated to address the sustainability issues outlined above.

1.2 The Research Aim and Approach

The research presented here aimed to be both place-responsive in its focus, as well as in its methodology. The main aim of the thesis is to explore how outdoor educators develop a sense of place for the Port Hills, and how this relates to their outdoor education practice. However, as Chapter 2 outlines, the human-place relationship is interdependent, and therefore a research method was developed that fully acknowledges this interdependency. In order to research how outdoor educators relate to place, and how place relates to their practice, this research had to occur *in* and be responsive *to* place. As outlined in 1.3 below the Port Hills, in Christchurch, play a very important role in my life. As such, I decided to use the Port Hills as a

case study of place-responsive outdoor education. The Port Hills form both the setting of this research, and, together with the research participants, the main focus of the research. This thesis aims to integrate the many aspects of place that together make up the Port Hills through conducting walking interviews in the Port Hills with expert outdoor educators from a wide range of backgrounds and professional areas within the outdoor education sector. In addition, topographical mapping activities, photo material, and relevant literature was used to further explore how outdoor educators integrate place-responsive approaches into their practice.

1.3 The Port Hills: An Introduction

The Port Hills are the volcanic hill area that separates the city of Christchurch from Lyttleton Harbour. The northern flank of the Port Hills contains the hill suburbs of Christchurch- the largest city of the South Island of New Zealand. On the southern side there are a number of the smaller settlements of the Banks Peninsula (see Figure 1). There are no generally accepted boundaries of the Port Hills, so this thesis follows the Christchurch City Council's District Plan (2014) in defining the Port Hills as all the hilly land between Godley Head and Gebbies Pass Rd and the bays, beaches, suburbs and villages on and directly adject to this land (Hogan, 2014).

The Port Hills form the northern part of the ancient crater rim of the extinct Lyttleton volcano, one of three main volcanoes that built up the Banks Peninula from around 12 million to about 6 million years ago (Ogilvie, 2000). Subsequent erosion has shaped the current features of the Port Hills, including Lyttleton Harbour. Soils on the Port Hills are mostly made up of volcanic ash and loess sediments. After the last glacial maximum, 14.000 years ago, loess material has been transported by Canterbury's frequent north-west winds from dry riverbeds or outwash plains, and deposited as a blanket on the Port Hills (Cooke, 1999). These sediments eventually joined the former island to the mainland, creating a peninsula (Sewell, Weaver, & Reay, 1993).

Prior to human settlement almost all of Banks Peninsula and the Port Hills was covered in podocarp hardwood forest (Christchurch City Council [CCC], 1992), with some small areas of subalpine vegetation covering the highest parts of the peninsula (Wilson, 1993). The Port Hills area has been populated by Polynesian settlers of Waitaha, Ngāti Māmoe, and Ngāi Tahu

tribes from the 14th century, and European settlers from the early 19th century onwards. Human settlement of the area saw significant removal of native forest, initially for hunting and traveling purposes and later to provide space and timber for agriculture (Ogilvie, 2000). An estimated 98 per cent of all forest was removed and only small pockets of mature forest remain on Banks Peninsula. In the Port Hills these are mainly found in the Ahuriri Scenic Reserve and Kennedy's Bush Scenic Reserve (CCC, 2016).

There are 40 protected reserves on the Port Hills, which are managed by a range of different agencies, and Te Hāpu ō Ngāti Wheke (Depatie, 2016). The Port Hills contain areas designated for environmental and historical conservation, various recreation activities, farming, and urban development (Depatie, 2016), and provide a range of functions for local people, including protecting, enhancing and utilising ecosystem services, economic productivity such as farming and forestry, and recreation areas (Hogan, 2014).

The Port Hills have recently seen two significant adverse events. In 2011 the Christchurch earthquake claimed the lives of 185 people and caused many people to lose their homes in or near the Port Hills due to land erosion and rock fall issues (NZ History, 2017). In February 2017 large fires in two valleys of the western Port Hills caused much damage to both property and conservation areas.

The Port Hills play a significant role of the lives of many people living in or near the area (Hogan, 2014) . They are also a unique place for educators to integrate local historical, social, and environmental outcomes, alongside meaningful active learning approaches, into their teaching practice. As such, the Port Hills warrant research into how outdoor educators view, interpret, and practice outdoor education in this place.

1.4 Personal Position Statement

I am a professional outdoor educator. I have lived and worked in Christchurch since emigrating from the Netherlands in 2005, and have lived near the Port Hills for most of that time. The Port Hills play an important role in my life; I regularly run, mountain bike, and rock climb there with my friends and family. The Port Hills are more than a setting for my recreational activities however. I spend a lot of time in the Port Hills in a professional capacity as well, teaching courses in environmental science, rock climbing, risk management, and social geography to students of the Bachelor of Sustainability & Outdoor Education at Ara

Institute of Canterbury. I have spent many hours in the Port Hills planting native trees and creating new rock climbing routes. Over the years I have grown fond of my regular runs up Rapaki track in all weather conditions, seeing the ever-changing colours of Lyttleton harbour, and the dusting of snow on Banks Peninsula in winter. A growing understanding of Māori and European history of settlement and conflict, and the changing natural and cultural environment, combined with my personal history in the Port Hills which includes many important moments with loved ones, all contribute to a deep sense of attachment and belonging to this place.

I come to this research, therefore, with the assumption that the Port Hills provide a unique place for people to live, recreate, and learn. I also believe that outdoor education can, and should, play a role in supporting students in creating meaningful relationships with their local environments. Lastly, I maintain that outdoor education should support learning outcomes that aim to develop critical thinking skills and behaviour change in relation to local and global issues of sustainability.

1.5 Terminology

This thesis contains a number of key concepts and place names in both English and Te Reo Māori (the Māori language) that the reader may not be familiar with. Although some of the more often used concepts are defined within the main text to aid the readability of the text, others are translated and defined in Appendix D.

1.6 Structure of the Thesis

This thesis consists of eight chapters. After this introductory chapter, the second chapter discusses the literature relevant to the domains of outdoor education, place, sense of place, and specific emphasis is put on the developing theoretical field of place-responsive outdoor education. The last section of the second chapter describes the research aim and research questions that guided this research.

Chapter 3 provides an overview of the study setting. The first part describes the natural history of the Port Hills. This is followed by the human history of the Port Hills, their current land use, recreation opportunities, and recent significant developments. Section 3.4 describes in more detail three specific locations within the Port Hills: Awaroa/ Godley Head,

Te Tihi ō Kahukura/ Castle Rock- Bridle Path, and Otutokai/ Victoria Park. These three locations form the basis of case studies presented in chapters 5, 6, 7, respectively.

Chapter 4 discusses the methodological approach that this thesis takes and its implications for the design and implementation of the research methods. The chapter discusses the nature of the interpretive research paradigm briefly, before providing a theoretical framework that justifies the use of its multi-method research approach, including the use of walking interviews. Subsequent sections outline the choice of participants, the methods employed for data collection and data analysis. Chapter 4 concludes with the ethical considerations and limitations relevant to the methodology and methods used in this research.

This thesis contains three findings chapters. These chapters consist of both a thematically descriptive component, as well as a case study. The case study areas, described in Chapter 3, are illustrative of the chapter's main topic. These three findings chapters integrate the different research data that was gathered: interview quotes, photo material, and location maps. Chapter 5 discusses the participants' relationship to the Port Hills: how these developed, what their key components are, and what role the participant-place relationship has in their lives. Chapter 6 looks at the participants' outdoor education practice in the Port Hills. It describes how they use local approaches, as well as a range of critical socio-ecological perspectives in their practice. Lastly, this chapter discusses how the participants interpret recent disruptive events in the Port Hills. The third findings chapter discusses how the participants integrate the concept of kaitiakitanga (guardianship) into a place-responsive approach to outdoor education that includes a more reciprocal relationship to place through student investment in place. The last section in chapter 7 discusses the role of traditional outdoor activities in relation to this practice.

Chapter 8 provides a discussion of the research findings and proposes the use of a new concept: place-constructive outdoor education. This chapter presents a conceptual theoretical model of place-constructive outdoor education, and discusses its implications for this developing field of outdoor education practice. The final conclusions of this thesis, research limitations, and opportunities for further research in this area are also discussed in this chapter.

Chapter 2: Place and Outdoor Education- A Review of Literature

Research into place-responsive outdoor education theory and practice has received increased attention in the last decade (Boyes, 2012; Brown, 2008, 2010; Hill, 2012, Irwin, 2012, Irwin, 2014; Straker, 2012; Wattchow & Brown, 2011). Wattchow and Brown (2011) point out that place-responsive education requires a vision of outdoor education which bridges gaps between learning areas and disciplines, and which brings together people, learning experiences, and the "geophysical reality of the site of learning itself" (p. 77). This review will provide an overview of key literature in the domains relating to place-responsive outdoor education. What follows next is an overview of the development of outdoor education in New Zealand. Section 2.2 discusses the concepts of place and place meanings. Sense of place and Māori conceptualisations of place are discussed subsequently. Finally, bringing these literatures together, the developing role of place-responsive approaches in outdoor education is examined in section 2.6.

2.1 Outdoor Education in New Zealand

Outdoor education in New Zealand can be considered an umbrella term. Many authors and practitioners include in the definition of outdoor education various approaches to outdoor learning, such as: formal outdoor education as defined in the Health and Physical Education NZ Curriculum since 1999; areas of primary, secondary and tertiary education curriculum delivered outside the classroom; school camps; nature studies; outdoor pursuits skills training; and many more areas of learning (Lynch, 2006). Outdoor education has at different times been viewed as a curriculum area, a pedagogical method, or both. Probably one of the most widely accepted definitions of outdoor education is that it incorporates all education that is in, about, and for the outdoors (Mortlock, 1994). This definition includes aspects of method (the 'in'), curriculum content (the 'about') and environmental education (the 'for'). However, outdoor education in New Zealand is currently perceived by many authors to be predominately focused on adventure activities that aim to support development of intrapersonal and interpersonal skills, and attitudes (Boyes, 2012; Brown, 2010; Jones, 2004, 2005; Lynch, 2006; Straker, 2014; Wattchow & Brown, 2011).

It is important to acknowledge the various backgrounds and histories of outdoor education in New Zealand, which include an ethos of discovery and adventure, and early conceptions of the outdoors as a place to learn about the environment. However, since the 1980s, much emphasis in both research and practice has been placed on areas such as outdoor skill development, risk management, facilitation skills, and adventure based learning (Boyes, 2012; Lynch, 2006; Straker, 2012). This emphasis was evident when outdoor education first became a key learning area in the Physical Education Curriculum in 1998: “Outdoor Education provides students with opportunities to develop personal and social skills, to become active, safe and skilled in the outdoors, and to protect and care for the outdoors” (NZ Ministry of Education, 1999, p. 46-47).

Since the early 2000s, however, the dominant discourse of adventure activities and nascent topics in outdoor education is increasingly being challenged in New Zealand and overseas (for example see Boyes, 2012; Brown, 2010; Cosgriff, 2008; Higgins, 2009; Lugg, 1999; Lugg, 2007; Nicol, 2002; Thomas, 2005; and Wattchow & Brown, 2011). These authors challenge both the philosophical foundations and efficacy of current adventure activity driven practices in outdoor education. Boyes (2012), for instance, argues that outdoor education has been compromised by commodification and individualist tendencies of adventure, influenced by the rise of neoliberal values in society. Brown (2008, 2010) challenges the pedagogical integrity of the idea of transfer of learning from remote outdoor locations to students’ lives back at home. Higgins (2009) and Loynes (1998) challenge outdoor educators to take up education for sustainability goals and develop a more critical approach to outdoor education, where its unique teaching and learning methods, and its context, are used to help students grapple with the most pressing issues of the coming decades: ecological stress, habitat and biodiversity loss, climate change, and social inequity.

Higgins (2002) argues that outdoor education practice can be said to have three components or foci: environmental education, personal and social development, and outdoor adventure activities. Although outdoor education can concern itself with any of these three components, many programmes appear to ignore the person-place relational outcomes of the environmental education component (Higgins, 2009). An important reason for the overemphasis on the adventure activity component of outdoor education is its place in the Health and PE Curriculum, and subsequent narrowly defined- and easily measurable- practical

assessment standards (Boyes, 2000; Boys & Zink, 2007; Cosgriff & Gillespie, 2011; Hill, 2010; Straker, 2012). Mannion (2000) points to the need to develop curricula with place in mind, in ways that carry these three components of outdoor education into experiences and learning outdoors.

Before further discussing the emergence and development of place-responsive outdoor education literature, this review provides an overview of the concept of place itself. This overview includes a discussion of the many varied, and contested, perspectives on place that have emerged in the literature in the last fifty years.

2.2 Place and Place Meanings

The concept of place has been a topic of research in a wide variety of academic domains, such as philosophy, human geography, cultural anthropology, architecture, and social-psychology, since the 1970s. There is a divide at the ontological level, between place defined as a location's character (see Tuan, 1975), and place as the fundamental expression of people's understanding and involvement in the world (Relph, 1973). Hummon (1992) attributes the theoretical complexity of place research to the fact that "the emotional bonds of people and places arise from locales that are at once ecological, built, social, and symbolic environments" (p. 253). For the purpose of this research place is defined to include and integrate both these perspectives.

Place is a way to understand how humans live in, experience, and relate to particular locations on earth (Brown, 2008; Wattchow, 2005; Wattchow & Brown, 2011). "Place is generally conceived as being 'space' imbued with meaning" (Vanclay, 2008, p. 3). This means that place refers to the invested meanings of people rather than just the physicality of the location. Things as different as a city, a secluded farm house, or a forest camp site are places, as all are centres of meaning, realities that are individually constructed (Hutchinson, 2004; Tuan, 1977). We live, recreate, and work in places. We travel through places which are sometimes very meaningful to us, and sometimes largely ignored (Hutchinson, 2004). The interpretation of these various places can be static or change considerably with time, however the important places in our lives form, through experiences, histories, motives and goals, a significant part of our personal identities (Hutson, 2011).

Although place meanings are constructed personally and socially, without the physical environment as a context, there could be no sense of place. Pyle (1993, p. xv) asserts, “when people connect with nature, it happens somewhere. Almost everyone who cares deeply about the outdoors can identify a particular place where contact occurred.” When we consider for example New Zealand’s Māori settlement and European colonial histories, both are shaped by the realities of the physical environments. Where and how the land and the sea allowed people to live forms a significant part of New Zealand’s national identity. Hutchinson (2004) argues that the concept of place is not only found at the intersection of an individual person and the physical locality, but that it can also be viewed as a socially constructed reality, embedded within and constructed through social groups such as schools, family, and recreational clubs. Place, therefore, lies at the intersection of the personal, the social, and the physical world.

The physical aspects of a place and the cultural values associated with that place become part of a person’s relationship to place. Association with a place over a long time can have a powerful effect (Hay, 1990). Place can be described as the centre of what humans value “incarnating the experience and aspirations of people. Thus it is not only an arena for everyday life... [it also] provides meaning for that life” (Eyles, 1989, p. 109). It is important to highlight the reciprocal nature of place conceptualised in such a way. Place entails both humans constructing a social reality as well as the physicality of the location enabling the range of possible experiences in our lives. Place therefore is not just physical space imbued with meaning by humans, it is the co-creation of meaning itself.

Ingold (2000) suggests that place combines our ecological, socio-cultural, and material-relational experiences of the world. This world of dwelt-in places forms the basis of all our experiences and abilities to interpret them. Places are the localities where our activities become reality, and the only world in which meaning exists. Malpas (2008) argues that this ontological understanding of place should be one of the key foundational principles of philosophy, as it links directly to everyday experience of our own being-in-the-world.

A datum that is not first given in terms of an encounter with consciousness, with sense data, or with any other such ‘derivative’ notion, but first presents itself precisely as an encounter in which self, other, and world are given together as a single unitary phenomenon (Malpas, 2008, p.8).

Tuan (1976) also highlights the ontological importance of place when he describes his notion of 'fields of care': the bonds between people and their physical localities, which form over time through sensory experiences, and are central to the meaning of people's everyday lives.

Casey (2001, p. 684) argues that "the relationship between self and place is not just one of reciprocal influence . . . but also, more radically, of constitutive coingredience: each is essential to the being of the other. In effect, there is no place without self and no self without place." This conception of place rejects views of place as inert background. Instead it recognises geographical context of place as integral to human existence (Anderson, 2004). Places are not passive stages on which actions occur, rather they are the medium that allows, impinges on, structures, and facilitate people's lived experiences.

The implications of this perspective of place on outdoor education in general and the design of this research are discussed in sections 2.6 and 2.7. What follows next is a discussion on the concept of sense of place.

2.3 Sense of Place

Sense of place can be conceived either as a person's 'place' in society; as a meaningful relationship of belonging between person and place; or as an aesthetic appreciation of a place (Hay, 1990). Hay (1990) discusses three interwoven dimensions of people's sense of place: the perceptual realm of awareness, orientation and memories; the experiential realm of bodily and sensory contacts, insider/outsider division and journeys; and the emotional realm of feelings, preferences and values.

People are able to develop connections to place in a number of ways. Relph (1976), argues that the difference between being a local, rather than a stranger or visitor to a place, is critical in becoming attached to that place. He suggests that long-term residency, insider status, and local ancestry are important elements in establishing a strong sense of place. Hay (1998) also argues that sense of place is effected most by a person's residential status, where rootedness and community involvement over time creates a stronger sense of attachment. Yet, as Ardoin (2006) argues, in today's increasingly transient world, many people are becoming less rooted to a specific place.

Socio-psychological approaches to researching sense of place look at place attachment, which refers to the range of positive feelings about a place that a person can experience (Vaske & Kobrin, 2001). Place familiarity is the extent to which a person has knowledge of a certain place and is often used, together with place-rootedness and place-belongingness, as a measurement of place attachment (Convery et al, 2012; Hammitt, Backlund, & Bixler, 2006; Wattchow, 2001; Wattchow & Brown, 2012). Feeling bonded to a place is a principal need of humans in order to provide stability in our personal identity and in understanding our notions of self and others (Casey, 2001; Eyles, 1989). Place familiarity according to these authors depends on memories and physical involvement with recreational places, while place belongingness integrates aspects of social cohesion and rituals. While belongingness suggests a strong attachment to place, rootedness is considered to be a sense of being completely at home, accompanied by feelings of security and comfort (Hammitt, Backlund, & Bixler, 2006). Twigger-Ross and Uzzell (1996) put these concepts into the context of how people form identities. They describe the importance of four principles in the development of place identity: distinctiveness (of a place), continuity (in a place), self-esteem (based on association with a place), and self-efficacy (the belief in one's ability to carry out chosen activities in one's environment). Altman and Low (1992) outline that place attachment is the outcome of a combination of socio-cultural, personal, biological, and environmental processes.

Tuan (1974) argues that everyday places elicit a deeper type of affection in people "in the same sense that an old rain coat can be said to have character" (Tuan, 1974, p.234). Tuan (1974) suggests that to develop a sense of a place is to know it on a personal and intimate level. He notes that long-term sense engagement, or physical experience, is what creates a contextual and specific sense of place over time. People who live in particular places for a long time develop meanings of those settings through direct experiences, sometimes subconsciously through all their senses which create memories and emotions embedded in one's identity (Hutson, 2010).

2.4 Place: A Māori Perspective

In modern western cultures, many people live their lives in several different places, and there are high levels of migration both domestically and internationally, for a variety of reasons such as study, work, or lifestyle (Hay, 1998). As such, a sense of place is more often developed

through a combination of factors such as residential and recreational, requiring regular physical contact, rather than through ancestral or cultural factors (Eyles, 1989; Hay, 1998). A Māori sense of place is based on more permanent attachments to the marae where a tribal member is 'tangata whenua' or a person belonging to that land, whether or not that person lives there currently (Hay 1998). Places are also strongly connected to tīpuna (tribal ancestors), through whakapapa (genealogy), whose stories are woven into the fabric of everyday life. Hay (1989) notes how kaumatua (tribal elders) on Banks Peninsula would make strong references to landmarks and other features of their lands that connected them emotionally, socio-culturally, and spatially to those places. Even for those Māori who do not live on or near their ancestral home, all important social gatherings, such as weddings and funerals, are still held on the marae and continue to provide an ongoing basis for strong place attachment. Hay (1998) concludes that Māori people develop a deep sense of place through cosmology, patterns of land use, tribal affiliation, rituals, architecture, extended family identity and ways of thinking and perceiving, which are rooted in the land, sea, and spirits of a particular tribal area.

Interpretations of thought, body, landscape, and place will differ between cultures (Murton, 2012). Given this, Wattchow and Brown (2011) contend that it is important for outdoor educators to consider how different cultures understand places, as these "philosophical positions influence the way in which outdoor educators and learners encounter, locate themselves within, move through, and identify themselves in, outdoor spaces and places" (p. 56). Understanding Māori interpretations of place therefore, should play an important role in outdoor education teaching and learning approaches. People's sense of place, as Irwin (2012) argues, are highly variable, contested, and most people will hold a complex map of multiple meanings relating to place. The next section discusses the role of place in outdoor education specifically.

2.5 Place and Outdoor Education

The concept of place in education has an important ontological dimension (Mannion et al, 2013). Karrow and Fazio (2010), argue that the ontological understanding of place is absent from most perspectives on place-based education, and that we should consider the natural and cultural world as intertwined and co-emergent. Place and pedagogy are ontologically

linked dimensions of a process in which teachers and learners work and are themselves re-worked (Mannion et al, 2013). Straker (2014) suggests that what 'the outdoors' means to teachers is central to their outdoor education pedagogy. Although Straker (2014) argues that the concept of 'the outdoors' is broader than that of place, she provides a valuable conclusion for the role of outdoor places in place-responsive outdoor education: "Meanings of the outdoors thus arise from the values, beliefs, and significance attributed to the setting by an individual or particular group" (Straker, 2014, p. 7).

Gruenewald (2003) argues that "places are fundamentally pedagogical because they are contexts for human perception and for participation with the phenomenal, ecological, and cultural world" (p. 645). Such an understanding calls into question traditional outdoor education practices that utilise outdoor environments simply as decontextualised spaces for individualistic outcomes, and are focused on the activity rather than the place where this occurs, and in doing so, deny the places where outdoor education happens (Gruenewald, 2003; Leather & Nicholls, 2014; Mannion et al, 2013; Wattchow, 2008 Wattchow & Brown, 2011).

The social, cultural and environmental meanings of place are always negotiated and contested in various ways, including in education. As discussed earlier, the dominant practices within outdoor education are increasingly being challenged by academics and practitioners who argue that place should have a central role in all aspects of outdoor education. What follows next is a discussion of literature on outdoor education approaches that are place-responsive.

2.6 Place-Responsive Outdoor Education

Place-responsive education seeks to connect learners to local environments through a variety of strategies that increase environmental awareness and connectedness to particular parts of the world (Sobel, 2004). Place-responsive educational theorists and practitioners aim to revise all educational practices, including those of outdoor education, with a focus on the needs of local communities and environments as the primary educational objective at all levels of schooling (Hutson, 2010). As the concept of place connects people to localities through reciprocal meaning-making, place-responsive outdoor education therefore has as its core principle an aim to be sensitive to the needs of unique places (Hutchinson, 2004).

For Tuan (1974), the meanings of a place are developed most powerfully through repeated physical exposure to particular locations, and this view highlights the importance of the ways places shape the identities of people as well as the ways people shape places over time. This is relevant for outdoor education practices that aim to build connections between students and their local places. An important tenet in place-responsive approaches to outdoor education is the emphasis on spending time exploring students' local places repeatedly (Wattchow & Brown, 2011). Altman & Low (1992) also argue that place-responsive education practices should recognise the diversity of place attachments that exist and stem from a range of relationships with place, such as familial, spiritual, economic, and recreational among many others.

The New Zealand Curriculum of 2007, in its vision document, emphasises the need for students to be educated holistically, in order to be connected, confident, actively involved, and lifelong learners (New Zealand Ministry of Education, 2007). A place-responsive approach to outdoor education is well situated to incorporate and promote all of these outcomes (Taylor, 2014).

Wattchow and Brown (2011) argue that a change in aims in outdoor education should go hand in hand with changes in practice, and that outdoor educators incorporate concepts of place-responsive education methodologies. Such teaching practices might give learners a chance to connect their own stories and experiences of places with local histories and current issues. Place-responsive outdoor experiences also provide a reference point for positive memories, further reflection and self-critique regarding the nature and power of person–place relationships, and provide the student with a context for what a sustainable and mindful person–place relationship looks and feels like (Higgins, 2009; Martin, 2004; Wattchow & Brown, 2011).

Tooth and Renshaw (2009) argue that outdoor education should be more attentive to place, in particular with respect to Sustainability Education. In New Zealand and Australia, there is an increasing challenge to outdoor educators to integrate Sustainability Education outcomes into their practice, and current research highlights the importance of pedagogy that addresses place (Brookes, 2002, 2004; Brown, 2012; Cosgriff et al., 2012; Hill, 2013; Irwin, 2010; Lugg, 2007; Taylor, 2017; Wattchow & Brown). Being responsive to place enables

outdoor educators to explore global socio-ecological issues in the context of particular places, in addition to developing strong connections to place. As such, a place-responsive approach provides students with experiences that allow them to connect complex global issues such as climate change and the decline in biodiversity to the needs of local places whilst at the same time creating significant and enduring connections to place. Gruenewald and Smith use a critical inquiry approach in their place-responsive outdoor education practice through the use of questions such as: “What educational forms promote care for places? What does it take to conserve, restore, and create ways of being that serve people and places? What does it take to transform those ways of being that harm people and places?” (2008, p. xix).

Wattchow and Brown (2011) offer four practical signposts that outdoor educators can use to design and implement place-responsive outdoor education programmes. These four signposts are briefly discussed below:

1. *Being present in and with place*: this involves careful planning to allow learners to attune to the environment, requiring stillness, silence, and patience. It is unlikely that this will occur if movement through place is rapid or if learners feel fearful.
2. *The power of place-based stories and narratives*: experiences that include interpretation and reflection help students to make sense of the world. Such experiences require educators to become storytellers in the places they work to create understanding of, and attachment to, places.
3. *Apprenticing yourself to outdoor places*: a combination of the points described above, this also requires an understanding of how our experience is shaped, through a range of physical encounters and knowing about, specific places through exploring its history, geography etc.
4. *The representation of place experiences*: developing students’ capacity to interpret how the places they are learning in are represented in our culture. This includes interpretation of, and responding to place through such things as poetry, film, songs, etc.

Penetito (2008) also discusses key components of place-responsive outdoor education. These include that practice emerges from the particular attributes of a place. The content is specific

to the geography, ecology, sociology, politics and other dynamics of that place. Place-responsive outdoor education is inherently multi-disciplinary, promotes collaborative approaches to teaching and learning, and invites members of the wider community, as well as local agencies in the teaching. Such education is inherently experiential, which in many programmes includes a participatory action or service learning component. Finally, place-responsive outdoor education connects place with the student and their local community (Penetito, 2008).

Mannion et al (2013) state that “before teachers attune pupils to a place, there is likely a need to develop new personal and professional orientations in teachers themselves towards these places” (p. 801). This idea emphasises the third signpost of Wattchow and Brown (2011), which addresses the need for outdoor educators to apprentice themselves to specific places. Similarly to Wattchow and Brown’s second signpost discussed above, Cameron (2003) notes that the stories used in an outdoor education context must be “true to the place itself, if it is told with critical social and ecological awareness, such a story contains at least an implicit condemnation of place being viewed as a resource or a commodity in a globalized economy” (2003, p. 300). Cameron’s critical questioning of whether the stories told by teachers and learners serve them, or the place, is important to consider in the context of practicing place-responsive outdoor education. Gruenewald and Smith (2008) argue that people must “globally resist ideas and forces that allow for the privileging of some people and the oppression of others both human and other than-human. At other times, place consciousness means learning how to reinhabit our communities and regions in ways that allow for sustainable relationships now and in the long run.” (p. ix). This critical socio-ecological component of place-responsive education is an important component if outdoor education aims to support the aims and outcomes as set out in the United Nations Decade of Education for Sustainable Development (Hill, 2013).

There is significant overlap between the components, or signposts, of place-responsive outdoor education described above. Together, the work of Wattchow and Brown (2011), Penetito (2008), and Cameron (2003), provides a theoretical framework through which the current research conceptualises and explores place-responsive outdoor education.

Although there has been a significant challenge to traditional approaches to outdoor education, there is very little empirical research available on how outdoor educators are already using place-responsive practices in New Zealand, nor is it clear how outdoor educators' personal sense of place is related to such practices. The literature discussed in this chapter justifies exploring the role of the Port Hills in outdoor educators' lives and teaching practices, through the lens of place-responsive outdoor education theory. What follows next is an overview of the aim and questions that underpin this research. The methodological considerations associated with these questions, and a proposed research methods framework is discussed in Chapter 4.

2.7 Research Aim and Questions

The aim of this thesis is to explore the Port Hills as a place for outdoor education and the relationships between outdoor educators' sense of place of the Port Hills and their teaching practices.

The specific research questions that guide this research are:

- 1) In what ways do outdoor educators express a sense of place of the Port Hills and how has this sense developed?
- 2) How do outdoor educators incorporate the Port Hills in their teaching practice?
- 3) In what ways do outdoor educators engage in place-responsive outdoor education practices in the Port Hills?
- 4) What are the links between specific locations within the Port Hills that are of importance to outdoor educators, and their outdoor education practice?

The research questions stated above are important, as they explore the connections between a specific place, outdoor educators' sense of place, and the implications this has for their outdoor education practice. This exploration further develops our understanding of what role the concept of place can have within the outdoor education field. The next chapter provides an overview of the histories, land uses, recreation, education, and recent developments relating to the Port Hills.

Chapter 3: Exploring Place- The Port Hills

The Port Hills form the physical setting for this study. From the first settlements of the Waitaha through to the present day, the area has been a source of refuge, food, inspiration, and wellbeing for local people. Cohan, in 1923, described the Port Hills as follows:

“The grandest hilltop pleasure place that any New Zealand city possesses within easy distance of its streets, and the worth of this mountain track, so easily accessible and commanding so noble a look-out over sea and plains and Alps, will increase in proportion to the growth of the Christchurch population. The fragments of the native bush which survive in the valleys will be of surpassing botanical interest in another generation or two, but the vegetation of the hills inevitably will suffer many changes, and an exotic growth will for the most part replace the ancient trees. [...] Volcanic energy gave us Lyttelton harbour and shaped for us also the ever-marvellous hills that are at once a grateful relief to the eye from the eternal evenness of the plains and a healthful place of pleasure for our city dwellers” (Cohan, 1923, page 1-2).

This chapter is in two parts. The first part provides an overview of the natural (3.1) and human (3.2) histories of the Port Hills, as well as its current landscapes and land uses (3.3). The second part provides a detailed description of three areas within the Port Hills which are of particular significance to the research participants. These descriptions of Awaroa/ Godley Head, Te Tihi ō Kahukura/ Castle Rock and the Bridle Path, and Otutokai/ Victoria Park form the geographical background for the case studies presented in Chapters 5, 6, and 7 respectively.

3.1 The Port Hills: An Overview

This first part of Chapter 3 focusses on the geological and ecological history of the Port Hills. It provides an overview of how the Port Hills were formed, and both the ecological changes that it has seen since the last glacial maximum, as well as its current ecological conditions.

3.1.1 Geological History of the Port Hills

The Port Hills form part of the volcanic rim that borders the now extinct Lyttelton volcano. The area that now forms the Lyttelton Harbour has experienced a long history of volcanic activity. The oldest rocks found are near Gebbies Pass and are around 80 million years old. It is estimated that eruptions occurred until 60 million years ago, after which most of the area was submerged beneath the sea (Wilson, 2009).



Figure 1: Port Hills area. Adapted from Freshmap, Heijnen, 2017

From around 14 million years ago until 6 million years ago a number of volcanic periods caused continued uplifting of the land in the Lyttelton area. These eruptions form the bedrock of most of the modern Port Hills and are mostly made up of basalt and andesite rocks (Wilson, 2009). During the height of volcanic activity in the Lyttelton area between 11 and 6 million years ago a symmetrical cone of 1500 meters high was built up centred on present-day Charteris Bay (Weaver, 1981). This volcano was then an island, distinct from any land further west which was still barely raised above sea level and would later become the Southern Alps (Wilson, 2009). Cracking in the side of this volcano, caused by rising magma, created volcanic dykes in a radial pattern made up of trachyte rocks which are still visible around the Port Hills today (CCC, 1986).

As volcanic activity slowed down erosion of the volcanic cone took over. Gaps were formed first on the Gebbies Pass side, and later forming the Lyttelton Harbour outlet, which was flooded by the sea as sea levels rose after the last glacial maximum around 14 thousand years ago. Continued erosion by the sea creating steep sea cliffs, and streams that deepened valleys, has given shape to the Port Hills as we see them now (CCC, 1986). Soils on the Port Hills are mostly made up of volcanic ash and loess sediments. After the last glacial maximum loess material has been transported by Canterbury's frequent north-west winds from dry riverbeds or outwash plains, and deposited as a blanket on the Port Hills (Cooke, 1999). These sediments eventually joined the former island to the mainland, creating a peninsula (Sewell, Weaver, & Reay, 1993). On north facing slopes on the Port Hills the loess soil is up to 20m thick (Cox, 1994), however the soil is prone to erosion, especially where forest cover has been lost (Ogilvie, 2000).

3.1.2 Ecological History of the Port Hills

The Port Hills are one of 268 Ecological Districts in New Zealand and forms part of the greater Banks Peninsula Ecological Region. An Ecological District is an area in which a range of geological and ecological features are similar enough to produce a distinct landscape with characteristically local ecological communities (Wilson, 2009; Park et al, 1983). The Port Hills range from sea level up to 573 metres at Coopers Knob. There is a moderate annual rainfall gradient, with the driest areas in the east and below 300 metres receiving between 500 and 750 mm of rain and the wetter western and higher areas receiving up to 1000mm of rain annually (Wilson, 2009).

The Port Hills, for most of their ecological history, formed part of the Banks Island. This explains many of its ecological features, such as a high level of endemism of its flora and fauna (Wilson, 2009). Throughout its history, the Port Hills area was almost completely forested, with some small areas of tussock and herbs at the highest elevations and around rocky outcrops. Although lower temperatures during the ice ages would have limited the flora able to grow on Banks Island, subsequent recolonisations of more temperate species from further north occurred several times (Wilson, 2009). Forest cover was still almost complete until the arrival of early Europeans in the 19th century (Wilson, 2009).

The forests of the Port Hills were originally exclusively podocarp-hardwood with dominant species such as totara, matai, kahikatea in the lower areas, and hall's totara, broadleaf, five-finger and pepperwood in other parts. During the colder glacial periods in the last 250,000 years species such as beech trees and subalpine plants, such as dracophyllum and snow tussock, would have gained a strong foothold. However, current conditions favour podocarp-hardwood flora, with beech trees mostly restricted to the cooler and wetter areas near Akaroa (Wilson, 2009).

The isolation for most of its existence led to high levels of endemism, particularly in invertebrate species (Fleming, 1980). The Port Hills still contain endemic species of cicadas, tree weta and ground beetles (Wilson, 2009). As in other parts of New Zealand, a wide range of endemic birds occupied the various ecological niches in the forest.

Radiocarbon dating from an early settlement shows that early Polynesians had settled in the Banks Peninsula area at least 700 years ago (Anderson, 2008). Several waves of human

settlement caused much disruption to the native ecology of the Port Hills. However, although Māori cleared about one third of the forest cover on Banks Peninsula, few if any species of flora went extinct, and cleared forest was colonised by native species such as tussock grasses, kanuka, bracken fern, and coprosma shrubs. The introduction of the Polynesian rat and dog, in combination with extensive hunting in the area, caused the extinction of a wide range of bird species within a few centuries. This included several species of moa, adzebill, several species of duck and swan, a giant eagle, a raven, and an owl (Holdaway & Worthy, 2008). It is likely that other species such as takahē, kiwi, and kākāpō also went extinct during this period, and the impact on invertebrate species may never be fully known (Wilson, 2009).

The impact of European settlement from the 1850s was even more severe. Within 50 years almost all forest cover was removed from the Port Hills. Land was cleared for farming, and hardwood timber was used for the construction of buildings and railways. In a short period of time the Port Hills were reduced from near full forest cover to barely 1 percent (CCC, 2016). Small pockets remained, mostly in the Omahu and Kennedy Bush areas and in steep inaccessible places mostly on the southern faces. Local botanist Hugh Wilson estimates that at least 20 species of flora went extinct in that period, and many more are reduced to a few individuals, or small and vulnerable pockets spread around the Banks Peninsula (Personal Communication, 2016). The colossal destruction of habitat caused the local extinction of a large number of native bird species that had previously flourished, including tūī, kōkako, kākā, red-crowned kākāriki, yellow-crowned kākāriki, saddleback, robin, bushwren, fernbird, mōhua, quail, mottled petrel, brown teal, weka, and laughing owl. Other species such as long-tailed cuckoo and kārearea now only visit the Port Hills area sporadically (Wilson, 2009). Extensive bird counting in the Kennedy Bush reserve showed that the most abundant species currently remaining are silvereye, bellbird, fantail, grey warbler, blackbird, and chaffinch (Freeman, 1999).

3.2 Human History of the Port Hills

The history of human settlement of the Port Hills area can be split into three parts: the earliest hunter-gatherer peoples of the Waitaha first arrived around 1300 AD. Many of these settlements were slowly taken over by the Ngāti Māmoe over subsequent centuries; the

second wave of more permanent settlement by Ngāi Tahu from the 1700AD; and the settlement by people of European descent from the early 1800s.

3.2.1 Māori History of the Port Hills

The earliest people to arrive in the Port Hills area, around 1300 AD, were hunter-gatherer groups, who later became known as the Waitaha. The Waitaha people lived in small communities and relied mostly on hunting birds and sea mammals for food. After the extinction of the larger flightless birds and large reduction of seal numbers, the number of local inhabitants dropped, which coincided with subsequent waves of settlers, the Ngāti Māmoe, who were mostly replaced by the descendants of Ngāi Tahu from the North Island in the 17th century (Wilson, 2009). Ngāi Tahu were the first people in the Port Hills area to live according to 'traditional' Māori culture- characterised by the building of fortified pā, extensive warfare, growing food crops such as kumara, and journeying across the Alps for the purpose of trading pounamu. Through ongoing warfare as well as through interbreeding the people of Ngāi Tahu became the dominant tribe in Canterbury. Many stories relating to the history of the Port Hills speak of the capturing and killing of Ngāti Māmoe, such as the Oketeupoko 'the place of the baskets of heads', the name for the hilltops above Lyttelton, or of sacred places of refuge for warriors such as Te Tihi ō Kahukura 'the citadel of Kahukura' (Cowan, 1923).

Weakened by civil war in the first decades of 19th century, a period known as huanga or 'eat relations', Ngāi Tahu people living in the Christchurch area, such as at Kaiapoi pā and in Lyttelton and Akaroa Harbour, were greatly reduced in number by the raids of Ngāti Toa chief Te Rauparaha in the early 1830s (Wilson, 2009). The battles between the two iwi ended inconclusively and a peace was negotiated by 1840.

3.2.2 European History of the Port Hills

It was at this time, after the signing of the Treaty of Waitangi on February 6, 1840, that European settlement of the Christchurch area was planned. From 1844 to 1863 almost all land held by Ngāi Tahu was purchased by the British Crown. In 1848, 8 million hectares of Canterbury land, including the Lyttelton Harbour and Christchurch area, were purchased for 2000 pounds (Te Ara, 2005). Dissatisfaction with how the Treaty was interpreted led to

ongoing disputes between Ngāi Tahu and the Crown, which were finally settled by the Waitangi Tribunal in 1998.

John and William Deans established the first farm in present day Riccarton in 1843. The Canterbury association, led by John Godley, John Wakefield, and Captain Joseph Thomas surveyed and planned the settlements of Lyttelton and Christchurch, and in 1850 the first four ships arrived at Lyttelton port with the first 750 British people (CCC, 2017; The Press, 2017). These early settlers faced a gruelling climb of the Bridle Path, carrying most of their belongings, to gain the Port Hills and access to their new home in swampy Christchurch (Cook, 2006).

From the 1850s the province of Canterbury grew and prospered mostly due to revenue from wool exports (CCC, 2017). Transport from Lyttelton port to the developing town remained problematic until the opening of New Zealand's first railway tunnel under the Port Hills in 1867. The final decades of the 19th century saw a growing city of Christchurch and the establishment of institutions such as the Canterbury Museum (1870) and the Canterbury College (1877). As the Port Hills were deforested, sheep farming was established mostly on the northern slopes, and urban development has subsequently spread across the lower parts of the Port Hills, creating the hill suburbs of Scarborough, Mt Pleasant, Hillsborough, Huntsbury, Cashmere, and Westmorland.

The Port Hills were first recognised as an outstanding scenic and recreational feature by Harry Ell (1862 – 1934). It was mostly due to his vision and effort that large parts of the Port Hills were kept open to the general public. Ell established the Summit Road and a trail of rest houses linking Christchurch to Akaroa. As a member of parliament Harry Ell also advocated for the establishment of a scenic reserve at Kennedy's Bush to preserve the remaining native vegetation there and elsewhere (CCC, 2004; Summit Road Society, 2017).

3.3 The Port Hills Today: A Peri-Urban Area

The Port Hills today can be defined as a peri-urban area, which are areas which form the interface between distinctly urban and rural areas, and as such have characteristics of both (Simon, 2008). The Port Hills consist of a range of urban, rural, and natural areas which overlap, and the public areas are managed by a variety of agencies such as the Christchurch City Council (CCC), Department of Conservation (DOC), Summit Road Protection Authority (SRPA), and private ownership. There are 40 protected reserves on the Port Hills, which together

make up nearly 20 percent of the land area (Depatie, 2016). The Summit Road is managed through the Summit Road (Canterbury) Protection Act 2001, administered by the SRPA. The purpose of the Summit Road Protection Act is to provide for the preservation and protection of the scenic and natural amenities associated with the Summit Road and other roads, walkways, paths and public open spaces within the Port Hills (Hogan, 2014).

The CCC has identified the Port Hills as an area of outstanding landscapes which has a variety of resources, land uses and values. The Port Hills provide a range of functions for local people, including protecting, enhancing and utilising ecosystem services, economic productivity such as farming and forestry, and recreation areas (Hogan, 2014). The Port Hills contains areas designated for environmental and historical conservation, a range of recreation activities, farming, and urban development (Depatie, 2016).

Commercial activities on the Port Hills include pastoral grazing, exotic forestry, the Christchurch Gondola, and at the time of writing, the recently reopened Christchurch Adventure Park; a large mountain bike and zip line park that opened in late 2016 and was severely affected by the Port Hills fires of February 2017.

3.3.1 Recreation and Education in the Port Hills

The Port Hills allow for a wide range of recreation experiences. A Port Hills recreation experience survey (CCC, 2004) found that respondents used the Port Hills for recreation for reasons related to aesthetic, solitude, challenge, discovery, and social life. The same study reported that the main recreational activities that people engaged in were walking (40%), mountain biking (17%), running (10%), and sightseeing (10%). Other types of recreation documented were road cycling, rock climbing, and dog walking (CCC, 2004). Recent research into Port Hills recreation activities by Depatie et al (2016) confirm these findings, although a greater percentage of people (33%) were engaged in mountain biking as their main recreational activity.

In 1999, the CCC formally adopted its Port Hills acquisition strategy. This document states that as the Port Hills play such an important part in the lives of many people in Christchurch, further areas of land should be purchased where practicable, and lays out the criteria for acquisition and maintenance. In this strategy document, the Council identifies the following objective: “To create an integrated, sustainable Port Hills parks system [...] that recognises

and enhances the Port Hills' ecological, visual, geological, historic and recreation qualities for the people of Christchurch, surrounding districts and visitors" (1999, p. 9). The Council recognises three distinct landscape types and associated values within the Port Hills. These are the Coastal Park, in the Godley Head area, the Tussock Grassland Park in the central northern areas, and the Crater Rim Forest Park, mostly in the western area and south of the Summit Road (CCC, 1999). Commercial activity within the Port Hills was identified as desirable only where it does not impact the scenic values, biodiversity values, and existing suite of recreational opportunities.

Formal and informal education takes place in the Port Hills on a regular basis, however there is no available data detailing which groups use the Port Hills, how often, and for what purposes. From professional experience, the author knows that certainly most Christchurch primary and secondary school students would visit the Port Hills several times as part of their educational programme, for the purpose of recreation/ outdoor education activities, and for history and geography field trips. Tertiary education programmes focussing on conservation/ ecology, outdoor education, recreation, and tourism, at all three major tertiary education providers, also use the Port Hills at times for ecological and geological field work, rock climbing, orienteering, mountain biking, health and physical education, and adventure racing. Informal education providers such as the YMCA, Living Springs Trust, and various scouting and youth groups also frequent the Port Hills for similar purposes.

3.3.2 Recent Disruptions in the Port Hills

Two large scale disruptions have impacted the Port Hills in the last 8 years. In 2010, Canterbury experienced the beginning of a long sequence of severe earthquake activity which culminated in the devastating Christchurch earthquake of February 22, 2011, which killed 185 people and injured more than 7000 people (NZ History, 2017). Moderate to strong aftershocks continued for several years (GNS, 2017). Much of the eastern part of the city and the Christchurch CBD were closed to the public. The Port Hills were also severely impacted by these earthquakes. Suburbs in the hills were impacted by rock fall, and by mass land movement. As a result many houses had to be abandoned and rock fall also forced the closure of the Summit Road, the road between Lyttelton and Evans Pass, as well as many of the walking and cycling tracks and rock climbing areas (see Figure 2) (CCC, 2017). Particularly hard hit were the areas above Lyttelton from Evans Pass through to Rapaki. Although most

conservation and recreation areas are now open to public access again, cars are prohibited on the Summit Road between Rapaki and Mt Pleasant, and the road between Lyttleton and Evans Pass remains closed to all traffic.

In February 2017, two large fires broke out within 24 hours of each other in the Port Hills. These fires burned for several days and devastated 1600 hectares land in the Port Hills. More than one hundred firefighters and 14 helicopters were involved in controlling the fires and a helicopter pilot lost his life when his helicopter crashed into the hillside (CCC, 2017). Although comparatively little damage was done to property (9 houses were destroyed) the fires had a severe impact on natural reserves where decades of ecological restoration work was destroyed, with the Summit Road Society's Ohinetahi Bush area particularly badly effected (Summit Road Society, 2017). The fires also impacted many important recreation areas in the Port Hills, such as Victoria Park and Kennedy's Bush. The Christchurch Adventure Park, which had only opened 6 weeks prior, was nearly destroyed (see Figure 2). Although its buildings were untouched by the fire, the chairlift and tracks were closed for nearly a year and have only reopened at the time of writing.



Figure 2: Castle Rock and Port Hills Fires, Heijnen, 2017

3.4 Case Study Areas: A Closer Look at the Port Hills

This section provides an in-depth look at the ecology and history of three key areas in the Port Hills: Awaroa/ Godley Head, Te Tihi ō Kahukura/ Castle Rock and Bridle Path, and Otutokai/ Victoria Park. These three areas have been selected for further examination as they are the focus of the case studies presented in chapters 5, 6, and 7 respectively. The purpose of the case studies is to illustrate in more detail what specific places are of importance to the participants, and how these places link their personal lives and outdoor education practice. Appendix H shows a map with an overview of the three areas in the Port Hills

3.4.1 Awaroa/ Godley Head

Awaroa forms the eastern most headlands of the Port Hills. Comprising about five square kilometres of steep sea cliffs and exposed tussock hills, Awaroa is a significant area from a scenic, ecological, recreational, and historical perspective (see Figure 3 and Figure 4).



Figure 3: Map of Godley Head, adopted from Freshmap, Heijnen, 2017

Ecology

The sea cliffs of Awaroa are important for nesting seabirds and coastal birds, particularly the endangered spotted shag, red-billed gull, and sooty shearwater (Crossland, 2008). Larger numbers of northern and wandering albatross are also found. In addition the bays surrounding Awaroa shelter breeding populations of penguins, including little blue, white flippered, and yellow eyed penguin, and aquatic mammals. New Zealand fur seals are becoming more abundant around Awaroa which has also lead to sightings of predators such as Hooker sealions and leopard seals (Crossland, 2008).



Figure 4: Godley Head, CCC, 2017



Figure 5: Native plantings on Godley Head, Alex, 2017

Small remnants of native coastal plants are found, mostly in the steep south facing gullies towards the Lyttelton Harbour, and some new native planting projects have been established (see Figure 5). However, the majority of plant cover on Awaroa is from introduced grasses, tussocks, and exotic flowering plants (CCC, 2004).

Human History

Awaroa has a significant human history, although it has had no recognised settlement, probably due to its exposed position, lack of fresh water, and no easy access to the seashore (Godley Head Heritage Trust, 2017). A lighthouse was built on Awaroa in 1865 (see Figure 6). Although it was seriously compromised by the Christchurch 2011 earthquake it remains operational. In 1939 three gun emplacements were built on top of Awaroa to defend Lyttelton Harbour against a possible Japanese attack. By 1944 two were completed, alongside barracks and observation posts and 400 servicemen were permanently stationed there (see Figure 7). The area is now a protected DOC heritage site (DOC, 2017).

Recreation

A wide range of recreation opportunities exist on Awaroa, ranging from the broad Godley Walkway between Taylor's Mistake and Awaroa via Boulder Bay, and the Breeze Col track (see Figure 8). A number of mountain bike tracks exist, including the



Figure 6: Lighthouse, GHHT, 2017



Figure 7: WW2 Observation Post, Rebecca, 2017



Figure 8: Godley Head and Lyttelton Harbour, Rebecca, 2017

popular downhill track ‘anaconda’. The predominant easterly breeze and steep cliffs make Awaroa one of New Zealand’s best paragliding areas (CCC, 2004). Surfing at Taylor’s Mistake beach and snorkelling in the bays around the headlands are also popular activities (CCC, 2004). Awaroa is recognised as a potential Coastal Park, one of three specific parks that make up the Port Hills, due to its unique character through its recreation tracks, coastal views WWII historic features, sea access, penguin and other seabird colonies, and tangata whenua values (CCC, 2004).

3.4.2 Te Tihi ō Kahukura/ Castle Rock and the Bridle Path

Te Tihi ō Kahukura literally means the citadel of Kahukura. Kahukura is a sacred ancestor that people of Ngāi Tahu look to for support in times of war. Castle Rock, the English name of this outstanding feature of the Port Hills, is a volcanic dyke that guards the top of the steep spur dividing the Horotane and Heathcote valleys on the northern slopes of central Port Hills (see Figure 9 for a map of the area).

Kahukura, after whom the rock is named was also known as Uenuku in the North Island. He is the spirit guardian invoked by tribal tohunga and appealed to for advice and omens in times of war. Each hapū had an image of Kahukura, often a small carved wooden figure, which was kept in a tapu place (Cowan, 1923).

The Bridle Path is the steep track that climbs from Lyttelton port and crosses a low pass into the Heathcote Valley just north of Castle Rock. It was the first, and for several years the only, land route that connected Lyttelton Harbour with the Canterbury Plains and as such was the major route for new European settlers into Christchurch.

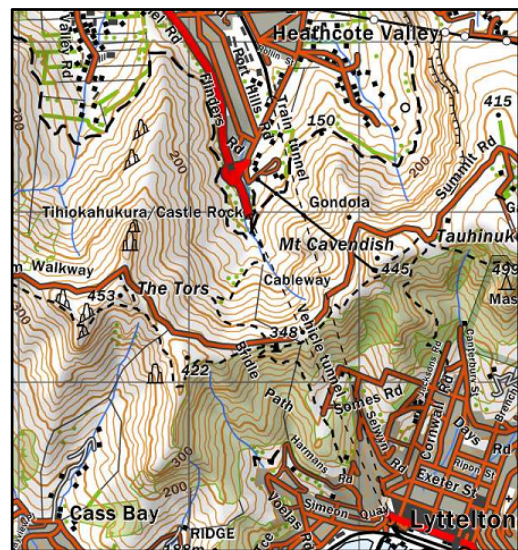


Figure 9: Map of Castle Rock/ Bridle Path, adapted from Freshmap, Heijnen, 2017

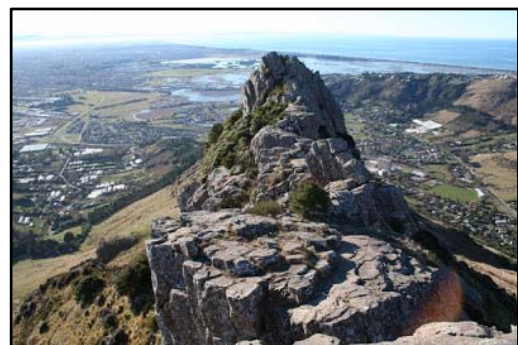


Figure 10: Te Tihi o Kahukura, Castle Rock, CCC, 2017

The area lies in what the CCC envisages as the Tussock Grassland Park (2004). Outstanding features of this area are that it forms a significant part of the city backdrop, recreation tracks, Crater Rim walkway, city and harbour views, alpine and Mt Herbert views, direct access to the Crater Rim, extensive open tussockland, and tangata whenua values (CCC, 2004).

Ecology

The central Port Hills, particularly on the northern slopes, contain almost no forest. However, the steep slopes above Lyttelton Port contain areas of remnant forest. Additionally, the tussocklands and steep rocky outcrops form a good habitat for a range of locally endemic and rare native species of flora and fauna. The introduction of herbivorous animals (such as cattle and sheep) had major impacts on the Port Hills' vegetation. Many plants were pushed back to these inaccessible rock outcrops (Wilson, 2009). These are often the refuge for some very rare species such as the recently discovered sedge *Carex inopinata*, and the endemic *Hebe strictissima* (Partridge, 2008). The tussocklands are an important habitat for New Zealand Pipit and are frequently visited by Australasian harrier hawk and a range of introduced bird species (Crossland, 2008). Rocky outcrops such as Castle Rock also form important habitat for a number of native lizards, including three species of skink: Spotted skink, Common skink, and McGann skink, and two species of gecko: Canterbury gecko, and the endangered Jewelled gecko (Freeman et al, 2008).

Human History

Te Tihi ō Kahukura was named after one of Ngāi Tahu's principal deities, who has as its celestial form the rainbow. It is both a name and place of high tapu, and its commanding view of the area as well as steep terrain made it an ideal refuge for war parties (see Figure 10) (Cowan, 1923).



Figure 11: Historical and contemporary view from the Bridle Path, CCC, 2017

As discussed in Chapter 4.1, organised settlement of Canterbury began in 1850 with the first four ships from the Canterbury Association arriving in Lyttelton Port. As no road was available, and it was still 17 years until the railway tunnel underneath the Port Hills would be opened, these first settlers had to walk over the Bridle Path into their new lives carrying most of their personal belongings (see Figure 11 for a photographic comparison between the view that greeted the first settlers and the current view of Christchurch). In defiance of its name, the Bridle Path was too steep on the Lyttelton side to use horses. In 1857 a bullock team managed to pull a dray over the Bridle Path, however all heavy equipment had to be transported by boat into the Avon/ Heathcote estuary (CCC, 2017).

Recreation

There is a swath of recreation opportunities in the central Port Hills. Before the 2011 earthquakes Castle Hill was one of the most used rock climbing areas in the Port Hills. It was also the location where the New Zealand Outdoor Instructors Association conducted its most rigorous rock climbing assessments.



Figure 12: Earthquake damage on Castle Rock, CCC, 2012

However, a significant part of the eastern and northern faces of the outcrop collapsed during the earthquake and the area is no longer suitable for rock climbing (see Figure 12). However, the nearby climbing areas Cattlestop Crag and Britten Crag are still open for use. There are also a range number of walking and mountain biking tracks traversing the Crater Rim, and the Bridle Path is now a popular walking track. Not far from the top of the Bridle Path is the Christchurch Gondola building, offering tourist information and a café.

3.4.3 Otutokai/ Victoria Park

Victoria Park lies on the spur between the top of Sugarloaf Hill and the suburb of Cashmere (see Figure 13). It has Bowenvale Valley on its eastern flank and Dyers Pass Road and adjacent Christchurch Adventure Park on its western flank.

Ecology

Although the original forest was removed from the Victoria Park area for farming and timber, the area has seen extensive plantings of exotic plants initially, and native planting since the 1980s (see Figure 14) (CCC, 2004). This has resulted in a wide range of habitats for both flora and fauna. In a comparatively small area you can find native forest plants, macrocarpa, pine and other tree species, as well as areas with rocky outcrops and native tussock fields (see Figure 15) (Wilson, 2009). This mosaic of habitats provides food and shelter for a wide range of birds, including moderate numbers of bellbird, fantail, grey warbler, and silvereye, as well as large numbers of introduced birds (Wilson, 2009).

Human History

Although Ngāi Tahu don't have a specific name for the Victoria Park area, nearby Dyer's Pass is Otutokai- which means 'the place where food was pointed out.' It received that name after an early Ngāi Tahu chief called Waitai had climbed the hill from Rapaki to survey the country, and pointed out areas of opportunity for

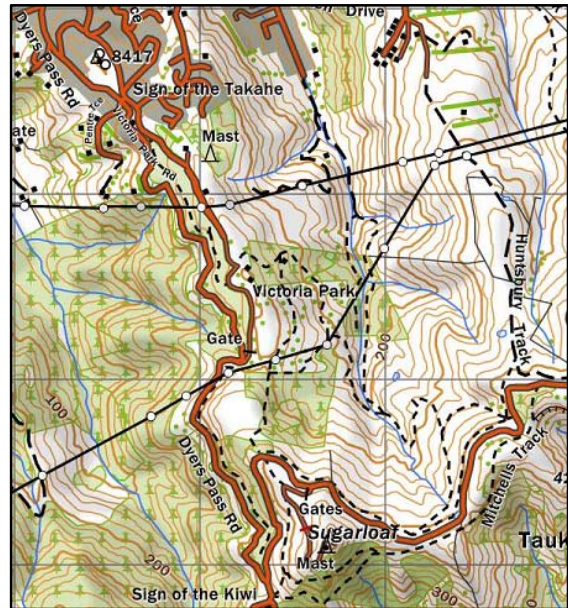


Figure 13: Map of Victoria Park, adapted from Freshmap, Heijnen, 2017



Figure 14: Victoria Park recreation area, Pete, 2017



Figure 15: View to city from Victoria Park, Pete, 2017

food gathering to his companions such as fish in Whakaraupo, and eel and water fowl in the marshes of Ōtautahi (Cowan, 1923).

Victoria Park was opened in 1897 by William Rolleston as part of the diamond jubilee celebration for Queen Victoria. It was initially heavily planted in exotic trees, but since the 1980s it was recognised that native planting sites needed to be established as well. Victoria Park also contains a WW2 memorial of the 227 casualties of the 19th NZ Battalion (Cloke & Pawson, 2008). More recent developments include establishment of the Port Hills rangers' headquarters, and a variety of outdoor recreation infrastructure.

Recreation

In addition to its botanical variety and good views, Victoria Park is mostly known for its recreation opportunities. It contains a myriad of walking tracks, including the highly popular Harry Ell Walkway which connects the suburb of Cashmere with the Summit Road and Sign of the Kiwi café. There is also ample mountain biking on its eastern side into Bowenvale, which include some of the most technical downhill tracks in Christchurch (CCC, 2018). The top of the park is bordered by the Summit Road and connects to the tracks that circle Sugarloaf



Figure 17: Victoria Park recreation area, Pete, 2017



Figure 16: Harry Ell Walkway fire damage, Jason, 2017

reserve, including the Crater Rim Walkway. The flat area at the bottom of Victoria Park includes a large carpark, dog park, grass field and playground (see Figure 17).

The Port Hills fires in 2017 reached the western flank of Victoria Park and the area bordering the Harry Ell Walkway as well as the Summit Road was burnt (Figure 16). The adjacent Adventure Park was seriously damaged, but the CCC rangers' buildings and most mature plantings in Victoria Park escaped the worst of the fire. The case study areas described above are further discussed in terms of the relevant findings of which these areas are illustrative in Chapters 5, 6, and 7. What follows next is an outline of the methodology used for this research.

Chapter 4: Methodology

4.1 Introduction

This chapter provides an overview and discussion of the research methods that form the basis of this thesis. This thesis explores the connection of outdoor educators to the Port Hills, and the role that place has in their teaching practice. The research involves interpretations of experiences, meanings, and values of the participants, and as such a qualitative, interpretive methodology was appropriate. This thesis seeks to position place as a concept that forms the nexus between the characteristics of the physical location itself *and* the subjective interpretation and construction of meanings of place by people. Therefore, a research method was developed that integrates both aspects of place.

This chapter consists of two main parts. The first part discusses the theoretical foundations that support the choice of methodology and research methods in sections 4.2 and 4.3. Section 4.4 provides a brief outline of the participants and how they were selected. The data collection and modes of data analysis are discussed in detail in sections 4.5 and 4.6 respectively. The first part of this chapter concludes by acknowledging the ethical considerations (4.7), and limitations (4.8) of the research. The second part of this chapter (4.9) provides an in-depth overview of each participant. It discusses both their personal and professional background, as well as where the interviews took place. This allows the reader to develop a contextual understanding of the participant-place relationship through which to interpret the subsequent findings chapters.

4.2 Methodological Considerations

This section provides an outline of the research methodology. First through a brief discussion of the nature of qualitative and interpretive research, and second through an overview of the theoretical foundations of the walking interview method. While there are many different approaches to qualitative research they share a focus on an in-depth understanding of what is researched. Qualitative research tries to discover new ideas rather than testing assumptions made by existing theories (Neuman, 2005).

Interpretive research methods explore how participants experience their world and construct meaning, what they do and experience, with the aim of understanding the meaning of a

phenomenon rather than generalising or predicting specific and measurable outcomes (Cranton, 2001). Interpretive research aims to understand how people make sense of their world and holds that there are multiple subjective conceptions of reality (Denzin & Lincoln, 2011; Pope, 2006). Within the interpretive research paradigm there are a wide range of approaches available, each with its own theoretical and ontological underpinnings. This research used a walking methodology. Participants were interviewed twice, with the second interviews conducted whilst walking in the Port Hills. Chapter 4.4 provides an overview of how these interviews were conducted. The next section discusses the theoretical basis of walking as a research method and why a walking methodology was deemed most appropriate for this research.

4.3 Walking as a Research Method

Place meanings are co-constructed between people and the physical locations themselves. Walking interviews have been used as a research method for some time, particularly in the field of cultural geography (Jones, Bunce, Evans, Gibbs, & Ricketts Hein, 2008), and have proven very effective in revealing human connections to place which more traditional stationary face-to-face interviews have found difficult (MacKay et al, 2018). Sheller and Urry (2006) argue for the recognition of a mobility research paradigm. This paradigm challenges the ways in which much social science research has been 'a-mobile' and provides a theoretical foundation for mobile and in situ research methods. An important argument for using a mobile research method is "the re-centring of the corporeal body as an affective vehicle through which we sense place and movement, and construct emotional geographies" (Sheller & Urry, 2006, p. 216). Carpiano (2009) uses the term go-along interview:

"The go-along method [...] is a form of in-depth qualitative interview method that, as the name implies, is conducted by researchers accompanying individual informants on outings in their familiar environments, such as a neighbourhood or larger local area [...] In this regard, the researcher is "walked through" people's lived experiences of the neighbourhood. Through asking questions and observing, the researcher is able to examine the informant's experiences, interpretations, and practices within this environment" (2009, p. 5).

Carpiano (2009) argues that walking interviews enable researchers to study local areas such as the Port Hills with specific social, cultural, or historical contexts, and to develop or refine theories that are grounded in the lived experiences of the participants. Mackay et al (2018)

conclude that using an interpretive walking method enables a meaningful and shared encounter with place, which includes a range of embodied and sensory experiences, “and thus has the potential to generate rich, sometimes evaluative, accounts of situated life experience and the dynamics and biographies of place” (Mackay et al, 2018, p. 2).

Wylie (2006) explores how landscape and subjective interpretation intersect through the practice of walking to forge understandings of place. Walking is much like talking, without a clear beginning or end, and both are fundamental to the human way of life. “Life itself is as much a long walk as it is a long conversation, and the ways along which we walk are those along which we live” (Ingold & Vergunst, 2008, p. 2). We tend to forget that the body itself is grounded in movement. Walking is not just what a body does; it is what a body is. And if the body is foundational to culture, then walking- or thinking in movement- is foundational to being a body (Sheets-Johnstone, 1999).

In their study of the role of the setting in educators’ planning of outdoor learning programmes Lynch and Mannion (2016) conducted walking interviews which were arranged so that the educators could take the researcher back to the very places where they had taken students for regular outdoor education experiences. These were also the places that educators had usually visited ahead of taking their students in order to plan their teaching sessions, or for personal recreational purposes. During these walking interviews, Lynch and Mannion (2016) looked at if, when, and how elements of the place itself featured in outdoor educators’ pedagogy.

Chapter 4.4 details how, for the purpose of this research, participants were interviewed both indoors as well as during a walk in the Port Hills, maps were used to elicit stories and ideas, and photos were used to capture the visual and aesthetic of the Port Hills during the walking interviews. The next section first provides an overview of the participants and how they were selected.

4.4 Research Participants

This research is based on information provided by eight participants. The assessment that enough data has been captured in qualitative research is to a certain degree subjective. However, through ongoing memoing and note taking during and after the interviews (see

section 4.5.1), it was concluded that no significant new ideas were forthcoming, and that sufficient data was collected to support a comprehensive analysis.

4.4.1 About the Participants

Each participant in this research is an expert in her or his area of outdoor education, and is highly experienced in terms of both their personal and professional relationship with, and time spent in, the Port Hills. Chapter 4.9 provides an in-depth description of each participant which allows the reader to gain a better insight into the participants' personal and professional background, values, and outdoor education practices in the Port Hills.

4.4.2 Participant Selection and Recruitment

The available population of outdoor educators who currently regularly teach in the Port Hills is small and mostly personally or professionally known to the researcher. It was therefore not necessary or practicable to use a randomised participant selection process. The researcher used his professional experience and contacts to carefully select an initial group of four participants based on the following criteria:

- Participants have a professional history of at least 5 years of employment in outdoor education in New Zealand.
- Participants have spent a large number of days (at least 100 days) in the Port Hills either for personal reasons, or as part of their outdoor education practice, within the last 10 years.
- Together, participants have, as much as possible, a range of backgrounds which include gender, ethnicity, age, and career focus/ area of employment.

Each participant was asked to recommend two other people they believed would provide valuable insights for this research. This snowball method ensured that the research is based on data from a wider and more diverse population, and includes participants not directly known to the researcher.

4.5 Data Collection

This thesis uses a range of different data, which include in-depth interview transcriptions, maps, and photo analyses. This section discusses the collection method of each type of data.

4.5.1 Indoor Interviews

Semi-structured and in-depth interviews were conducted for this research from October 9 through to November 30, 2017. The flexible nature of semi-structured interviews ensured that each interview was adapted to explore areas relevant to the individual participant, whilst still capturing data that is comparable (Gray et al, 2007). Each participant was interviewed for around 1hr to 1.5hr in a location of their choice, which included their offices, local café, and homes. Key themes that were discussed in these interviews included participants' definitions and meanings of the Port Hills in general, their work and recreation activities in the Port Hills, and their outdoor education values and practices. Appendix B provides an overview of the interview question guides used in these indoor interviews.

4.5.2 Walking Interviews

At the end of each indoor interview, the participant was asked to identify an area to conduct the walking interview, which were also between 1hr and 1.5hr in length. These interviews were each conducted between 3 and 7 days after the initial indoor interview with the participant. The second part of this chapter discusses in more detail the place context of where each walking interview was conducted, and why those particular locations are important to the participants. Appendix E provides an overview map with the location of each walking interview.

4.5.3 Recording and Transcription of Interviews

All 16 interviews were audio-recorded and fully transcribed. Each indoor interview was transcribed prior to the walking interview with that participant, and each walking interview was transcribed as soon as practicable afterwards.

The indoor interviews were recorded using two independent digital voice recorders. The walking interviews were recorded in two separate ways. Participants' voices were recorded with a Tascam DR-05 recorder with a lapel microphone, which allowed unimpeded movement for the participant. This recorder also faintly picked up the researcher's voice, however as a back-up, the researcher used a hand-held voice recorder similar to those used in the indoor interviews. Although recording quality of both types of recorders was compromised in

moderate to strong wind conditions, their combined use allowed a full transcription of all comments made by the participants and interviewer, and no data was lost during this process.

4.5.4 Maps and Photos

During each indoor interview participants were shown a topographical map of the Port Hills area. This map helped participants to remember locations and stories, and provided an opportunity for participants to write down their thoughts about what specific areas in the Port Hills mean for them personally as well as professionally. Appendix E shows the map of the Port Hills that was used for this purpose.

During the walking interviews the participants were encouraged to take photos of things they encountered that had significant meaning to them. Participants were informed at the start of the walking interview that photos could include a variety of things such as landscapes, views, human-made structures, tracks, and flora and fauna. The first two participants were asked to email a small selection of photos with short answers to the following two questions: (a) explain what the photo shows or represents; and (b) why was this particular image chosen. The purpose was for participants to be able to reflect on their walking interview experience before selecting and commenting on photos. However, it soon became clear that this placed too big an additional burden of time and effort on participants, and it was decided that instead participants would take photos on a camera provided by the researcher, and comment immediately on the two questions stated above. This method was used for all remaining participants.

4.6 Data Analysis

Blumer (1969) describes two key steps in the qualitative research process: exploration and inspection of data. Exploration of data in this research involved interviews, maps, and taking photos while walking in the Port Hills. These actions allowed me to “form a close and comprehensive acquaintanceship with a sphere of social life [...] and remain grounded in the empirical life under study” (Blumer, 1969, p. 40). Inspection means to critically analyse the data, to find general concepts, relationships, and theories. Blumer emphasises that inspection should not be viewed as prescribed or routinised and the researcher’s perspective is clearly an elemental part of this process. The inspection process is “flexible, imaginative, creative, and free to take new directions” (1969, p. 44).

This section discusses the process of inspection, or data analysis, used in this research. Data analysis was iterative and continuous. Although the next sections describe this process in specific steps for reasons of clarity and ease of reading, it is important to note that such clear distinctions do not exist in reality, and that much of the analysis occurred unconsciously, and when I least expected it. For example, I found that personal physical recreation in the Port Hills, such as going for a run or mountain bike ride, often provided unlooked for insights.

4.6.1 Analysis During Data Collection: Memoing and Notes

During each indoor interview notes were taken as a reminder of which themes to further explore and these included follow-up questions to ask during those interviews. Immediately after each interview memo notes were taken with basic ideas and thoughts on both the content and method of research. Each indoor interview was fully transcribed as soon as possible after the interview, and subsequently more extensive notes were taken pertaining to both the data and research methods. From these notes, themes and questions were identified for further exploration in the walking interview with that participant. This allowed for more targeted and specific questions during the walking interviews, as well as revisiting areas of interest that were not fully covered in the indoor interview.

A similar process of memoing, transcription, and note taking was used after each walking interview as well, and completed prior to the subsequent indoor interview with the next participant. Although this iterative process of ongoing analysis and adjustment of the research process did not lead to any significant changes in how the research was conducted, it allowed me to keep the research questions in sharp focus, and formed the basis of the subsequent analysis phase of the research.

4.6.2 Coding and Thematic Analysis of Interviews

To start making sense of the data the 16 sets of memos and notes from the interviews were read multiple times and a spreadsheet of initial codes, their descriptions, and relevant quotes from the interviews was set up. This spreadsheet provided the starting point for the identification of repeating ideas and patterns (Lofland et al, 2006). These codes were distinctive ideas but were not analysed themselves at this initial stage, and they ranged from very simple to very complex concepts and themes.

When initial coding was completed, all full transcripts were analysed several times to allow for more codes to emerge, and participant quotes were added both to these new codes as well as to existing codes to provide context. After several readings of both the transcripts and the analyses notes, to ensure no distinct codes were left in the data, the codes were analysed to identify which codes were sufficiently distinctive and coherent. As a result of this analysis several codes were either merged or split into separate codes.

The final step in this part of the analysis process was to group all codes into several connecting areas or themes that shared thematic coherence and consistency. All codes were printed and arranged on a table to create a visual overview. Once distinct themes were identified, related quotes from the interviews were added to each theme in a separate spreadsheet.

4.6.3 Analysis of Maps and Photo Material

The next step in the analysis process was to analyse the maps and photo material. A map of the Port Hills was created that shows each participant's walking interview location. Each interview transcription was read again, and each time a participant talked about a specific location in the Port Hills a small triangle was plotted on the map, with each participant given a different colour (see Appendix G). This provided an overview of clusters of specific areas of the Port Hills that were of importance to the participants.

The maps that participants used during the indoor interviews, and which contain their comments about locations of significance were also analysed, coded in a similar manner as described in section 4.5.2, and added to the spreadsheet.

The photos that the participants took during the walking interviews were printed, and after reading the walking interview transcripts, placed next to relevant themes that the participants discussed when taking the photos.

An important and challenging step in the analysis phase was to blend the different forms of data. This required reflection on the research questions themselves, in order to decide which themes were most relevant and which would be discarded for the purpose of the coherency and consistency of the thesis. A story board was constructed showing the research questions, and the themes, maps, and photo material were integrated onto this board (see Figure 18 for a photo of this part of the analysis process).

The findings chapters and themes of this thesis emerged from the process described above. Each chapter was assigned a group of themes, maps and photo material and placed on the thesis structure board. Once a basic overview of the thesis structure was completed, each theme was further analysed and findings were written by analysing associated quotes and relevant literature. Although several themes were rearranged or renamed as part of the writing process, the main structure of the findings chapters has remained consistent.



Figure 18: Storyboard for integrating data during analysis, Heijnen, 2018

4.7 Ethical Considerations

It was important to ensure that the wellbeing of participants, third parties (including the ecological systems of the areas visited), and myself were not detrimentally effected by this research. Such effects could be the result of unmanaged physical, emotional, or social/ work related risks. This section discusses the ethical concerns in relation to this research, and the steps taken to address these concerns. The research adhered to the ethical guidelines and regulations set out by Lincoln University's ethical committee. Participants were informed of the nature and purpose of the research at the initial approach, and then via an information letter and consent form (Appendix A). It was made clear that they could decline to take part, or withdraw from, the study.

Physical, Emotional, and Social Risk

Walking in the Port Hills has inherent physical risks such as injuries, exposure to weather, traffic accidents, rock fall, or falling from heights. As both the participants and researcher are all outdoor educators with extensive experience with walking in the outdoors, in particular in the Port Hills, physical risk was manageable.

When using qualitative research methods participants often reveal personal stories from their lives, and there is risk of emotional harm as a result. Participants were informed before the interviews commenced that participation was voluntary and that they should only share information that they were comfortable with. Each situation with potential emotional risk was managed with sensitivity to minimise any potential issue. For example, during one interview a participant became very emotional as a result of looking at a map of the Port Hills and being asked to share moments and locations of importance. The interview was paused, and the participant was given time to recover, and later asked if she wanted to postpone or stop the interview. She recovered quickly and was happy to continue. At the end of the interview, the participant was reminded that she could choose to delete part, or all, of the interview transcript at any stage.

Anonymity

As the population of professional outdoor educators working in Christchurch is small, there is an element of social and professional risk to the participants in being recognisable through descriptions and stories used in this publication. To ensure anonymity rights are respected, pseudonyms are used throughout this thesis, and workplaces, professional backgrounds, names of family or colleagues were generalised and changed where needed. Audio recordings, transcriptions, and all other data gathered was stored on a private computer with password protection and backed up on an external hard drive which was kept in a lockable drawer. The details of the interviews remained confidential and were only discussed with my supervisors at Lincoln University.

4.8 Research Limitations

Bias is to a certain degree inherent in qualitative research methodologies (Gray, 2007). It is both unavoidable and undesirable to fully distance the researcher from what is researched (Lofland & Lofland, 2006). That is not to say that the findings presented in this thesis are figments of my imagination, they are in fact rooted in the lived and narrated experiences of the participants. As discussed in the introduction, and acknowledged throughout this thesis, I am a part of the community that is the focus of this research. My personal and professional values and views pertaining preferred developments and directions within outdoor education practice inform the conceptualisation, methodology, and conclusions of this research. It was not possible nor desirable to put aside my biases; they are woven both explicitly and implicitly into this thesis. Through an honest and ongoing acknowledgment of these positions and biases I hope to forestall the potential criticism of conflict of interest. The process of research, however, did require me to both examine my biases as well as challenge my values and beliefs. As a result of this examination I have gained a deeper understanding of my role and practices as an outdoor educator and as a researcher.

4.8.1 Limitations of Participant Selection

The small number (8) of participants involved in this research, as well as the method of participant selection, has limitations. These limitations include the representativeness and validity of the findings of this thesis. As discussed in section 4.3 there was clear indication that sufficient data was available after completing the 16 interviews to provide a thorough discussion of the research questions.

By targeting specific people for participation, and then using a snowball method for further selection of participants, the degree to which the findings in thesis are representative for the population is unknown. It is important to keep in mind that this thesis presents a case study of a small number of outdoor educators and their practice in a specific place. The research has sought to gain an in-depth understanding of the concepts raised by the research questions through a qualitative exploration, and as such there is no need for the full population to be statistically represented. The findings and conclusions of this thesis should be read with these limitations in mind.

4.8.2 Limitations of the Walking Interviews

The walking interviews used in this research were particularly effective and insightful. Rich, specific, and varied stories were shared by the participants, and the approach allowed for the Port Hills themselves to play an active role in the research process. The stories and examples that participants shared while walking were more lively and detailed, and avoided generalisations in comparison to the indoor interviews. The physical activity of walking, in combination with the unexpected encounters of other people and other organisms, and the aesthetic characteristics of the Port Hills landscape, all contributed to rich conversations.

Limitations pertaining to this method include the following. First, while walking it was physically impossible to keep notes for the purpose of reflection or for identifying ideas for further exploration. This limitation was partially addressed by taking memos and notes as soon as possible after the walking interviews were finished. Second, the activity of walking, the weather, landscape, and environment, as well as encountering other people, were all potential distractions for both the participants and the researcher. This is an inherent limitation of the method. One has to question though: distractions from what? It was this emergent reality of place, as experienced and made sense of by participants and myself, that informed the research itself. The use of a question sheet while walking, and having an initial indoor interview, addressed these limitations sufficiently. Finally, wind was a serious issue for the recording quality, and routes had to be adjusted accordingly. Overall, conducting the walking interviews were well worth the inherent limitations and practical challenges.

4.9 The Participants

This section provides a detailed description of the eight participants, and the walking interview in which each participant was involved. A fact sheet of where and when the interview took place is provided, alongside a small map with the precise interview area. For an overview of all walking interview locations, see Appendix E. The photos presented here were taken by the participants themselves during the walking interviews and represent an important reason for why they chose that location. The order of the participants presented here follows the order of when the interviews were conducted.

4.9.1 Rebecca: “My mountain is not too far away”

Rebecca, in her mid-20s and originally a keen rock climber, currently works as an outdoor instructor, adventure tourism guide, and outdoor educator for a variety of organisations around New Zealand. Previously she worked as a ranger for the Christchurch City Council, responsible for pest control in the Port Hills. In addition, Rebecca was the caretaker for the DOC campsite on Awaroa. During that period she spent the majority of her time either working, recreating, or being at home, in the Port Hills.

Our interview takes place on a beautiful sunny spring day in Christchurch. Rebecca has decided to take me on one of her favourite tracks, the Breeze Bay track (see Figure 19). This track starts at Breeze Col and sidles the southern side of Pt. 247 towards the gun emplacements of Awaroa. As we gain the spur we can see the ocean in the north, east, and south.

Everywhere I look I can see ocean. It draws me closer somehow, you can see the ocean from the peninsula, I just love that. I like not being able to see the city here as well, I can see the Kaikōura ranges, which has Mt Tapuae-o-Uenuku in it, which is my mountain. I grew up by that mountain, so I can look back a go yeah, it's not too far away.

A cold northerly wind forces us to take shelter beside a concrete WW2 observation post, and eventually back the way we came (see Figure 20). Originally from a small town in Marlborough, Rebecca is developing an educational practice that allows her to share her passion for the Port Hills, a place that has become her home, and for which she feels an acute sense of care.

FACT SHEET

Date: 13 October 2017

Location: Breeze Col, Awaroa/ Godley Head

Duration: 1hr 15 min

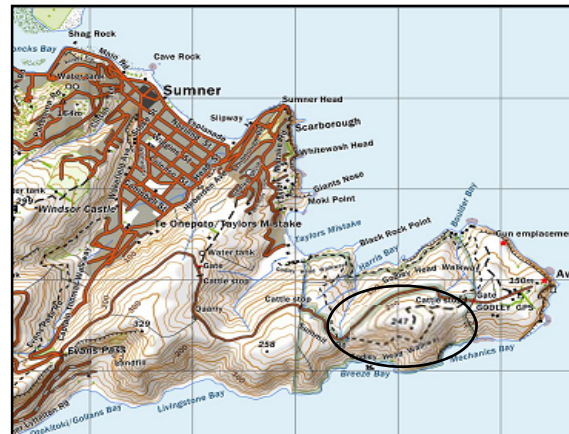


Figure 19: Map of Walking interview with Rebecca, adapted from Freshmap, Heijnen, 2017



Figure 20: Godley Head view north, Rebecca, 2017

It still feels like home and that means that when I come up here as a teaching tool or a location for education, I try to articulate to students that it's a special place, we need to value and look after, and care for it, for recreational purposes as well as conservation. Because it feels like home for me, and now I incorporate that into the teaching that I do, I treat it like a home and an entity that deserves value and care.

4.9.2 Carla: “We need more of these tracks, more access”

Carla is a geography, physical education, and outdoor education teacher in her mid-50s. Originally from the UK, she spent the first part of her career developing educational programmes for outdoor centres that integrated many facets of outdoor education. Carla has worked the last 20 years in secondary and tertiary education programmes throughout the country.

For our walking interview we meet at the bottom of the Mt Vernon valley track (see Figure 21). Even though it's only 10am in the morning it's already warm. Carla is passionate about integrating health and exercise into her practice through various adventure races and orienteering programmes. We therefore set off at a fast pace, and I find myself out of breath quickly, so I ask her why she chose this track when most people choose the main Rapaki track.

Because they are not afraid to get lost up on that track. It's big. This is a little bit confronting you know, it might go the wrong way or disappear. This might be a bit rougher for some people who don't like going over rocks and things but I love this. I'd never walk up there. I'm so glad that there's this track as well. If Rapaki track was the only way up the hill that would be disappointing.

FACT SHEET

Date: 19 October 2017

Location: Mt Vernon valley track

Duration: 1hr 10 minutes



Figure 21: Map of walking interview Carla, adapted from Freshmap, Heijnen, 2017

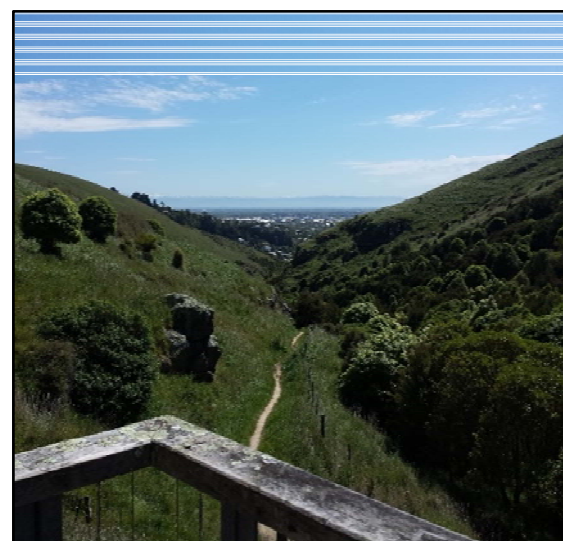


Figure 22: Mt Vernon track, Carla, 2017

Many of Carla's most important life decisions have revolved around easy access to trail running areas. The value of the Port Hills for her is the freedom of access it provides, the ability to go off-track and create small-scale local adventures, for personal fitness and wellbeing reasons, as well a way to spend time with her family and friends. Inspiring future generations to fight for the maintenance and expansion of access to the Port Hills is one of the main aims of Carla's outdoor education practice:

This is an example of what every city should have. This is my vision for it, to expand what we have. We need more of these tracks further west where there's not so much access, and to have more bush further east, where there is more access. More variety of where people can go. Every city needs an area like that this peri-urban, well looked after, place.

4.9.3 Susan: "I guess it's where my heart is"

Susan is the owner and managing director of an outdoor education company in New Zealand. Now in her early 30s, and with two young children, she lives in Governor's Bay. Susan's company designs and delivers a wide range of outdoor recreation and education programmes to schools, groups, and the general public. Susan has spent much personal time up in the Port Hills, especially inducting her young family into an active outdoor lifestyle. She loves walking and rock climbing in the Port Hills, and also regularly runs a range of outdoor programmes there, mostly comprising of rock climbing, or orienteering and navigation training.

We meet at the Sign of the Kiwi cafe for our first interview as it's halfway between our homes. After the first interview Susan decides that our walking interview should start from the same place (see Figure 23). We meet a few days later

FACT SHEET

Date: 27 October 2017

Location: Mitchells Track, Gilpins Track, Crater Rim walkway

Duration: 1hr 18 minutes

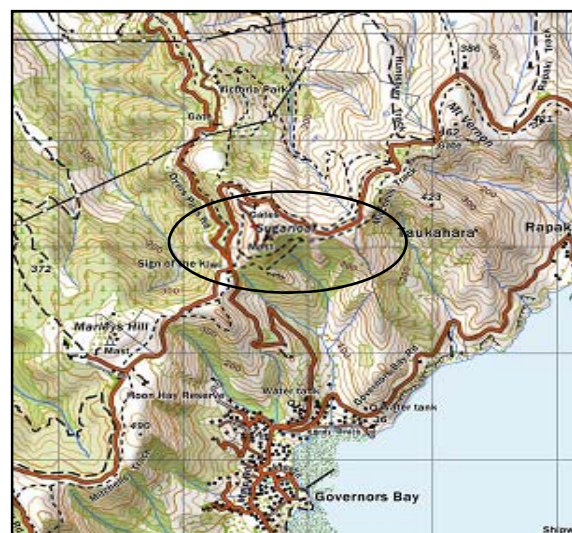


Figure 23: Map of walking interview Susan, adapted from Freshmap, Heijnen, 2017

on a cold and cloudy day (Figure 24). During our first interview Susan became quite emotional and it was clear that reflecting on her life in the Port Hills has made her realise how important the area is, in terms of both her family, as well as her work life.



Figure 24: View from Sugarloaf, Susan, 2017

I was very intrigued by what happened during that last interview, and the emotional reaction that I had. Because that was just so out of left field for me. I wasn't expecting to have such a response over such a simple question [...] and that made me realise how important this area is for me, and how little I consciously realised that. I know I use a lot of terms like accessibility and the variety for learning and teaching. But I guess it's where my heart is as well. I don't think I could ever leave Christchurch, the Port Hills are too much like home.

Susan, like most of the participants in this research, has integrated the Port Hills into most aspects of her life: where she lives, how she raises her family, her recreation activities, and how she envisions the future of her professional practice.

4.9.4 Dave: “The Port Hills is like the outrigger on my waka”

Dave teaches Outdoor & Environmental Education and Physical Education at a New Zealand university. Dave has researched and taught environmental approaches to physical education and outdoor education for decades and during our walk it becomes clear that he has a wealth of theoretical and practical knowledge about the concept of sense of place. For Dave, it starts with the understanding that our identity in relation to place is developed by, and mediated through, the use of our bodies.

FACT SHEET

Date: 1 November 2017

Location: Harry Ell Walkway, Victoria Park

Duration: 1hr 5 minutes

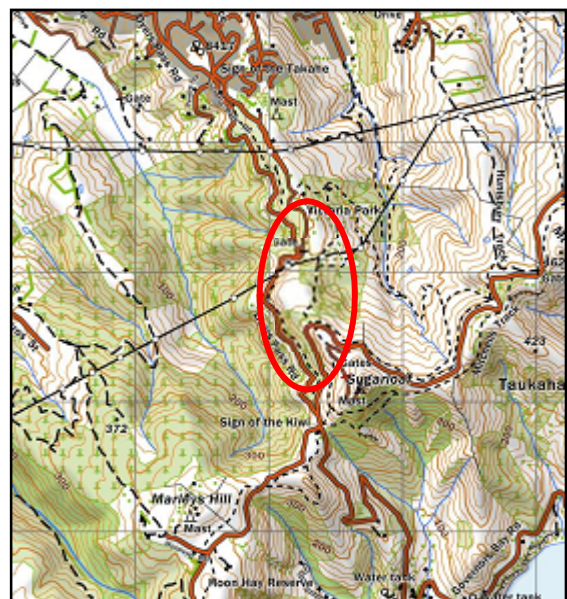


Figure 25: Map of walking interview Dave, adapted from Freshmap, Heijnen, 2017

It starts I think with allowing ourselves to be in our bodies and to understand that. I understand the place through feeling the weight of the pack on my back, through maybe the blood pumping through my arteries, oxygen to my muscles. Or the roughness of the terrain under my feet, that you would never feel on a concrete footpath.

We start our walking interview at the main carpark of Victoria Park (Figure 25). Dave has biked up from home, “*biking uphill is part of my Port Hills kaupapa*” and he starts talking immediately as he comes to a stop next to me. It’s one of those mornings where Christchurch city is blanketed in a thick brown sea fog but the hills are crisp and views are perfect right out to the Southern Alps. Dave talks about the conversations he’s had with his partner after our first interview, and the thoughts he had during his bike ride that morning.



Figure 26: Burnt cabbage tree, Dave, 2017

I was talking with my wife last night about the Port Hills and she said how many of our friends would live in Christchurch if the Port Hills weren’t here? That’s a really good point, because they are such a gem and a jewel.

A significant part of our walk up the Harry Ell Walkway goes through the fire scarred remnants of native bush. The picture of the Cabbage tree (Figure 26) represents for Dave both the vulnerability of natural areas to the stupidity of humans, as well as nature’s resilience and ability to recover after being severely disrupted, in this instance after the fire of February 2017.

I hear a bellbird. What does that mean, is that the resilience of nature? He said [Dave quotes environmental author David Suzuki] ‘nature will be far more generous than we deserve, in its resilience, in its rebounding. But first we just need to stop beating it up.’

In his outdoor and environmental education practice Dave seeks to integrate embodied experiences of place, with the critical discussions relating to socio-ecological systems and practices that such experiences can enable.

4.9.5 Jason: “How do you become a rangatira?”

Jason, a youth development worker, is originally from Dunedin, and whakapapas through his father to Ngā Puhi in the far north. Jason is a very accomplished competitive rock climber, and it was climbing that first brought him to the Port Hills. After spending time working in outdoor retail and managing an indoor climbing wall, Jason now uses the outdoors to support Māori with mental health problems.

We meet at Victoria Park to walk the Harry Ell Walkway. Jason chose this location because he regularly takes his clients here to go for a walk or run up the easy gradient track. For Jason, the aim of taking his clients into the Port Hills is to allow for spontaneous learning moments to occur, where they can make connections to their Māori identity through “*Understanding that there’s a wealth of embedded knowledge in our Māori Korero and Tikanga.*” As we emerge out of the native bush we gain a view of the Christchurch Adventure Park and the destruction caused by the 2017 fire there.

It does strike up some good conversation with our boys: ‘geez what’s happened there?’ Then you can remember about the big fire and they can go ‘oh yeah I heard about some idiots who set fire to something.’ So yeah you can help with processing that. It leads to some meaningful conversations about decision making, totally. What would happen if you were among a group of people doing dumb things? How do you become the Rangatira at that point? So you can quickly weave in Te Ao Māori into those conversations.

FACT SHEET

Date: 1 November 2017

Location: Harry Ell Walkway, Latters Spur track, Victoria Park

Duration: 1hr 10 minutes



Figure 27: Map of walking interview Jason, adapted from Freshmap, Heijnen, 2017



Figure 28: Harry Ell Walkway view of Adventure Park, Jason, 2017

During our walk Jason repeatedly makes the point that the Port Hills, although a wonderful resource for the people of Christchurch, is lacking in available information about the tangata whenua, the people of the land. As Ngā Puhi, Jason lets his clients who whakapapa to Ngāi Tahu tell their stories of place.

So it's actually correct if they brought their stories to this place, and they educate me on their stories. And definitely my role would be to be the student. And that's all about mana. Because, me, supposedly being in a place of authority because maybe they are my client, but how I actually enhance their mana is more about me being able to maybe humble myself in their knowledge.

Walking with Jason questions my assumption that we mostly gain a sense of place through our own experiences in place. There's an element to place that comes before our lives, which is the ability to share and understand stories of Tipuna, the ancestors. This also includes the understanding that kaitiakitanga means that we are conduits between the knowledge of the past and the future. The concept of kaitiakitanga is discussed in detail in Chapter 7.

4.9.6 Alex: “It’s lighter up there, on my shoulders”

Alex is a 30 year old outdoor educator, who grew up in Governor's Bay, and has lived most of the last decade in or near Sumner. He is passionate about the ocean, and spends much of his time surfing or snorkelling around the Banks Peninsula and wider Canterbury area. At the time of the interview Alex works on a secondary school outdoor education programme. This programme combines achievement standards from earth and social sciences, as well as Health & PE into a yearlong course where secondary school students study for one day each week in a tertiary education setting. The Port Hills form an integral part of this programme.

FACT SHEET

Date: 16 November 2017

Location: Godley Walkway, Godley Head

Duration: 1hr 26 minutes



Figure 29: Walking interview Alex, adapted from Freshmap, Heijnen, 2017

Alex takes me on an easy walk up the broad Godley Walkway from Taylor's Mistake beach towards Boulder Bay (Figure 29). We start walking at 7.30am and are almost the only people out on the track. We go on this walk because it traverses some of Alex's favourite snorkelling areas, and he is keen to show me Black Rock Point, one of the places he takes his students.

During our walk Alex talks about winds, tides, and swell, as much as he does about trees and birds. He tells stories of encountering a large sting ray and penguins in the area. When we get near Boulder Bay, Alex takes a photo (Figure 30) back towards Taylor's Mistake and explains why the Port Hills' interdependence with the ocean is so important to him.



Figure 30: Taylor's Mistake and Black Rock Point, Alex, 2017

On a clear day I've come over here and it looks like someone has just put a blue wash over half the picture. It's hard to draw that boundary. And I guess I'm just so familiar with the underwater area here as well and I know what we see above looks like it just stops when it reaches the water, like that spur just finishes there. But if you spend time in the water you know actually the shape of that continues onwards.

For most participants there was a clear boundary between the Port Hills and the surrounding ocean. Alex argues that these boundaries are at best subjective and porous, with an ongoing interdependence between the hills and the ocean, in both geological form, and ecological function.

4.9.7 Mary: "It's about being grateful for what we have"

Mary, in her late 30s, is originally from overseas, but has lived in Christchurch for the better part of 20 years. After completing a number of outdoor qualifications and working as an outdoor instructor in various places around the world, she is now a Deputy Principal and teaches at a primary school based in the suburbs of the Port Hills, where she is responsible for all education outside of the classroom.

FACT SHEET

Date: 24 November 2017

Location: Drayton Reserve, Mount Pleasant

Duration: 1hr 10 minutes

We agree to meet at her office for our walking interview. As I walk through the school gates I can see the information signs, photos, and notices which make it clear that the school values its place in the local community. Mary has decided to go to Drayton reserve (Figure 31), the site of an ecological restoration project set up by a member of the community, and which involves the school, the council, and the community. The day is cool and overcast, and as we walk Mary makes several links between the project, and what she values as an educator, which is to ensure that the school and its students have a central place in the community.



Figure 31: Walking interview with Mary, adapted from Freshmap, Heijnen, 2017

Figure 32 shows the ‘bear cave’ a spontaneous initiative by the people visiting Drayton Reserve after the Christchurch earthquakes in 2011.

And of course we have the bear cave here. This just appeared here, after the earthquake, nobody knows who started it. I just love that it's a spontaneous community response after the earthquake [...] every two weekends there's a working in bee in here. And when I brought the 70 six year olds here, the park ranger was out as well. So it's really cool, even if I just walk here, there's a bunch of stakes with little bits of fabric on them. Some of those my outdoor ed kids have planted.



Figure 32: The Bear Cave, Drayton Reserve, Mary, 2017

Chapter 6.5 further discusses the disruption that the both the earthquakes and 2017 Port Hills fires have caused. Through her example of the bear cave, Mary highlights that these disruptions also built relationships between the Port Hills and local communities, which is one of the critical factors underpinning approaches to outdoor education that are responsive to place.

4.9.8 Pete: “I love that it’s got a different mood every day”

Pete, in his late 40s, is the Head of Department of Outdoor Education at a secondary school in Christchurch. Originally a PE teacher, Pete has changed his focus from an activity-based practice of outdoor education towards an approach that is more responsive to culture and place. We meet at the Victoria Park playground (Figure 33). It’s another beautiful sunny morning and I reflect on my luck- my final walking interview signals the end of the longest fine weather period in Christchurch on record. In the two months of conducting walking interviews the Port Hills has turned from green to gold.

We don’t go very far on our walk today. After a brief walk along the track, we weave our way through the tall grass and find a large rock outcrop with commanding views of the city below, as well as the upper section of Victoria Park. Pete explains how he incorporates a wider range of stories into his Port Hills based teaching these days than in the past.

We do this Year 10 unit where we look at Christchurch before people, after Māori, and after Pakeha, and we look into the future. So this could be a good site for looking down onto the plains and go ‘ok well if you came over the hills from the first four ships, and looked out over this view what would you have seen, what would this place have been like? And what’s been done to change it? Well, what are we missing then, if we look into the future?’

Figure 34 shows Pete’s photo of the interview location. It allows readers to gain an appreciation of how Pete’s meaning of the Port Hills has changed. From our rocky outcrop we

FACT SHEET

Date: 30 November 2017

Location: Victoria Park

Duration: 1hr 7 minutes

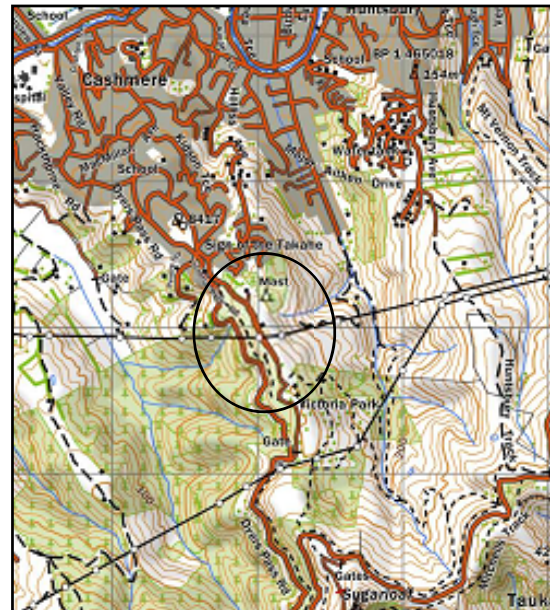


Figure 33: Walking interview, Pete, adapted from Freshmap, Heijnen, 2017



Figure 34: Rock outcrop, Victoria Park, Pete, 2017

can see the city below. Introduced species of macrocarpa trees frame this view of the city, however a careful inspection shows native plants such as five-finger and kanuka in front of the exotics. Pete uses a critical socio-ecological approach in his exploration of the Port Hills, which is further discussed in chapter 6.3, which blends elements of natural history and socio-cultural issues. This blending of traditionally separate domains of knowledge through intensive collaboration inside and outside of schools, is how Pete sees not just the future of outdoor education, but the future of secondary education more generally.

4.10 Chapter Summary

This chapter provided a discussion of the theoretical and practical considerations with regard to the research methodology, methods, and an overview of the participants and the walking interviews that were conducted. Together, these enable the reader to better interpret the findings of this research, which are discussed in the next three chapters. Chapter 5 looks at how the participants have developed, and express, their sense of place of the Port Hills.

Chapter 5: Sensing Place- The Participants' Lives in the Port Hills

5.1 Introduction

The relationship between the research participants and the Port Hills plays an important role in the construction of their identities. Moreover, how outdoor educators choose to construct their identities and how they live their lives has considerable implications for their educational practice (Irwin, 2008). This first findings chapter discusses how participants express their sense of place of the Port Hills. Section 5.2 looks at the individual interactions between participant and place through an analysis of how the participants describe the Port Hills and their features, and how they gain an understanding of the Port Hills through their senses. Section 5.3 discusses the wider context of participants' lives in relation to their experiences of the Port Hills. Through feelings of being at home, and the physical and social relationships that are formed in the Port Hills, the lives of the participants are to a large extent related to this place.

5.2 Sensing the Port Hills

How people come to understand a place is influenced by their physical experiences of place through the use of their senses. This section describes how the participants have experienced the Port Hills and how they interpret their developing understanding of, and relationships to, the Port Hills as a result.

5.2.1 Locating Place Through Our Senses

Whilst all participants describe their connection to the Port Hills in terms of the wonderful views they offer, several participants also describe how they use their other senses to experience the Port Hills. Whilst on our walk on Awaroa Rebecca stops suddenly and says:

You can hear the ocean when you listen hard enough, swallows, and skylarks maybe, up above us. Doesn't smell like much today, but there's a beautiful native clematis that grows through some of the prostrate plants here and when they are flowering it's just an incredible smell, it's a sweet, I don't know, better than candy, haha. Sometimes even the gorse flowering smells good.

Our eyes are often the dominant sense used to perceive the world around us (Jay, 1993). By allowing other senses to infiltrate their awareness the participants allow a more

multidimensional understanding of, and attachment to, the Port Hills to develop. As we walk up the Harry Ell track, Dave comments on feeling the ground with his feet.

It's very specific the ways in which we are allowed to use our bodies and for me to feel a sense of place is to start with my body and feel the ground beneath my feet. Even though I'm wearing shoes, I can feel the textures.

The track surface and condition was a theme that often came up during the walks. Tracks can be wide and flat, allowing fast and easy movement, or they can be rougher and rockier or muddy, forcing our attention to our movement. As we walk through a muddy and rougher section of track on the south facing side of the Sugarloaf Reserve Susan says:

I like that it feels like a tramping track. It's undulated terrain, the rockiness, the mud, a few roots. There are sections that are smoother and easy going but I like that you have to put thought into your body position and foot placement.

During our walk from Taylor's Mistake, Alex talks about his experiences snorkelling in the bays around the Port Hills. Snorkelling allows for a completely different sense of place when compared to movement on land.

Snorkelling, yeah I guess being in the water is this floating, slow, 3D kind of movement. [...] We cannot fly, but in the water you have the ability to do the equivalent of fly. You have your up-down axis, rather than just your level axis. Because you can dive and surface and be upside down, you can really experiment in ways in which your body can be, which you can't do on land. You are also very aware of yourself in place, because you can feel water on your skin much more than you can feel air on your skin, so there's this real sense of 'wow I'm alive right now, and I'm aware of myself in space', that is really cool.

Several participants, when asked how they prefer to spend time in the Port Hills, refer to the use of their body's senses through movement. As discussed in Chapter 2, sense of place is a multidimensional concept that can refer to both the *genius loci*, the distinctiveness or character of a place, and to people's experience of, and connection to, a specific location (Convery et al, 2012). As we move onto higher ground, and stop to let a runner pass, Dave explains why he values outdoor activities.

As the fundamental place where we start our self-identity; our bodies, our movement, our thoughts, ourselves as the central starting point of our identity. If we know who we are, and we know a bit about our bodies, then our bodies are our place. And then how can we expand this identity of place, the concept of place, beyond our bodies? How far can we go before it starts becoming so diffuse that it's no longer us, it's an else? And by

traveling and exploring I think we expand the idea of bodies in place and being place-responsive.

Throughout this discussion of his experiences in the Port Hills Dave connects both concepts of sense of place discussed earlier. The notion that through embodied experiences of place, that is, through active sensing of place, we are able to expand our concept of self-in place or our self-identity will be further discussed in Chapter 8. The next section addresses how the participants describe the genius loci, or character, of the Port Hills.

5.2.2 Views, Weather, and Moods: The Aesthetic of the Port Hills

How people come to perceive, inhabit, and make sense of a place can be described as a reciprocal process between people and the specific location (Ingold, 2000). We bring our previous experiences, values and attitudes to place and behave in accordance with these preconceptions (Graham, 2009). However, the genius loci of the Port Hills - their ecology, geology, landscapes, weather patterns, and the echoes of their human and ecological past - strongly influences what kind of experiences are possible. The Port Hills create their own weather patterns which are often different from those of Christchurch below. The tops of the Port Hills are exposed to winds from all directions, and sea cloud often blankets the eastern parts. The weather gives the Port Hills a changing mood that several participants express as one of its main drawcards.

During the walking interview with Dave, we reach the top of Harry Ell walkway and gain a brief glimpse of the Lyttelton Harbour. We are above the city fog but down below the harbour is covered in a thick layer of low cloud. It feels like we are on an island, and Dave talks about the importance of the weather for his experience of the Port Hills.

It's definitely the air, the skyscape, the wind, the weather, all those things [...] but that idea of getting blown around, getting rained on, getting swirled and whirled and feeling it, maybe it's a sense of awe. The power, that you don't get on a calm sunny day. I guess a sense of place can invoke feelings of wonder at beauty, but also of awe.

Alex lives at the base of the Port Hills. During our first interview he tells a story of how he observed a storm brewing around the tops of the Port Hills, and decided to put himself in the middle of it.

I was at home and I looked out the window, and it was fine at Monks Bay and I could see this really amazing cloud that tends to hang around at the tops of the hills, when it

gets really southerly and rainy and windy. And I had this urge to go up there, so went up the hills right at the top of Britten reserve and there's this rock outcrop there, and I was just sitting there for ages. I couldn't see a thing it was just cold and windy and rainy. The Port Hills it has this unique weather aspect, there's this clear altitude line, that if you are lower than that point you are totally unaffected by any kind of weather and if you are up past that point you are really in the thick of it.

Being “in the thick of it”, as Alex calls it, is an experience that many of the participants actively seek out. The Port Hills allow people to experience natural forces such as inclement weather very close to the urban landscape of Christchurch, where similar experiences of feeling exposure are not easily afforded. The opportunities and issues of this more extreme weather in the Port Hills for participants' outdoor education practice are discussed in Chapter 6, however it is worth noting that for their personal sense of the Port Hills this is viewed by all participants as a particularly positive aspect. Pete also talks about the Port Hills' variety of moods in relation to the weather.

And, you know, one of things I love about the Port Hills is it's got a different mood every other day. When the weather comes out there, you're quite enclosed, and this is why I have a passion for it. On the Summit Road when the cloud comes in you are very isolated there. Even the noise changes, the sound quality changes, so I enjoy it for its moods as well. Yeah, there's days where I would be running, and I'd run this track hundreds of times, and you would stop. You'd stop just because, something that particular day, that particular view had drawn you. And it wasn't always those bluebird clear days, where everything was pretty. Sometimes it's the light coming through the clouds, sometimes it's cloud formation.

Pete shares his sense of awe when confronted with a view that he would have seen many times. However, the conditions on that day would transform a familiar sight into a significant experience. One of the key characteristics that many people would associate with the Port Hills are the wonderful views that stretch from the Pacific Ocean, Christchurch City and beyond to the Canterbury Plains and foothills of the Southern Alps on the northern side, and towards Lyttelton Harbour, Banks Peninsula, and Lake Ellesmere in the south.

As we reach the main Godley track from Taylor's Mistake beach, Alex and I both observe the beautifully coloured flowers next to the track, such as the introduced South African proteas. Alex expresses the complex mix of feelings that the Port Hills, and their current landscape, invoke in many of the participants.

This kind of track, because it has so much introduced grasses and flowers on it, I don't know, it doesn't feel like it is what it should be. I'm just really aware that this could be a

coastal forest. But it is quintessentially Taylors Mistake, it's everything I've known the peninsula to be so it's this weird split between what I feel it should be and my love for what it is now [...]

I also lament the fact that there isn't more of a coastal forest because I know what effect that would have on the water quality, and the strengthening of the hillside. I'm acutely aware of the forest cover that it used to have, and what it lacks now. I really look forward to the day when the forest starts to creep back up the hillsides.

Dave has similar feelings about the current landscape of the Port Hills, but then also highlights the aesthetic benefits that the variety of vegetation types and associated landscapes bring to the experience of the Port Hills, landscapes that are the result of human impact.

One of the things that I really like about the Port Hills as they are at the moment is the openness. The tussockness, the expansiveness, the unboundedness. I love being able to look up the coast to the faraway mountains. The kaikōura ranges and the Southern Alps, looking across the ocean to South America. Lyttleton Harbour, the water. The way the sun shines on the water is aesthetically just very beautiful. The movement of the tussock.

The interplay between views and aesthetic appreciation of the Port Hills is a significantly complex area of inquiry and falls well outside the aims of this study. The discussion whether a place such as the Port Hills can be said to have an objective aesthetic, or whether, as Kant argued, can only be judged aesthetically beautiful through representation and interpretation of the mind, has been an ongoing discussion in philosophy (Lothian, 1999). The interpretation of their sensorial experiences of the Port Hills by the participants is undoubtedly predominately subjective. However, to argue that the Port Hills itself has no influence on the possibility and likelihood of specific aesthetic experiences goes too far. Several participants conclude that they have had experiences in the Port Hills that they would not have been able to have elsewhere, either in Christchurch or further afield because of the unique geographical position and landscapes of the Port Hills. Sense of place, therefore, should be viewed as a dynamic interplay between the genius loci and people's representation and interpretation of place.

It is important to note that all participants clearly expressed a love for the sheer variety of views that the Port Hills offers, an appreciation that they express in very different ways. Susan for example describes her sense of satisfaction of gaining a view through the hard physical work of getting to the top of the hills under her own steam.

I can see such a long way, I can see the mountains, that's really important to me. Probably why I've been drawn to mountaineering I just like being up high and being able

Both Rebecca and Alex chose to have their walking interview on Awaroa. The pictures in this case study are theirs. The topographical map of Awaroa presented in Figure 35 shows when participants talked about Awaroa specifically. The yellow triangles represent Alex' and the red triangles Rebecca's stories



Figure 36: Black Rock Point, Alex, 2017

during these interviews that focussed on Awaroa, either from a personal, or outdoor education perspective. The other coloured triangles represent each time another participant talked specifically about Awaroa. The key themes that relate to this place are the interdependency between the Port Hills and surrounding ocean, and the participants' perspective of home.

The following quotation relates to Figure 36. This photo, taken during our walk shows the coastline from Boulder Bay, past Black Rock Point and into Scarborough. The photo provides a clear overview of both Alex' notion that the Port Hills continues below the ocean's surface, as well the area where he feels most at home.

Taylor's Mistake is like another home for me, largely because of the surf and snorkelling around that area. Black rock point in Godley Head is this kind of finger of volcanic rock that comes down, with some world class snorkelling, but you have to roam through the hills a bit to get there. That gives it a sense of adventure and you feel like you are further away from that urban area. Not that an urban area is bad it's just that at times I feel like engaging with it and sometimes I don't.

The following quote by Rebecca also highlights the importance of the ocean in her sense of the Port Hills. Figures 37 and 38 show where Rebecca lived as DOC campground caretaker on the Port Hills, as well the surrounding ocean that connected her to her ancestral home at the base of Mt Tapuae-o-Uenuku.



Figure 37: Godley Head Campsite from observation post, Rebecca, 2017

I guess there's a lot of importance in the ocean for me, and everywhere I look I can see ocean. It draws me closer somehow.

You can see the ocean from of the peninsula and I just love that. I like not being able to see the city here as well, I can look towards Mt Tapuae-o-uenuku, which is my mountain.

One unique characteristic of Awaroa, is the sense of isolation that it provides. Where most places in the Port Hills have views of the city below or the settlements around Lyttelton Harbour, Awaroa has a distinctively different feeling to it, described here by Rebecca:

I'd drive away from life down there in the city, a transition of worlds, or a change in perspective I guess. A mental change as well as a physical change in perspective.

Awaroa has very little native vegetation cover left. When we pass a small planting site Alex takes a photo (Figure 5) and talks about the ecological benefits of more forest on the peninsula such as less siltation, erosion, and drought. He then links this to his aesthetic vision for the Port Hills.

I really love to see plantings like this, you come around the corner, and there's something really nice about flax flowers. I think these ones are just coming out now which is really nice, and the potential of seeing tui, one day, that would be the dream. Just this reforested volcano with mountain bike tracks and walking tracks, and the potential for little huts around. I mean I'm no Harry Ell, but that would be really neat to see.

Awaroa provides an illustration of many of the characteristics of sensing place discussed in this chapter. It engenders feelings of home, and provides a range of sensory experiences, and recreation activities, that together form a significant part of the participants' place identity.



Figure 38: View of Godley Head from Breeze Col track, Rebecca, 2017

5.4 The Port Hills: A Place for Wellbeing

It is apparent that the Port Hills play a significant role in the lives of the participants. All participants live close to the Port Hills and spend time there on a regular basis, mostly for recreational purposes. Physical exercise, spending time with friends and family, and stress relief from their busy working lives, are the participants' main reasons for spending time in the Port Hills. Six out of eight participants recreate in the Port Hills between one and three

times each week, and the other two participants recreate in the Port Hills several times each month but not on a weekly basis.

The next section discusses these three main reasons why the Port Hills play such an important role in the participants' lives. Section 5.4.4 introduces the idea that for many of the participants the Port Hills have become a place that they identify as their home place.

5.4.1 A Physical Place

One of the key values of the Port Hills, as expressed in the Christchurch City Council's 2004 Recreation Strategy, is that by offering a variety of recreation settings and challenges in close proximity to the city, the Port Hills create an opportunity for all sectors of the community to develop a more active and healthy lifestyle (CCC, 2004). All participants expressed a commitment to regular physical exercise, and discussed how the Port Hills allow them to gain fitness outcomes in a range of ways. At a basic level, the Port Hills provide an efficient solution to the participants' exercise needs through its elevation contours, as expressed here by Jake.

I was a hockey player back then, so I ran a lot. I would not go into the Port Hills for the sake of the Port Hills then, I did it because it was an easy way to get a good workout.

Many of the participants discuss this development in their relationship with the Port Hills. They often started going into the Port Hills for physical recreation activities and built up deeper layers of connection over time, which is consistent with Tuan's (1977) argument that development of place attachment, or fields of care, requires lengthy physical involvement with place.

The participants' main forms of exercise in the Port Hills are trail running, mountain biking, walking, and surfing. The participants have specific favoured locations for their exercise routines in the Port Hills. Mary, for example, uses Rapaki as her main track for physical exercise.

So I do a weekly bike up Rapaki, and walk up Rapaki once a week too, at six o'clock in the morning. Rapaki is definitely my main track. Especially being new to mountain biking, that's the challenge, to be able to get up. The physical challenge. I never thought I'd be able to do it.

Dave talks about two distinct tracks that he uses. He uses Mt Vernon for running, and the Bowenvale track and Victoria Park for his weekly mountain bike ride. These routines are often

informed by practical aspects of the location such as track types and time considerations.

When asked to explain why he runs up Mt Vernon every week Dave says:

My friend is on the same programme as me, likes short and sharp as well. He's probably got an edge on me in terms of fitness and speed up the hill, but occasionally I surprise us. That's really important for me. I guess the pain, the pushing, getting to the summit and having earned that view. When your body is screaming at you it's hard to think about other things, that's important for me. And then after that happens I feel release, there's a physicality about that, that I really enjoy.

After moving to Auckland from the UK, Carla and her family decided to move to Christchurch for lifestyle reasons. Carla explains how her early encounters with the Port Hills whilst running there helped to make the decision.

I'd been to Christchurch before and decided that the Port Hills was quite like my background where I'm from in England. So I thought this is a cool place to go for a run. I run a lot and I don't like to be on the road, I need the hills and some tracks. So I was keen to move to Christchurch even before any jobs came up.

Carla seeks solitude through running in the Port Hills, and values gaining distance from work related stress. However, she actually enjoys seeing many people out and about recreating in the Port Hills as well. This is a theme that many of the participants bring up. Carla also sees the large numbers of people as a potentially positive educational experience for her students.

The numbers of people up there are an asset. When we were doing our Longest Day race up there my students were commenting on that, 'look how many people are walking, biking, running up here', I said yes you should do it more. Some of them do get into it a bit more. This is a lifestyle choice. You are going somewhere and you are moving. It's important.

Although the opportunities for physical exercise are an important reason why participants use the Port Hills for recreation purposes, most participants embed their need for physical exercise within their broader lifestyle, which includes their mental and social wellbeing.

5.4.2 A Mindful Place

Mindfulness has gained increased attention in cognitive psychology research, in particular as it relates to developing clinical therapies aimed at reducing behaviour and cognitive disorders (Bishop, 2004; Hayes, 2004). Mindfulness has been defined as bringing a higher quality of attention to moment by moment experiences of life (Kabat-Zinn, 1990). However, as Malinowski (2008) argues, the theoretical foundations of mindfulness are ambiguous and require further operationalisation and testing. Brown and Ryan recommend a cautious approach to the use of mindfulness: "Mindfulness is a deceptively simple concept that is

difficult to characterise accurately. Intrepid scholars seeking to do so must enter the shadowy realm of consciousness, the domain from which mindfulness arises" (2004, p. 242). Five of the participants used the concept of mindfulness during our walks to explain how the Port Hills helps them, as well as their students, in developing and maintaining healthy mental states. As such, this research uses the concept of mindfulness to explain the importance of the Port Hills in the participants' lives, while recognising the limitations it has. The broader concept of psychological wellbeing could be used to explain this component of wellbeing, however as many participants explicitly referred to mindfulness, this will form the basis of this discussion.

During our walk up the Harry Ell walkway Dave pushes his mountain bike up the track. I ask Dave why he enjoys mountain biking enough to go to that effort, and he discusses the opportunities of various scales of mindfulness that mountain biking offers him.

It's scales of mindfulness, taking notice. On a mountain bike I take note of wind and speed and vistas, and the experience of what's going on in my body. I've got this real sense of where I am and the momentum. On the unicycle it's associated with mountain biking but without the same level of speed. It takes all my focus just to stay on the bike. It's very much in the moment. Focussed, but slower, more precise. Other times there's a meditative stillness of just sitting somewhere having some food. And I just survey my kingdom, I see that all is well, I feel an intense sense of gratitude, of connection.

In the discussion above Dave uses the concept of mindfulness to further explain how his experience of place is a combination of physical and mental states that effect each other as he engages in recreational activity. He goes on to argue that within certain strands of contemporary outdoor environmental discourse the role of physical activity is often talked about in denigrating terms such as 'treating the outdoors as a gymnasium'. For Dave, the experience of place through mindful and embodied experiences, is the base of place-responsive outdoor education.

Mary also explicitly talks about the Port Hills as a place that allows for practicing mindfulness. This is an important part in her outdoor life, but she has also incorporated principles of mindfulness in her primary school teaching.

It starts in the classroom. We have a focus on mindfulness, and I think students can apply those more introspective and reflective skills when we go into the outdoors. We try to make the outdoors a really creative space, where we are encouraging them to look for inspiration and that connection [...] And I've been very focussed on our immediate environment, which for us is the Port Hills. I love the idea that we can walk there. I have

quite an innate sense of wellbeing, but I work on that a lot, and I can do that in Port Hills. I love just sitting up there and looking at the view. And I love doing that with the students too.

Other participants don't use the concept of mindfulness explicitly, but discuss the ability to release stress, often related to work, by going into the Port Hills. Physical exercise has been well documented in aiding people to cope with stress and promotes positive mental health (Salmon, 2001), however the Port Hills are more than a gymnasium for the participants, and the ability to gain elevation is one of the key reasons why the participants seek these experiences.

In our first interview Alex mentioned his love of 'roaming the hills' at several occasions. As we walk along the Godley track I ask him why likes doing activities that allow him to roam in the Port Hills.

Roaming around, walking, exploring. 'Do' is a funny one. 'Be'. I go up there to feel good. It's lighter up there, on my shoulders, my soul for lack of a better word. I feel away from clutter. That's probably maybe an evolutionary trait, we get up high and we get a view and we feel safe. We can see everything. When I have a view I feel unburdened and stress free, and safe. So it's nice to get out of that cluttered urban environment.

Alex's point above is supported by Ingold's argument that a people-place relationship is interdependent (2000). The participants all emphasised that it would be impossible to gain the same benefits from recreating elsewhere. The Port Hills, through their variety of landscapes and recreation opportunities, allows the participants to develop and maintain higher levels mental health. Several participants voice their concern about the mental health of people in Christchurch after the earthquakes in 2011. In her outdoor practice, Susan sees a dramatic increase in mental health issues, and identifies the Port Hills as being potentially an important place in addressing this.

And if we can encourage people to grow their physical strength by doing stuff up here then we are going to encourage stronger mental health. I think that's a really big issue in Canterbury because of the earthquakes. Something I see a lot more in the students that we take, is levels of anxiety, medications that young people are on to manage those anxieties and to manage depression, and it's becoming more of an issue for younger people.

The opportunities that the Port Hills provide for positive physical and mental health outcomes, are related to each other and to the idea of mindfulness. The Port Hills play an important role in the lives of the participants in maintaining high levels in both these components of

wellbeing. Another key pillar of mental health is a rich social life, and all participants discuss the role of the Port Hills in their social life extensively.

5.4.3 A Social Place

A meta-analysis of 286 empirical studies by Pinquart and Sorensen (2000) into the relationship between the quality of social contacts, and the subjective interpretation of wellbeing, found that to a high degree the quality of social contacts in everyday life is a strong predictor of human well-being. Kawachi and Berkman (2001) draw a similar conclusion, however they also found that in situations where people have lower socio-economic resources, and lower levels of physical health, large quantities of more superficial social contacts can lead to lower levels of wellbeing. This next section discusses the role that the Port Hills play in the social lives of the participants. It divides these social groups into two parts: family and friends.

Family

The role of the Port Hills in the family life of the participants is described by the participants as an integral part of their wider lifestyle. The Port Hills are fundamental in how participants choose to raise their children. In our first interview Susan had a very strong emotional reaction when trying to explain the importance of the Port Hills in her life. When asked during the walking interview to describe why she thinks this happened, Susan talks about the role of the Port Hills in her life when her children were very young.

Certainly as I spent a lot of time, especially when Layla was a baby I spent a lot of time walking around in the Port Hills with her, and that was something I could do with her as a toddler in the backpack. Just continue to be able to recreate and being outside a lot.

This was a difficult time in Susan's life, and it seems clear that being able to easily access outdoor recreation in the Port Hills with her daughter was certainly critical for her wellbeing in that period. She goes on to say that now, with another young child, she continues to find a sense of wellbeing with her family in the Port Hills, and through recreating locally she hopes to instil her values in her children, and to make them part of, and give them access to, the outdoor way of life.

What I really like about the Port Hills is that you can be any age and recreate. My kids for example, I love that I can take my son who is 18 months, and we can explore. I can take him rock climbing or I can take my daughter climbing or we can go on an adventure, walking up and down the tracks. And it really is an adventure for them. Because my partner and I have a really strong outdoors lifestyle, it's how our children see us and it's

their way to relate in the activities and feel like they're doing things that we love doing as well.

Susan also says that the Port Hills allow for multiple generations of her family to recreate together, and that the Port Hills is an inspiration for lifelong activity.

My daughter will go out walking with her grandparents in the Port Hills, and she can see that from her age up to 80 year old recreators there's still places you can go, there's still things you can do and enjoy it, it's always a giving environment.

During our walks up the Harry Ell walkway both Jason and Dave talk about how they used that particular track often to access the summit road when their children were very young. Dave, whose children are now in their mid-teens, still has fond memories of the Harry Ell Walkway.

When we first came to Christchurch we took the kids running up Harry Ell. We'd throw the kids trailer on the bike and bike up to Vic Park, and we had one of those chariots with the wheel on the front so you could unhook it and push it up the track. I've got very fond memories of Harry Ell, with a 9 month old baby giggling and bouncing up the track.

The participants with children all spoke about the joy that sharing the Port Hills with their partners and children gives them, and this contributes significantly to the development of long-term intergenerational connections to place. Carla, for example, speaks with pride about her daughter's choice of using the Port Hills for a high school art project.

She needed to go up there and get some photographs of the road with a model car on it for a project. You could go anywhere, but she wanted to go up the hills, which I thought was quite special. She maybe got that from me, she often said 'I'm glad you took me up to those places, some of my friends have never been up sugarloaf', crazy. She wanted the hills and the slope and the views to the Alps in this photograph, I remember going up there to try to find the right light and right place. That was quite memorable.

Friends

In addition to family life, participants' place identity is also expressed through the role the Port Hills have in their social lives. As discussed earlier, Mary has her weekly bike ride and walk up Rapaki track, which she does with a group of friends.

It's about community, because I'm chatting to my girlfriends when we go up Rapaki, so it's building my social network.

When we sit on a rock in Drayton Reserve during our second interview, I remind Mary of this social aspect she mentioned and ask her to explain further how she views the Port Hills in relation to her social life.

I think it's in two parts. It's probably a vehicle for that community building and relationship building. There's something about walking or riding where you have interesting conversations about all sorts of things. And I mean we are not talking about tramping per se in the Port Hills, but you have moments of silence and moments of inane chatter, and also really deep and meaningful conversations. It's the physical space and the emotional space to have those conversations I guess. I see the Port Hills as a vehicle to those things happening.

Carla also stresses the social community building aspect of regular recreation activities in the Port Hills. As we sit at her dining table and look at a map of the Port Hills, I ask her to identify which areas she goes to most, and why. After identifying tracks around Barnett Park, Lyttleton, and Godley Head Carla continues:

All of these are running places I use with my friends and we finish up with coffee in Sumner- that's quite important too you know. There's a group of women, a group of eight of us, who run and bike, and go to someone's for dinner. We definitely catch up and socialise, offloading work frustrations, or other stuff, and the Port Hills is good for that.

It is clear that the Port Hills play a fundamental role in the lives of the participants, in terms of their physical and mental wellbeing, and in their family and social lives. The next section integrates these aspects of place by discussing the participants' sense of home in relation to the Port Hills.

5.4.4 A Home Place

What people consider to be 'home', and where they feel 'at home' is a strong predictor of both the importance of the role of particular places in their identity, as well as the level of care that is invested (Irwin, 2008). All but one of the participants live in, or close to, the Port Hills. However, proximity is not necessarily the main driver of these feelings of being at home in the Port Hills.

Feelings of familiarity of place, as a result of spending large amounts of time in the area where they live, allows the participants to develop their sense of place in relation to the Port Hills. Both Tuan (1977) and Relph (1976) explain how it requires ongoing investment of time, through physical and social engagement in place, in order to develop strong connections to place. After we leave Black Rock Point and continue our walk to Boulder Bay, Alex comments that we are reaching the geographical limit of what he would call his home place. Home for Alex can be both on land and in the water.

And if we go further my knowledge of what's below the surface is more limited. So yeah this is my place really, where I can exist in both mediums. For me that's the essence of home, if I can feel good on land and can feel good in the water.

Susan also attributes this sense of familiarity with the Port Hills, and with specific areas within the Port Hills, to repeated and ongoing experiences. It is this sense of feeling comfortable in a place that allows for such connections to be developed (Wattchow, 2001). As Susan says:

I think it feels like home because it's comfortable for me. I spend a reasonable amount of time up here, in different capacities. I've never recreated in the Port Hills where I've felt completely out of my comfort zone. I think that has been fostered by time and mileage in the hills. Lots of walking, knowing the shape of the land. Exploring a little bit.

Pete is the only participant who does not live very close to the Port Hills. However, when he shares an anecdote about sitting in a café in London and feeling homesick for New Zealand, and for the Port Hills in particular, it becomes clear that physically living near the Port Hills is not a necessary precursor for a strong connection or feeling of home to develop.

So my attachment to the Port Hills really started when I started doing hill running and training on the Summit Road and the tracks. I would start at the Takahe, go up the Harry Ell and go on from there. Occasionally you'd use one off the other tracks, the Kennedy's Bush track for example, or Bowenvale to get up on to the tops. That's where I developed attachment to the hills, because I would be up there 2 or 3 times a week, often on my own, and it did become a real place for me. In fact I was sitting in a café in London at one of my low points when I was there, and remember thinking 'what the hell am I doing here?' And my go to image was running along the Summit Road. Looking out over the hills, and over the plains to the mountains. It is a place I have a real connection to.

Living in proximity to the Port Hills, or on the Port Hills, like Rebecca did when she spent more than a year as the caretaker of the Department of Conservation camping ground on Awaroa, does encourage development of home feelings for the Port Hills. Alex, who at the time of the interviews lives near beach suburb of Sumner, has lived there for most of his adult life.

And the surf, you know the water is 500 meters from my door. The hills just out the backdoor. So it's nestled in this kind of perfect place to play. I can go for a run, or a swim, or a bike, or a surf within 5 minutes from my place, which is good. I prefer to live where I play, rather than where I work.

Feeling familiar with, having extensive knowledge of, and being emotionally and physically comfortable in, the Port Hills, all contribute to the participants feeling at home in the Port Hills.

5.5 Chapter Summary

This chapter discussed the key components of the participants' sense of place in relation to the Port Hills. It also provided a case study of Awaroa/ Godley Head which illustrates this sense of place. Two main findings can be derived from this analysis. First, embodied experiences, through the active use of all their senses, form the basis of the strong attachments that the participants have to the Port Hills. The data support the use of the term 'sensing place' rather than 'sense of place' when discussing experience and interpretation of place, which emphasises the embodied and active nature of this process.

Second, the other meaning of the term 'sense of place' refers to the *genius loci*, or character, of the physical setting itself. This chapter argues that, indeed, these dimensions of place are interdependent. In other words, the character of the Port Hills, through their elevation, various landscapes, weather patterns and aesthetic qualities, allows for the participants' subjective experiences to occur, and defines their boundaries. Undoubtedly, the interpretations of these experiences, and by extension, of place, emerge from psychological processes, and are nested within the broader socio-cultural background of the participants. However, the Port Hills *themselves* both afford and limit the scope of such interpretations of place.

Sensing place, and its derivatives such as feelings of belonging and attachment to place, do not develop in a physical and social vacuum, but rather within, and through, a framework of wellbeing. The participants have developed a sense of place with regard to the Port Hills that integrates all aspects of their personal lives: their family, lifestyles, the interactions with friends, and their physical exercise routines all play out in, and in relation with, the Port Hills to a significant extent. These ongoing interactions are so deeply seated that participants speak of the Port Hills as their home place, a haven away from the immediate stressors of busy lives.

Following on from this developing understanding of the Port Hills, and the participants' sense of place, the next chapter discusses how the participants practise outdoor education in the Port Hills.

Chapter 6: Practice in Place- Outdoor Education in the Port Hills

6.1 Introduction

The concept of place is gaining increasing attention in outdoor education theory and practice. This chapter discusses how the participants practise outdoor education in the Port Hills, which includes their philosophy, values, and pedagogical approach. It answers questions such as: what do the participants do in the Port Hills and why do they go there? What settings in the Port Hills do they use, and what are approaches to outdoor education that are practicable in, and supported by, the Port Hills? In short, this chapter discusses what an outdoor education practice, which is responsive to place, looks like in the Port Hills.

Section 6.2 looks at both the practical and pedagogical implications of the use of local approaches to outdoor education by the participants. Section 6.3 discusses the ways in which the participants weave various pedagogical approaches into their practice. The Port Hills are uniquely suited to drawing out the complex stories of natural and human history, and issues relating to sustainability and resilience, not just in the Port Hills themselves, but in the wider context of Canterbury, and indeed New Zealand. The final section in this chapter discusses recent disruptive events in the Port Hills, their impacts, and the potential opportunities that these offer as identified by the participants.

6.2 Hills on Our Doorstep: Local Outdoor Education

There are many inherent benefits to practising local outdoor education, which is sometimes referred to as place-based outdoor education. The following section integrates these ideas by discussing where, how, and why the participants situate their outdoor education practice locally, in the Port Hills.

6.2.1 Proximity, Accessibility, and Student Agency

It may seem superfluous to discuss the benefits of the proximity to Christchurch and ease of access that the Port Hills offer as a setting for outdoor education. However, it should not be underestimated how often such considerations are disregarded in outdoor education practices. During our walks the participants both voiced their disbelief at outdoor educators' disregard for local opportunities, as well as critically reflected on their own choices.

Proximity

There are a range of advantages inherent in the proximity of the Port Hills to Christchurch. The main factor that several participants discuss is that of time. Alex sees his secondary school students for one full day each week, and time is a critical limiting factor for his sessions in the outdoors.

So from a logistical point of view, the Port Hills is a really easy to access resource that I can use. I can be up there in under half an hour. For a nine to three day, which is more time than the average outdoor education teacher gets with a class, that's really useful to have.

For our walking interview, Pete and I meet at the Victoria Park car parking area. Pete explains why he chose Victoria Park for this purpose.

I think Victoria Park is probably one of the places I go most often. It's often the first port of call if we are taking kids from school because it's very accessible, you can get a bus up here within 40 minutes of leaving school. Offload the students, do an activity, and be back at the bus. Within a 2, 2.5 hour period you can get in an orienteering course, a tree-identification type exercise, and be back at school before their next period.

Many of the participants lament the fractured nature of their students' school days and the logistical issues this brings to their outdoor education practice. Susan, when describing the benefits of the Port Hills, also talks about the time factor when she compares the Port Hills to other often used outdoor settings in Canterbury.

Even from the northern side of Christchurch, it's really easy to get here, instead of having to drive an hour to Mt Thomas or Ashley forest, or an hour and a half into the Craigieburns. Even if you go a little bit south you have to go to Peel Forest or Mt Hutt before you can get into the bush, whereas the Port Hills you can go and spend a day there easily and enjoy it, and it's just so close by. I don't know anywhere, any other city where you can go and access hills in so many places and so easily like we can here.

Accessibility

The quotation from Susan above shows that the geographical proximity of the Port Hills to schools is related to the ease of access. However, the ease of access that the Port Hills provide through the wide range of access points, tracks, and the Summit Road, is even more significant for participants than their proximity. When asked to define what makes the Port Hills unique, Rebecca summarises this in one word:

Accessibility. It's set up well to use for outdoor education, the tracks and the resources are all there. So biking tracks, and signs, and bolted crags, carparks. It's a well

maintained, well set up area for recreational use and being based in Christchurch the accessibility to it is just perfect for day trips, maximising use of time with students.

Logistical considerations play a big role for most of the participants when asked to define the advantages that the Port Hills offer as a setting for their practice. Pete, who as Head of Outdoor Education of a large secondary school in Christchurch often has to manage the logistics of large groups of students and several staff during outdoor education field trips, sums up the wider context of his group management decisions.

Victoria Park is easy to get to, you can park a bus here. Most staff know where to go when they get here, they're familiar with the place, it's not like you have to explain it, so there's whole bunch of management decision that sit behind using a place like this. There's facilities like toilets, there's a bit of shelter there, all those things come into play when we talk about this place.

Student Agency

Practising local outdoor education also has a range of benefits that relate to students' ability to access familiar recreation areas, and gain confidence in exploring their own local outdoor places. The participants all value these outcomes as they encourage their students to develop lifelong habits such as a healthy lifestyle through outdoor recreation, positive connections to place, and environmental awareness and behaviour. When asked why the Port Hills area is a place that allows such outcomes to be gained, several participants point to the ease of access for students in their own time. When we discuss her involvement in a Ministry of Social Development programme, aimed at providing long-term unemployed people with a range of work and life skills, Susan explains why she often takes her clients into the Port Hills.

The Port Hills is so accessible for those people, it doesn't cost anything to come here, you can get a bus up to Victoria Park. There's the orienteering courses, the walking and mountain bike tracks, and it's all free.

Educational practices which are more remote may leave students disconnected and without the practical means of retracing their steps outside of the school or education programme. Pete expresses this concern when he talks about a new approach to his outdoor education programme that he is currently developing. This entails moving away from using vans to transport students to locations, towards the use of public transportation.

Rather than having us driving them everywhere, which is a bit.. they're almost clients in some ways, we pick them up, give them an experience, and then drop them back. One of the things I've been thinking about recently is how do we give kids more their own

agency and control over how they get to and from places. Taking public transport and finding their own way there, I think is part of that picture. And given that one of those goals in the back of my mind is how do we get kids to do this as a lifestyle, not just as a one-off experience in school? How do you get them to continue doing that beyond school, and I think giving them those little bits of knowledge and confidence is probably quite important.

Dave also consciously uses the public bus system to access the Port Hills and encourages his trainee teachers to use this in their future teaching practice. As we walk up the Harry Ell, Dave tells the story of one of his student's work placements.

A student took a group from one of the poorer schools in Christchurch on a bus to the Port Hills and they went for a walk, and the students had no idea that a) the Port Hills were there, and b) you could take a bus there. And so the next weekend 4 of them organised an expedition, took a bus, and went for a tramp in the Port Hills. They organised themselves and made it happen. For me that's such a great outcome, to give people the tools that they can use now to have an experience they can do any time.

This is powerful anecdotal evidence for the importance of giving students agency over their learning so that they can expand it beyond the confines of structured programmes or school. Rebecca expresses a similar idea to Dave's, when she talks about her students' prior knowledge and awareness of the Port Hills. One of her main aims is to give her students the confidence and skills to return to the Port Hills in their own time.

Others have only seen it from a distance and wonder what this mysterious thing is that people talk about. But it's easily accessible, so even if they haven't used or thought much about it in the past, it can become a dominant feature in their lives.

The examples discussed above show the advantages of using local outdoor places, both in terms of logistical practicalities, as well as the notion that inducting students into their local outdoor places, in particular the Port Hills, can support the development of their agency. Another benefit that the Port Hills area provides as a local place of practice, is that it can extend students' perspectives of their home place.

6.2.2 Perspectives on Home

The previous chapter concluded that the participants have developed a place identity with regard to the Port Hills that encompasses feelings of being at home there. One key aim of the participants' local practice is to also foster such feelings in their students. The Port Hills are uniquely situated so that students can gain a new perspective of home- they can see their homes in the city of Christchurch by being elevated above it, and they can continue to develop

their perspective of home when back in the city, as the Port Hills are a visual landmark seen from almost anywhere in the city. The experiences they gain, and relationships that develop there are more easily remembered as well as repeated. As we walk along the Crater Rim Walkway, and gain a clear overview of the city at the head of Bowenvale, Susan addresses this point when she explains the connections she looks for between her students and the Port Hills.

I think that's where you can have personal growth, when they start to build connections and develop a sense of ties, based in that place. The Port Hills is something that they can look up at when they are back on the flat, and think 'I've learned how to not yell at someone or punch them when I was really angry', or 'hey I climbed that mountain with the mast on it.' It's visible to them, they can see it from anywhere in Christchurch where they stand.

Both Dave and Alex repeatedly refer to that fact due to the elevation of the Port Hills students gain a mental overview of the city itself as well as the ability in a more abstract sense, to shift their perspective on life. Alex explains this as we gain a view of the suburb of Scarborough from across the Taylor's Mistake bay.

The Port Hills is unique in the fact that it overlooks a city. I can take a group of students out of their daily environment of the city, and pull them above it, for an outside perspective. We can look at the city and we can look at our daily lives, both stepping outside ourselves and our minds, but also stepping outside of the physical environment and looking inwards. You can draw parallels, you can look at differences. The Port Hills make this amazing kind of natural stage, a geographical outside perspective on life.

The uniqueness that Alex is referring to here stems from the fact that the Port Hills allow outdoor educators to take their students out of their normal environments so they can experience new perspectives, and reflect on their home lives, *without* disconnecting them from their home by going to remote places. Students' sense of what can be their home place can be expanded. This approach addresses a significant critique on a central tenet of most outdoor education practices. Increasingly, outdoor education theorists and practitioners argue that the notion of taking students far away from home for adventure experiences, learnings from which are then transferred back to changes in values or behaviour back home, is fundamentally flawed (see for example Beames, 2006; Brown, 2008, 2010; Brooks, 2004; Hill, 2012, 2013).

Jason makes a similar point as Alex, however he uses a different approach with his clients, by showing how much bigger their home places could actually be than they realise.

I think it's important because they then understand their place. Because they can't see their houses, it's actually a far bigger place than just your street, or the mall, or your mate's room with the Xbox in it. So it's expanding their understanding.

In his Māori youth development practice, Jason takes his clients often on the same walk we are on, the Harry Ell Walkway. When asked if he explicitly talks with his clients about their ideas for potentially revisiting the Port Hills he shows an awareness of both the possibilities and limitations of a local approach. It takes time, and agency from his students, for enduring connections to develop.

If they show an interest in it. If they start talking about 'oh maybe if I take my family up here, show mum or dad this place' then we would explore that with them. I think it's when they start to feel a connection is when you can unpack it, but you can't force a connection. And that takes time.

Familiarity with place is a key factor in how people develop attachments to place (Convery et al, 2012). This concept of place familiarity is related to Relph's notion that strong attachments to place are formed when people see themselves, and are seen by others, as locals rather than outsiders (1976). Supporting students to gain a sense of being a local in the Port Hills is important from this perspective. Alex provides an example of this effort when he discusses a Port Hills-based field trip in his secondary school programme.

Maybe through familiarity I could extend that sense of home. I guess that's what I hope is achieved through this programme, that it extends their sense of home.

Pete's school is in the north part of Christchurch. Most of his students don't have a very strong connection to the Port Hills. He explains how specific outdoor education programming can support students in building connections to their local places.

Kids can come here [Victoria Park] and look and say 'oh yeah there's the city, there's where we go mountain biking, there's the hill we went up in year 9 or 10' and actually get a relationship to the Port Hills that they can tangibly experience. And I don't know how many kids get to come up here on the hills regularly. Certainly from our side of town, not often. So it's actually opening their horizons to other parts of the place they live.

Broadening students' horizons, and expanding and challenging their conceptions of their home place, are approaches to local outdoor education that are particularly well suited to the Port Hills. The next section briefly discusses the perspective of the two participants who work in tertiary education, and how they see their responsibility with regard to developing local outdoor education practices.

6.2.3 Tertiary Outdoor Education: Role Modelling Local Practice

Carla and Dave both work in tertiary outdoor education. They educate students who seek careers as teachers, instructors, or guides who design and facilitate a wide range of outdoor programmes. When we stand at the top of Victoria Park, and Dave is getting himself ready for his ride down the mountain bike track to get back to his office, he offers a final thought on how he sees his approach to local outdoor education.

What I try to do is help my students make connections between specific places. So knowing a bit more about the Port Hills for example, I have had students going 'well I'm actually quite interested in learning more about my local place' and especially when I'm talking with students from around New Zealand or around the world, and they talk about their specific places that have meaning for them. And they are now stimulated to go and find out more about those places, and hopefully see those in less superficial ways. So instead of going 'that's a place where I go riding, oh this is the place where Tamatea threw the spear. Or this is the place where we can find some of these native plants, and that's why we've got the bellbirds here.'

Carla supports this idea when she argues that as a tertiary outdoor educator she is a role model for local approaches and she stimulates her students to adapt their programmes to the place where they work. This seems partially to be born out of frustration with seeing outdoor programmes that choose to travel great distances rather than look at local opportunities. I ask Carla why she believes being a role model for local approaches to outdoor education is so important.

Because they will pass on that culture. They will then start working at a school and start looking locally. To see 'what can I do here?' I've seen schools from Dunedin drive to Murchison to go kayaking, what have the teachers there learnt? So for me I want them to go out there and think 'what can I use in my outdoor programme that uses this local environment?' It is about getting kids to see what's on their doorstep. Because there's very few places in New Zealand that don't have something on their doorstep.

This section has shown that there are multiple justifications for local approaches to outdoor education, both from a point of view of practicality as well as the underlying pedagogy that aims to build strong connections between students and their local places. The next section discusses how the Port Hills lend themselves to an outdoor education approach that is not only place-based, but one that is also place-responsive.

6.3 Multiple Approaches to Place-Responsive Outdoor Education

Place-responsive approaches to outdoor education recognise that the human and natural histories, as well as the physical characteristics of a place, are central to the learning experience (Heijnen, 2017). These aspects of the Port Hills makes it particularly well suited for a place-responsive outdoor education practice. The Port Hills, as a peri-urban area with a complex past, and multitude of land uses, offers a myriad of possibilities for outdoor educators. The participants describe a wide range of perspectives that they use, both to foster relationships to the Port Hills themselves, as well as using the Port Hills for further exploration of themes within the social and natural sciences.

This section addresses these approaches in several ways. From the conversations with the participants the outlines of a Port Hills-centred critical socio-ecological approach to outdoor education emerges. Local narratives of the Port Hills are used extensively by participants to share the stories of the Port Hills. Lastly, the participants describe their use of the Port Hills as a metaphor and case study for addressing a range of sustainability issues, both regionally and further afield.

6.3.1 A Critical Socio-Ecological Approach to Outdoor Education

In the last decade there has been an increasing call in outdoor education literature to reposition the field towards more critical approaches that incorporate education for sustainability outcomes, and practices that are consistent with these outcomes (see for example Higgins, 2009; Hill, 2012, 2013; Irwin, 2010; Lugg, 2007; Martin, 1999, 2004). Critical education challenges the assumptions, outcomes, and practices taken for granted in dominant culture as well as in current approaches to education (Gruenewald, 2003). Hill (2012) argues that this repositioning of outdoor education needs to focus on three key dimensions of outdoor education: its philosophies and values, resources and planning, and pedagogy.

Place-responsive outdoor education and education for sustainability share connective tissues as both use a critical approach that questions and critiques the (unstainable) status quo (Brown, 2010; Hill, 2012, 2013). In terms of the Port Hills, such critical questions are wide ranging and could include: what was the ecological structure of this place prior to Māori and then prior to European colonisation, and what have the impacts of human settlement been? Which stories of human settlement in the Port Hills are acknowledged and valued, and which

are ignored? How does current outdoor education practice in this place maintain or challenge issues of inequality relating to cultural dominance and socio-ecological justice? This section provides an overview of the various approaches that the participants take in response to such questions, and is split into two subsections, the Māori voice of the Port Hills, and the historical socio-ecological approach.

Missing Voices: Māori and Te Poho-o-Tamatea

Several participants commented on a lack of representation of Māori history in the Port Hills. When compared to the literature available on the British settlement of Canterbury, the author found very little information available on Māori history in the Port Hills. This is partly due, as Pete argues, to the lower impact that Māori had on the land itself:

This place was very well known to Māori, they traversed it, they had settlements at Rapaki, at Port Levi, they had smaller settlements around the place, and certainly as a mahinga kai area it was well understood. And they used the entire place. But now we can see very little of the Māori presence on this landscape. Māori really didn't leave much of an impact on the wider Christchurch area. You know, you can see farming, you can see the impact of the conservation movement, but we don't actually see much of the Māori story.

Although Māori did have a significant impact on the Port Hills in terms of deforestation, and the extinction of mostly larger flightless bird species (Wilson, 2009), the point made by Pete is valid in terms of Māori population numbers and permanence of building structures on the Port Hills. Jason, of Ngā Puhi decent, argues that the stories of local Māori history that exist are often ignored, or misrepresented, and that there is a general lack of available information.

The missing link is accessible information. I think there's an ironic sign, on the Bridle Path, that has the history of the Bridle Path itself, and it has Te Tihi ō Kahukura on it, and I think it might be spelled wrong. That's the only bit of Māori connected to that, I haven't seen a lot more. I think there's a sundial on top of the Huntsbury spur with some Māori names on it, but not a lot more about any other places.

Several participants argue that outdoor education is well situated to address the issues of social inequality by allowing the voice Te Ao Māori in the Port Hills to emerge. Additionally, such an approach also enriches students' developing awareness of the full history of the Port Hills and the broader region.

Connecting Perspectives of Past and Future

Rebecca has spent many hours in Kennedy's Bush Reserve as a biodiversity ranger. For her, the mature native forest there, together with Omaha Bush, is a special part of the Port Hills that she enjoys taking students to.

Kennedy's Bush is not like the rest of the Port Hills. It feels like a step back in time and like a memory of what the Port Hills may have been in the past.

The ecological changes that the Port Hills have undergone as a result of human settlement are a topic that many of the participants address. As we sit down in the middle of Victoria Park during our walking interview Pete points out the views to the city as well as the older native planting sites in the Hidden Valley area of Bowenvale.

There's another story there, when you look at those plantings, and I can say to the kids 'those weren't there 15 years ago, that was just farm land.' That's a deliberate attempt to try to recreate some of the bush that was here before Europeans got here.' And you can talk about why they've chosen the valleys and not the ridges and spurs to do that. I think I see a lot of scope because it's a place that hasn't been paved over yet. Kids can take a step back into history simply by being on the hills. And once you get high enough up on the hills the city itself gets blurred. So I think you can get a better picture of what Christchurch was like. Maybe visualise it better.

Pete uses the elevation of the Port Hills to help his students visualise what the hills and city would have looked like before European colonisation, and as a starting point for raising critical questions about such diverse topics as bicultural issues, ecological impact by humans and current conservation efforts, and conflicting perspectives on land use and values.

Place-responsive outdoor education can give a historical perspective to students in terms of their role in contributing to the ecological wellbeing of the Port Hills. Allowing students to connect events of the past in the Port Hills, with both their current state, and with the range of future choices that they have, is an important theme that all participants address, in particular during the walking interviews. Pete provides an example of a critical socio-ecological programme that fosters an historical perspective of the Port Hills.

We do this Year 10 unit where we look at Christchurch before people, after Māori, and after Pākehā, and we look into the future. And when we start looking at things like 'what's happened in terms of changes to the landscape?' The loss of the lowland bush has broken a connection between the mountains and the sea, and I think there's a discussion to be had, about how we've impacted it, and if we were going to try to redress some of that impact, what would we do?

Chapter 7 will provide further discussion of Pete's final question: what would we do if we want to redress some of that impact? What follows next is a discussion of the role of local stories about the Port Hills in the participants' practice.

6.3.2 Storying the Port Hills

Telling stories, or storying, is an effective way to introduce students to place. Storying allows students to negotiate the complex cultural meanings of place, and can be a useful tool alongside their experiences (Wattchow & Brown, 2011). The telling of stories has been a fundamentally human way of passing on knowledge and tradition over countless generations, and is fundamental to the preservation of culture (Abram, 1996), and our connections to place (Wattchow & Brown, 2011).

Many participants discuss the role of storying in their Port Hills-based practice. Dave's students research stories and share them with the other students as part of a field trip in the Port Hills that explores issues of land ethics.

One of the things that we also do when we travel through the Port Hills is we tell stories of the past. The students present on different topics as we come to places, recognising the stories of the people in the past both pre people, pre Māori, and then some of the Māori history that's associated with some of the richness of these places.

One of the issues with storying, according to Park (1995), is the question of what or whose story to tell. The Port Hills, like other places in New Zealand, are full of layers of storied history, and each place blends European, Māori and Pre-Māori stories. Dave questions his pedagogical use of stories:

A lot of places have been renamed by the Europeans. How does the past get washed over by the present and what does that mean for how we come to understand a place? Even the Māori names are most likely from Ngāi Tahu, as opposed to Waitaha or Ngāti Māmoe. Is that a natural thing that happens? What does that mean for us today? Can we just continue to just erase the past? These are good questions for my students. And for me too.

The questions that Dave raises are pertinent to all outdoor educators. Park (1995) argues that some stories are oppressed, or silenced, and have almost disappeared in New Zealand, while other stories thrive. Wattchow and Brown emphasise that storying should be incorporated by outdoor educators with a high level of cultural sensitivity, and through "deep research into the historical records of each place", and they go on to warn that "storytelling is not a frivolous

or fanciful endeavour, it is a serious attempt to connect and make sense of where we are and who we are” (2011, p. 189-190).

Alex shares a story of the Port Hills that he use at times with students, and which allows for a much deeper historical awareness of the Port Hills, one which is often forgotten or ignored. The story of Omahu Bush exemplifies how multiple aspects of place can be woven effectively into a single story:

A long time ago a Māmoē rangatira and his men where roaming around the tops of the hills. And they got around to an area now called Cooper’s knob, and they were ambushed by another group. The rangatira was killed, and his men fled down through Omahu Bush and down into the valley and they managed to escape their pursuers. So Omahu roughly translates to a place of escape. So we go there, it’s a wonderful area of native bush, it gives the students a sense of what the hills once where like. There’s an amazing amount of fuchsia in there and this beautiful cascading stream with waterfalls the whole way down through it. You end up at the bottom with this amazing serene feeling, and that’s usually where I tell them that story, about why it’s called a place of escape. And we think about people’s values to do with the Port Hills, and being out in nature. We draw parallels about how in the past it was a place of escape from adversity, and it is maybe still a place of escape for people now.

Storying is an important pedagogical method in the outdoor education practice of the participants. The examples provided above showcase some of the possibilities that exist. However, it should be noted that due care and diligence needs to be taken when using stories. Outdoor educators should ask themselves whether a story is appropriate in a particular context of place and student group. The use of stories can encourage a broader recognition of New Zealand’s bicultural heritage. However, if done carelessly, and without appropriate research and critical reflection, storying can contribute to maintaining socio-ecological inequality. What follows next is a case study of Te Tihi ō Kahukura and the Bridle Path. This area illustrates how the participants integrate local history, New Zealand’s bicultural identity, and outdoor activities, through the use of place-responsive outdoor education.

6.4 Case Study: Te Tihi ō Kahukura and the Bridle Path

Although none of the participants chose to use this area as their walking interview location, all spoke several times about Te Tihi ō Kahukura and the Bridle Path (Figure 39). The area is a hotspot for outdoor education as it enables climbing, walking, and mountain biking activities, as well as some of the most important Māori and European history of the Port Hills.

This case study will focus on two key themes that form part of this chapter's findings: student agency, and using a critical socio-ecological approach to place-responsive outdoor education. Student agency is the ability of students to gain the confidence, skills, and opportunities to revisit and expand their connection to local places beyond the programme itself. Alex describes how his visit to the Bridle Path area meets these outcomes:

In a day we've walked to the bus exchange, took the bus to Lyttelton, walked over the Bridle Path and then bused back to Christchurch, we did all of that without a car. So how do they [the students] get out there and do cool stuff? And here's an example of that, it's accessible, they can roam around Lyttelton, they can walk up the hill, it actually makes them feel like the hills are less of a barrier and more of a connection.

Alex continues by explaining how he integrates local history into that particular field trip. He explains to his students how new immigrants would have to walk up the hill with all their belongings after a tough three month boat journey across the world.

So I try to give the students a sense of that as they are then about to walk over it themselves. So we probably talk about that stuff while we are in Lyttelton. I often show a couple of photos of historical Lyttelton and what it looked like.

When Mary takes her primary school students over the Bridle Path she incorporates social, creative, and historical approaches in her field trip, and also emphasises the use of local public transport. And because it's close to school they walk home.

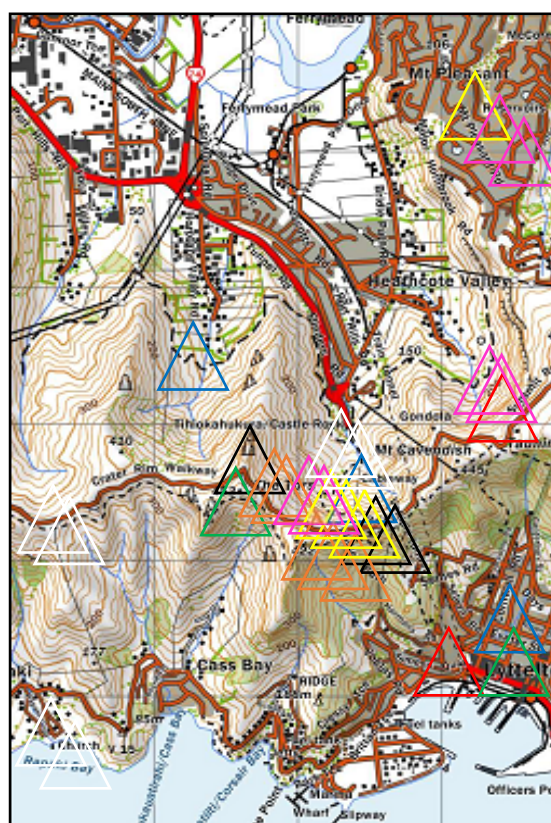


Figure 39: Map with comments of Castle Rock and Bridle Path, adapted from Freshmap, Heijnen, 2017

And we hop on a bus to go through the tunnel and get dropped off further up, just on the main road in Lyttelton and then throw our day packs on and walk up and over. Often we'll stop and do drawings, so they'll take their sketchbooks, because there's a few plaques and things along the way. So we'll give them different sketching challenges. So that might be of the view on the Lyttelton Harbour side, and we'll talk about some of the landmarks. And to get to the top, and then be able to walk home is a great part. So we stop at the top and have lunch up there, and a bit of a run around usually. They love that you can see both sides, down to sea level on both sides.

The examples above illustrate the ease of access that the central Port Hills offer. The Tussockland Park, as envisaged by the CCC's recreation strategy (2004), identifies access and wide views as outstanding features. The participants also discuss the opportunity to weave in a number of critical socio-cultural stories that this location specifically provides. Pete, for example, integrates the Māori, European and natural history in field trips in the Bridle Path area.

We also try to incorporate some of the cultural history, and that part of the hills are very significant, because the first settlers of course arrived in Lyttelton, and then they came up over the Bridle Path to see this view of Christchurch. I think the perspective from that elevated position on the hills is quite instructive. You can help kids map out what this place was like pre-European development and you can get them to think about 'well what's the difference between a Māori perspective and a Pakeha perspective? What has changed here? Why has it changed, what have we lost, and what does that mean for Māori in terms of their place?'

The questions Pete asks here are useful questions for all outdoor educators, wherever they go with their students. However, the contrast between the well preserved European history of the Bridle Path, and the often forgotten meanings that local Māori have in relation to this place, allows outdoor educators to not only to teach students local history, but also the social processes through which stories are shared and given value, or ignored and rejected. Jason aims to bring out these hidden Māori histories, and blends whakaaro Māori into his practice. Te Tihi ō Kahukura as an important area for this:

For example there's Te Tihi ō Kahukura, the idea that it was their sanctuary. If you were a warrior and you got yourself into trouble, you got isolated from your war party, you would go up there and because of the geological features of the rock, you could actually protect yourself quite nicely. So that's one of the Korero that I have heard about why it's called Te Tihi ō Kahukura. So if you actually walked up that spur for instance, it's a hell of a slog, and the clients understand that we need to group together to actually get there. And when we finally get up to the top we can get together and look after each other. And we can relate it back what it must have been like for the warriors to get there.

Such journeys as the 'slog' up to Te Tihi ō Kahukura are potentially rich in experience and developing a more critical understanding of students' local history. As such, this area illustrates the wide range of options available to outdoor educators when developing a place-responsive approach to their practice.

6.5 The Port Hills as Metaphor and Case Study

Sections 6.2 and 6.3 discussed the Port Hills-based approaches to outdoor education used by the participants. The Port Hills area in that sense is both the locus and focus of the educational programme. However, the Port Hills are not isolated from the rest of New Zealand, or indeed the world. In fact, in many ways the Port Hills share many of their characteristics and stories with other parts of New Zealand. The participants make use of this understanding in their practice. This section explains how and why the participants use the Port Hills as a metaphor and case study.

Alex and Rebecca both work on a secondary school outdoor education programme that uses the Port Hills extensively as a metaphor or case study for broader socio-ecological issues. As Alex comments:

The Port Hills are this perfect geographical and metaphorical resource. For me the Port Hills is this really unique place that kind of seems to be its own place, but it's also this conglomerate of loads of different parts of the world. There's islands, there's hills and mountains, there's beaches. There's a safe harbour. A rugged coast line, crumbling cliffs, amazing views, dense forest. There's so many little pockets, and as an educator it's an incredible resource to just be able to go and pick those pockets. It's earth but it's condensed.

Alex talks about the geological and geographical features of the Port Hills, which form an accessible case study for a wide range of learning outcomes in the earth sciences. As we shelter from the wind in one of Awaroa's WW2 bunkers Rebecca expands on this point.

I guess this reflects what New Zealand is like as well, this place. This has so many different aspects that you can talk about, that you can identify as New Zealand, there's sheep everywhere, there's tussock and farmland. You can see some of our native bush and look out on our beautiful mountains. And there's so much ocean, New Zealand has so much ocean. I mean the basic breakdown of the geography of New Zealand, the length of the coastline, and the fact that around here you can see 98% farmland and 2% forest, or less than that. There's links to New Zealand history all along the Port Hills as well and I guess what happened here reflects a lot of other places in New Zealand too.

The use of case studies can be a highly effective educational approach (Bassey, 1999), in particular when students are already familiar with 'the case', the Port Hills. This then allows students to learn about other places, and their unique stories and characteristics. The use of metaphor, comparisons, and contrasts, can then further elucidate the issues being studied. Dave, for example, does this when he links the Port Hills to the concept of wilderness.

We explore the idea of wilderness and the Port Hills is a good example of land preservation. Harry Ell set aside the land so that stopped houses being built all over the Port Hills. So that's an example of preservation. It's also an example of a highly modified landscape. So the original forests that were there are now completely gone, except for some small pockets. And we look at wilderness and conservation examples in other places too, I mean the national parks. So what do we call wilderness and how do we protect it? Is this wilderness? Should we protect the Port Hills more?

The examples above show that although the Port Hills has unique characteristics that are worthy of being both the locus and focus for study itself using a place-based approach, there are also good reasons for expanding its use in the form of case study or metaphorical connections to other places. The histories of the Port Hills share significant commonalities with other places, in particular with New Zealand and other island ecologies, as well as other societies with colonised indigenous peoples. Although a place-responsive approach is sensitive to the stories, character, and needs of a particular place, this does not exclude a broader exploration of the Port Hills.

6.5.1 Land Use and Values

As discussed in Chapter 6.2.1, the natural and human history of the Port Hills is made up of complex layers, some better understood and communicated in our culture than others. This in itself is a theme that is worth exploring with students. In our present day the Port Hills have a wide range of landscapes, land uses, and conflicting values and assumptions about what kind of place, and whose place, this is, and as a result, what kind of land uses are appropriate or allowable in the Port Hills. The participants are aware of the potential for rich learning experiences that result from these tensions.

For Dave, questions of history, values, and land use are all related and appropriate for use in his journeys with students across the Port Hills.

So, for example, we look at Māori history of particular places around the Port Hills, we look at particular characters or people from the history, we look at places and the events

in those places. We look at some of the species and ecosystems that are or were here. We look at land use, where we look at what's happening here now, why has that developed this way? What should happen here in terms of land use? What's important to keep? So over the course of a day of travel we have a chance to learn about lots of different parts of it.

Mountain biking is gaining significant popularity in the Port Hills, with the opening of the Christchurch Adventure Park, and development and opening of more tracks to mountain bikers throughout the Port Hills (CCC, 2017). This development has the potential to cause conflicts on multi-use tracks if not managed properly (Tumes, 2007). During our walk in Drayton Reserve, Mary gives an example of the educational opportunities inherent in land use conflicts and recreation impacts.

It is interesting too, to talk with the kids about what this track is used for. Because we have been here a few times where mountain bikers have come down here, well I can see the attraction. But the kids have actually said 'oh man they look like they are wrecking the trail' and so it is a really interesting conversation about that use too.

Recreational and land use conflicts, resulting from differences in the values attached to place, will require ongoing monitoring by the agencies managing the Port Hills. However, such conflicts also allow for inspection and discussion in outdoor education practice.

6.5.2 Authentic Learning in the Port Hills

Authentic modes of learning focus on real-world complex problems and possible solutions. When students are engaged in learning activities such as problem-based activities, case studies, and participation in communities of practice, they are more motivated, and learn more effectively (Lombardi, 2007). Authentic learning approaches are based on an experiential education philosophy, which has its origins in the work of Dewey in the first decades of the 20th century. For Dewey (1911, 1934), experiences of the world, and the process of individually and socially reflecting on, and making sense of real experience, lies at the heart of both pragmatic and progressive education practice. In this section the significance of authentic learning approaches in the participants' practice in the Port Hills is discussed.

During our walk from Taylor's Mistake towards Boulder Bay, Alex looks up at the hills and explains how he uses this area. One of its benefits, he argues, is that he can allow students to roam more freely while still managing their safety. This freedom of movement, in turn, allows

students to discover both what good lines of travel in this area are, and offers the potential for student discovery of the unknown. Alex explains:

I might put a few other boundaries in place, but it's a little bit more real, they are not being dictated exactly what they have to do. That awakens that really positively engaged spirit in people. You know, it's the outdoors. The environment around here is so conducive to discovering different things. Even as we are walking along this track, there's all these different gullies heading down to the coastline. And you can roam up any of them. Part of being or learning outdoors is learning how to move outdoors. So here's a really cool place where students can learn to go off track. And they can learn to identify paths, natural lines, the capacity to go into the world and absorb what the world throws at you is a unique form of education that I don't think is replicated inside the classroom, or inside school environments. There's a sense of realness or an authentic way of going about things in the outdoors.

The notion expressed by Alex, that outdoor education is a unique form of education that allows students to experience the world in its full complexity, is shared by many of the participants. Mary shares a story about the first time she took a large group of six year old students into Drayton Reserve, and how the interplay between the natural setting and people in that place provided an unplanned, but rich, learning experience for the students.

The purpose of the trip was around how people have an impact on their environment. There was rubbish here on the day, and they could see the impact of that, and they could see that there's lots of weeds so the native plants can't grow so well. Just up here there was a quail's nest with some eggs in it. First of all the kids were like 'well where's the quail?' Well, you know, it's abandoned, and there's eggs there. So the six year olds were 'well that's not very cool.' But talking about why do you think the quail would have left the eggs there? So the kids came up with well there might have been dogs on the track and maybe they scared them away. Or maybe there were mountain bikers or people. And maybe the quail didn't make a very good decision about where to build its nest. So we could not have asked for a better learning moment.

In its close proximity to where the students live, and where they go to school, the relatively small Drayton Reserve offers a wide range of authentic learning experiences, which would be hard, in not impossible, to have inside the classroom. Susan, in her work with long-term unemployed people, discusses why she chose to use Victoria Park as the location of one of her sessions.

Victoria Park enabled us to have a story that was believable. Somebody had fallen off a track into a steep gully, they are injured. The location allowed us to set up navigation points, and from a safety perspective I could set boundaries and manage that well. The whole idea was to get them to go out there and do that and not feel like they are being micromanaged by me, so take ownership of that. And then engage them with the local

environment and show them that in Christchurch we have this amazing resource that you can come up and go orienteering, or you can sit up at the park and come here with your children or grandchildren and watch them play. So Victoria Park as a place to recreate in was a secondary outcome.

Susan integrates a variety of outcomes in her session in Victoria Park. This is something several participants address repeatedly. The Port Hills allow for authentic experiences that challenge students physically and emotionally, while it is relatively easy to manage students' safety, whilst also enabling students to develop connections to their local place. Jason places such authentic experiences in the context of his youth development practice. Here the Port Hills engender fruitful discussion about topics such as personal and social responsibility, and decision making skills.

A classic is that if I take a young group out, and it starts off as a reasonably nice day. And I tell them here's what I think we need to take: rain jacket, water, food, and someone decides not to take a rain jacket then the weather changes and they start to give you hoha [attitude, annoyance], they start to demand stuff from people and start to get pissed off. If the facilitators are skilled and well versed in what they do, then 'Oh I see, what did we talk about this morning, and you decided you'll be fine. And what's happening now for you? You are cold and miserable, is that why you are angry?' And then if you can unpack it and make sense for them of what they can own and then maybe we can reflect on their home environment. 'What do you need to do to make your environment a bit better? Do you need to listen, make slightly different decisions?' I find the natural environment can actually support that processing.

Through their steep elevation contours, severe weather, uneven and often slippery surfaces, the Port Hills allow for a range of physically authentic experiences to take place. In addition there are also opportunities for unexpected learning to occur, and the area enables students to roam more freely.

6.6 Disruption in the Port Hills: Opportunities for Outdoor Education

Chapter 3 discussed the impact of the 2011 Christchurch earthquakes and 2017 fires on the Port Hills, and on people's ability to use recreational and educational facilities. Although the negative impact of these events should not be underestimated, and both events had a detrimental impact on many local people's lives in the Port Hills, there are also positive educational opportunities associated with both events. This section provides an overview of the participants' ideas relating to the opportunities that these events provide for their outdoor education practice.

Several participants who work with primary age students note the increase in levels of anxiety after the earthquakes. As Deputy Principal, Mary has seen significant increases in mental health issues in her school, as well as in other primary schools in Christchurch, after the Christchurch earthquake.

And there's a big increase, and this is goes for schools across Christchurch, in childhood anxiety. We have a lot more issues when we go out on camp with bedwetting too. I absolutely notice the changes. And even in our achievement data there's a cohort that's going through that are lower, especially in reading and writing.

This is a highly troubling conclusion from a primary school teacher who works in one of the higher decile primary schools in Christchurch. Extensive research on children's wellbeing after Hurricane Katrina reached similar conclusions (Abramsen et al, 2011; Bidwell, 2011). Although published research on the earthquakes' effect on student achievement in Christchurch is not yet available, there is clear evidence to suggest that due to factors such as sleep deprivation, and loss of regular learning patterns (due to school closures and location changes), especially younger children are more vulnerable to anxiety, and fear of separation from parents (Gawith, 2011; Gluckman, 2011). Mary, who runs the afterschool outdoor programme called 'William Pike Challenge', goes on to give an example of higher levels of anxiety in her rock climbing activities in the Port Hills.

Even the William Pike kids, the ones that haven't been climbing before, they said 'is this safe'? That does say it's definitely embedded into their psyche, that idea of 'is this safe, am I safe here?'

Susan has similar experiences and contrasts her own attitude towards recreating in the Port Hills with the higher levels of anxiety and depression that she observes in her outdoor education practice.

Yeah, the people who recreate in the Port Hills have been recreating since the day after the earthquake. It wasn't so long before I was up and along the summit road and with my children. That's because I was comfortable in that environment. I strongly believe that we shouldn't let fear prohibit us from doing things. Kids that were three or four when the earthquakes happened are now eight or nine, and still have some serious anxiety issues. And that's coming through in school. How can we make people feel safe again? Are people not coming into the Port Hills because they are worried about an earthquake?

Both Mary and Susan continue to take students into the Port Hills. They argue that through such experiences students can become more comfortable in that environment, and gain

higher levels of confidence as a result. Becoming more aware of the geological past of the Port Hills, whilst building positive feelings of attachment to place through careful exploration, could also serve to demystify the earthquakes. A sense of agency and confidence of students, through programmes that include developing skills such as camping, outdoor cooking, and risk assessment and management, could also support students in managing their anxiety.

Both Pete and Dave commented on the 2017 fires that devastated 1600 hectares of land in the Port Hills. Although they both acknowledge the dramatic impact on protected ecological reserves, they emphasised the potential for outdoor educators. Pete describes his ideas for getting his students actively involved in helping with native planting and maintenance of areas affected by the fires.

I think the fire is an interesting one. I think the council is very keen to get public engagement and I think that's created an opportunity. So one of my goals in the coming year is to try and get up onto the hills and either to do some weeding and maintenance around some of the planting sites, and actually I'd really like to get the kids planting as well.

When Dave and I walk into the clearing on the Harry Ell Walkway, almost at the same place where Jason talked about how he uses the fire damage to discuss questions of rangitiratanga and social responsibility with his clients (see Chapter 4.2.5), we stop to look and listen for a while. Dave observes the regrowth of native bracken, takes a photo of it (see Figure 40), and continues:



Figure 40: Bracken fern regrowing on Harry Ell Walkway, Dave, 2017

It is an interesting place here, we have fire blackened plants and we are looking across to the adventure park with its scarred hillside and also its blackened trees. New Zealand doesn't really have a fire ecology so it's been pretty destructive for a lot of the native plants [...] So I've got the bracken fern here, a New Zealand native plant that comes up after the fires. And Māori used to burn the land as this would come up and the bracken fern were an important food source. So it's a sign even though the fires were extremely destructive, nature has quite a bit of resilience to it. This ties in with the bellbird song we can hear. I'm always hopeful that things can get better. Sometimes disruption creates a space for something new to come that might be different and may even be better.

For better or worse the earthquake and fire events are part of the Port Hills story and educators must find ways to tell those stories in ways that make sense to students, and that do not stand in the way of their development of connections to the Port Hills.

6.7 Chapter Summary

This chapter revealed the multi-faceted nature of participants' outdoor education practice in the Port Hills. It concludes that local approaches to outdoor education in the Port Hills offer a range of practical benefits such as the proximity to school and students' homes which lessens travel times. The accessibility of the Port Hills in terms of the sheer number and variety of tracks, reserves, climbing areas, and the sheltered harbour and coastline, allows for flexible and diverse outdoor programmes that have the potential to incorporate a wide range of outcomes. Moreover, a local approach to outdoor education gives students agency over their learning. They can use public transport to access and revisit areas and expand their experiences of, and connection to the Port Hills, in their own time, and beyond the confines of the outdoor education programme itself.

Local outdoor education practices also allow students to gain a broader perspective of their lives at home. Rather than being disconnected through field trips in remote areas, a local approach enables students to make the Port Hills their home place, an important component of a developing sense of place. The participants working in tertiary education also discuss the benefits of role modelling a local outdoor education practice, in terms of showing their students the philosophy and opportunities inherent in a local approach, which they can then apply to their future places of employment.

The Port Hills, through their sheer diversity of landscapes, geological and geographical features, and complex tapestry of natural and human histories, are a rich place for learning for the participants' students. It allows the use of a critical socio-ecological approach that questions issues of human-nature relationships, colonisation and the local indigenous voice, and social justice within the Port Hills.

The use of sensitive and careful local storying of place, case studies, and metaphors allows outdoor educators to look both at what the Port Hills are telling us, as well as use this knowledge to cast their eyes further afield and ask critical questions pertaining to New Zealand as a whole or indeed the wider world. The Port Hills are a peri-urban area with

concurrent conflicts of land values and land uses, which in themselves offer opportunities for critical inquiry, discussion, and learning.

This chapter also concludes that the Port Hills offer outdoor educators a myriad of opportunities for fostering authentic learning situations. Recent disruptions to the Port Hills, notably the 2011 earthquake and 2017 fires, had a significant deleterious impact on many people's lives, as well as the Port Hills' indigenous flora and fauna, conservation and restoration efforts, and recreation opportunities. However, these events also provide opportunities for outdoor educators in addressing place-based competencies such as resilience, outdoor living skills, and developing students' confidence through place exploration.

Although the Port Hills are unique in that they provides a breadth of opportunities in terms of diverse educational experiences and outcomes, it is important to conclude that these approaches to outdoor education are potentially applicable to any local outdoor place in which a practitioner may be working. The following chapter builds on the previous two chapters by discussing how the participants use the concept of kaitiakitanga, and investing in the Port Hills, both to strengthen their students' sense of place, as well as to develop a reciprocal and interdependent student-Port Hills relationship.

Chapter 7: Kaitiakitanga- Place-Constructive Outdoor Education

7.1 Introduction

David Orr's critical essay *What is education for?* challenges outdoor educators' practices. Orr (2004) contends that if an educational programme does not explicitly address socio-ecological issues, it actually contributes to the sustainability issues described in Chapter 1. Orr's challenge resonates with Leopold's (1949) Land Ethic, which argues that we can judge a right course of action based on its impact on the wellbeing of the broader ecological system. If we accept that place should be the central focus in outdoor education practice, what then should be its purpose? Similar to the notion that outdoor education should be in, about, and for the outdoors (Mortlock, 1994), this research argues that place-responsive outdoor education should be *for place*. Previous chapters have developed the argument that the people-place relationship is reciprocal and interdependent. The focus of this chapter is how the participants develop constructive relations to place as part of their outdoor education practice.

This chapter discusses how participants integrate the concepts of kaitiakitanga and personal and social investment into their outdoor education practice. The following section defines the concept of kaitiakitanga, and how participants interpret and apply kaitiakitanga in relation to their educational approach. Section 7.3 looks at how the participants define the role of adventurous activities in an outdoor education practice that has place as its central focus.

7.2 Kaitiakitanga

Kaitiakitanga is a Māori concept which means guardianship or more broadly resource management. A kaitiaki is a guardian and custodian of a resource or place. Kaitiakitanga can be defined as the custodial responsibility of an iwi or hāpu for a specific resource, which flows from their status as tangata whenua. The term kaitiakitanga has developed fairly recently, and non-Māori often have too narrow an understanding of the concept, especially when it's used to describe conservation efforts (Kawharu, 2000). Marsden and Henare (1992) include the following concepts as essential features of Kaitiakitanga. It has a spiritual, environmental and human dimension, and kaitiakitanga includes authority over land (mana whenua), sacredness (tapu), resource restrictions (rahui), and life force (mauri). Kaitiakitanga also includes social protocols associated with hospitality, reciprocity and social obligation (manaaki, tuku and utu). Combined, these beliefs play an important role in maintaining the

social and environmental wellbeing of a community, and “human, material and non-material elements are all to be kept in balance” (Kawharu, 2000, p. 349).

Te Hapū o Ngāti Wheke, a hapū of Ngāi Tahu based at Rapaki Bay, holds mana whenua over the Port Hills and is a partner with other land management agencies such as the Banks Peninsula District Council, Selwyn District Council, Department of Conservation, the Summit Road Society, Mount Vernon Trust, and the Christchurch City Council, in looking after the wellbeing the Port Hills.

However, rather than focus on the official agencies’ role in looking after the Port Hills, this chapter looks at the concept of kaitiakitanga from the perspective of the participants, their students, and how local outdoor education projects can foster a deeper sense of guardianship.

7.2.1 Kaitiakitanga in Outdoor Education Practice

Feelings of kaitiakitanga about the Port Hills were expressed by several of the participants, both in terms of their personal connection to place, as well as a concept used in their outdoor education practice. Rebecca, who lived in the Port Hills, and was in many ways a kaitiaki of the Port Hills in her job as biodiversity ranger, talks about her sense of loss and grief during the Port Hills fires of February 2017.

And then when something like that happens it really affects you when you already have the feelings of guardianship to that place. It’s property that means something to you that’s being damaged. The feeling that the efforts that I’d been through for conservation in the area were being destroyed I guess.

Rebecca’s feelings of being a kaitiaki of the Port Hills are the result of more than just having lived in the Port Hills, or spending a lot of time there. It was the time spent working on conservation and restoration projects that defined the strength of her connection and subsequent feelings of loss.

The concept of kaitiakitanga is deeply woven into the outdoor education practice of other participants, in particular that of Jason. Throughout the later part of his working life, Jason has sought to develop a much stronger connection to his Māori ancestry, his culture, and in particular his language. Through his use of whakaaro Māori Jason supports his clients to connect to a Māori worldview in general and to their tīpuna, in particular. Understanding what it means to be a kaitiaki is an integral part of this.

That's actually why the conversation we were having in the beginning about kaitiakitanga is what you think and feel and value here [in the Port Hills] still sits with you down there [in their lives in Christchurch], as if our tīpuna are still sitting with you.

Jason explains that kaitiakitanga is different from the concept of leadership, as being a kaitiaki means being part of a community, both in terms of the people around you now, as well as in terms of being part of the ongoing community that includes your tīpuna and future generations.

And so the trick is, how do you have a conversation with our young people, to get them to understand that they are the conduit of change. I think that sits around the idea that they are kaitiaki, and that our tīpuna were great believers in making a place better than they had found it and that there was no such thing as ownership, that it always was about making it better for their whanau to come, for future generations. And I think that is the conversation that we should have with our young people.

A Māori sense of place is founded on the concepts of whakapapa and tūrangawāeae (Hay, 1990). Combined, these concepts enable Māori to understand that they are in fact interconnected to a much wider socio-ecological system. Jason uses the story of Papatūānuku and Ranginui, and the creation of earth and of life itself, to explain the links between his clients, their tīpuna, and their sense of place.

As we are walking towards Boulder Bay, Alex talks about how he would love to see more coastal forest on Awaroa/ Godley Head:

I lament the fact that there isn't more of a coastal forest because I know what effect that would have on the water quality, and the strengthening of the hillside.

When asked how he has developed such an emotional feeling about losing something which he has not seen himself Alex also addresses the idea of kaitiakitanga. He argues that it's the knowledge of history, gained over a long period, which makes such connections possible.

That comes with time, it comes with learning and knowing that this place was once different. And having seen pockets in other areas of what it would have looked like. And then once you are exposed to that knowledge you can't not know. I can't not overlay that in my mind and see this place for what it might have looked like when there was a forest here.

Developing a sense of kaitiakitanga, as discussed above, is the result of a combination of knowledge of place, time spent in place, and for Māori, developing relationships with tīpuna and a deeper understanding of whakapapa. However, most importantly it requires a personal and social investment in a place, which is the theme discussed in the next section.

7.2.2 Investing in Place

The concept of investment is most often associated with monetary injections into enterprises for profit. In its broader sense however, to invest means to advance, devote, and empower (Oxford Dictionary, 2018). Investing time, effort, and other resources into the wellbeing of place was described by many of the participants as a key component in an outdoor education practice that is responsive to place. Several participants shared stories about projects that their outdoor programme is involved in, and the benefits to both their students and the location itself of such endeavours.

Mary decided to show me the Drayton Reserve for our walking interview. This reserve is an ecological restoration project in the heart of the suburb Mt Pleasant, which was started in 2012 as a volunteer project with support by the Christchurch City Council. Mary explains her outdoor education programme's involvement in the project:

One of the cool things the last few years is I've become involved in the Drayton Reserve's regeneration project. We've been taking the students in there and they have been learning about the different types of flora and fauna that are endemic to the Port Hills, which has been really interesting. And they've been involved in planting and weeding, and building lizard habits, catching pests, and putting stoat traps out. Certainly it's been a platform, not just to feel that sense of responsibility, but to take action about it as well.

Restoration and conservation projects that involve planting, weeding, and pest control are increasingly used by schools to engage students in outdoor activities that develop specific knowledge and skills. For place-responsive outdoor educators, it's the reciprocal benefits to people and place that stand out as key benefits of such projects. Mary continues:

Well, certainly with my discussion with [the reserve caretaker] about why we are here, for him it's very much about getting that younger generation invested in this area, and having them understand the impact of humans on their natural environment, or how symbiotic that relationship really is. And also the benefits of just being in nature.

From our viewpoint in Victoria Park, Pete points out a range of native planting areas, including areas planted recently, and those established decades ago. He goes on to argue that investment is about allowing staff and students to be more aware, and appreciative, of the places they go to as part of outdoor education programmes.

I think it's about investment. When you invest time and effort into a place, you invest a bit of yourself. And I think one of our problems is that places become very utilitarian in outdoor education. You go there to do your thing and then you leave. But if you go to a

place and you do something that is going to have a lasting effect, you've made a connection with that place whether you like it or not. I think the bigger picture idea is that if kids plant a tree, it's there for them to go back to and see in later years. They can see that tree as it grows, they can see their input on the place, and I think that's really quite meaningful.

In the quotation above Pete highlights the importance of both the temporal and local aspects of investing in place. In other words, the ability of students to return to these locations and see the results of the effort they put in. The Port Hills allow outdoor educators to programme such activities, because there are case studies and examples of old growth forest, and the results of many decades of planting activity.

Investing time and effort in local places such as the Port Hills is related to the concept of place making. Making, or constructing, place is an important component of a person's sense of place (Beames et al, 2012; Sobel, 2004). Through interacting with place people shape their surroundings in ways that are both intentional and unintentional, in a mutually constructive relationship with the location itself (Lindsay et al, 2012). In their outdoor education practice the participants integrate intentional place-constructive methods, which aim to contribute to their students' ongoing developing sense of place that includes the past, present, and future wellbeing of both students and place.

In addition to the local and temporal aspects of investing in place discussed above, Pete also argues that his students can learn a great deal by investing in places that they actively use for other parts of their outdoor education programme. He reflects on the notion that mountain bike organisations will be increasingly responsible for track building and maintenance as the activity becomes more popular in the Port Hills.

I think there's enough momentum in the mountain bike community to do that. And I'd like to get the kids involved in that. We use these tracks, sometimes when we probably shouldn't, we put wear and tear on it, so I really would like kids to be involved in maintaining the tracks we are using.

Community

In addition to the benefits for both the students and their local natural areas, investing in place through outdoor education programmes also allows for the development of relationships between students and their local communities. Several participants argue that this acts as a catalyst for the development of a greater sense of place for members of the

community as well. Mary describes the effect the Drayton Reserve project has had on the wider school community.

It was a bit of an audacious plan originally, to bring 70 six year olds through here. We told the parents that we needed a really high ratio, so we took lots of parents with us too, which was great, and a lot of them said 'oh we didn't know this was here' and more families have been going to the working bees now, on Saturdays and Sundays. So yeah to have them come back with their parents, and have their family and friends come along to help and have them exposed as well is just wonderful.

After expressing her sincere grief for the natural areas burnt by the Port Hills fires, and the destruction of decades of volunteer work, Rebecca takes stock and reflects:

And yeah but now it's not all bad. There's been regeneration efforts that got the wider public involved, it's a case study, something to talk about in terms of regeneration, the natural cycle for the environment, and fire ecology I guess.

Taylor (2014) argues that one barrier for local place-responsive outdoor education is the time and effort involved in developing and fostering the relationships required to make projects like the Drayton Reserve a success. Indeed, this is a time consuming and lengthy process, inherent in any development of sense of place. In fact, one of Wattchow and Brown's (2011) key signposts of a place-responsive approach to outdoor education is the need for teachers to apprentice themselves to a place. Investing the time and effort required to establish local communities of practice is a part of this apprenticeship.

7.3 The Role of Activities in Place

As discussed in Chapter 2, the use of adventurous activities for the purpose of personal and social development of an individual or small group, has been a dominant approach to outdoor education since the 1970s (Lynch, 2006). In New Zealand in particular, outdoor education practices have also shown a strong emphasis on adventurous activities (Andkjær, 2012). However, as the view of what the purpose, outcomes, and pedagogical approaches in outdoor education *should* be is increasingly being challenged (for example see Brown, 2008, 2010; Lugg, 2007; Wattchow & Brown, 2011), there is now considerable confusion about what, if any, role is left for the adventurous activities, such as white water kayaking, rock climbing, mountaineering, and tramping themselves. How do outdoor educators integrate these traditional approaches into a practice centred on place? The next section discusses the participants' ideas and practices in relation to that question.

7.3.1 From Adventure Pursuits to Confident Exploration of Place

A key finding presented in Chapter 5 is that the participants' sense of place developed alongside their confidence in being in the outdoors. There are a range of outdoor skills required for such levels of confidence to develop. Susan explains that one of her aims is to teach her students those basic outdoor skills.

I guess we build their skills to come back, or bring their family, and we talk with them about that. I talk with them about bringing their parents out, coming back and thinking what they could do. So for example orienteering is a great family event. So we talk about how they can come back and where to access the resources from. Again it's that confidence to come back by yourself. I see that a lot from the public training courses too. I think a part of our job is to reinforce to people that 'yes you can do this without me. And you can bring other people and do this as well because now you have the skills'.

Susan uses orienteering as an example of an outdoor activity that requires a basic level of skill development, but does not focus on the thrills of risky adventure. Orienteering also builds the skills required for students' exploration of place. This focus on exploration of place, by travelling in and between places, links to the ideas of Potter and Henderson (2004), who argue that outdoor educators need find approaches to practice that connect to people's mobile lifestyles. Rebecca comments that exploration of place through activity allows her students to develop connections to the environments that they are learning about.

So whether you are out walking or kayaking or biking, you are in the environments that we are learning about. I think that builds a connection to the place which in turn tends to drive an interest or a care for that place. And we use that a lot here, we are always moving around, walking, snorkelling. We're not just talking about it in class.

Rebecca's comment above connects the concept of using skilled and confident exploration of place to the role of embodied knowledge of place, first discussed in Chapter 5.

7.3.2 Activity and the Body in Place

Dave voices a strong critique of discourses in contemporary outdoor education that reject outdoor activity as one of its central tenets.

There's a physicality there that especially in some environmental discourses gets marginalised. I often see 'the outdoors is being used as a gymnasium'. A very dismissive term for someone who engages physically with place. And by traveling and exploring I think we expand the idea of bodies in place and being place-responsive.

The importance of outdoor education using outdoor activities to allow students to develop embodied ways of knowing and exploring place has been discussed by several authors (for example Mullins, 2009; Payne & Wattchow, 2008; Wattchow & Brown, 2011). Payne and Wattchow (2008, as cited by Straker, 2014) expand awareness of embodiment by discussing the value of a slow pedagogy: slowing down, attending to sensory engagement, and the specifics of place. During our walk Dave draws a link between embodied ways of knowing and developing an expanding sense of place.

To me the interconnectedness of ecosystems means that my body breaths in the oxygen that's made in trees and my body breaths out the gas that the tree uses. So, where does self stop? And where does the other begin. And I think that's plastic and elastic in those scales. And I think that by having more experiences in places, embodied experiences, we are able to expand those boundaries.

Moving in, and actively experiencing, place is central in Tuan's writing on how humans develop a love of places and 'fields of care' (1977). In the following quotation Pete argues that outdoor activities remain important in a place-responsive outdoor education practice, and then reminds educators that although activity is an important tool in building strong relationships between students and particular places, it should not be the central focus of the programme.

It's the doing in the place that connects us. With bigger concepts as well, the whole idea of looking after places, whether it's planting or just picking up rubbish. Being aware of what makes or destroys a place while still enjoying the activities. I think you won't fully appreciate a place until you've experience it, and experienced it positively.

The bigger question then is how it [outdoor activities] ties into the rest of their learning. I think if it's just about an activity, that's not good enough. It isn't hard to think of an activity to do, it's linking it in to bigger outcomes that becomes the real trick. Making it relevant. What are the kids getting out of it? How connected is that trip to the rest of the school?

The participants, through a practice of using activities judiciously, in building skills for embodied exploration of, and connection to, place, and in support of the wider educational outcomes relating to place, are developing a clear answer to the challenging call by place-responsive outdoor education. What follows next is a case study of Victoria Park, which illustrates how participants integrate the concept of kaitiakitanga in their practice.

7.4 Case Study: Otutokai/ Victoria Park

The participants talked significantly more about Victoria Park than any other area in the Port Hills. This includes stories about their personal connections to the Port Hills as well as their practice. As Figure 41 shows, each participant spoke about Victoria Park at least three times. In addition, three participants (Dave, Jason, and Pete) chose Victoria Park as their interview location, and Susan's walking interview bordered the area. The photos presented in this case study were all taken by the participants during the walking interviews.

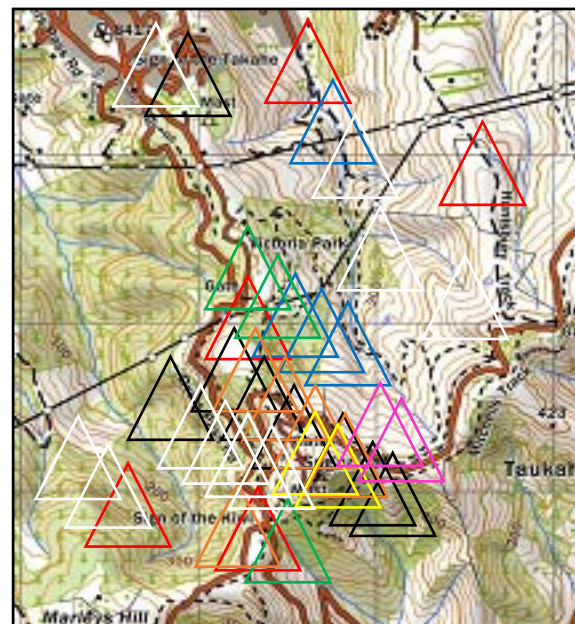


Figure 41: Map with comments of Victoria Park, adapted from Freshmap, Heijnen, 2017

Victoria Park plays a central role in a wide range of outdoor education practices. The themes that are illustrative of this area are kaitiakitanga, investing in place, and a new perspective on the role of adventure activities in outdoor education.



Figure 42: Hidden Valley from Victoria Park, Pete, 2017

Native ecological restoration has occurred in Victoria Park for at least 20 years. Figures 42 and 43 show some of the earliest planting sites in the Port Hills, in the upper reaches of the Bowenvale catchment. The goal of these plantings is to create corridors for native birds and other fauna to traverse the Port Hills and connect Christchurch to Banks Peninsula (CCC, 2004). The foreground in this photo shows more recently established areas. Pete uses this in his outdoor education practice.

There's a whole another story there, when you look at those plantings and you can say to the kids 'those weren't there 15 years ago, that was just farm land.' That's a deliberate attempt to try to recreate some of the bush that was here before Europeans got here.' I think it's a rich place, there's tons you can do here.

Pete goes on to argue that he doesn't just get his students to look at the various planting sites and the conservation values that they represent. It also provides inspiration to include outdoor activities in his practice that involve investing in place.

Kids can come here and can see that doing something can make a difference, planting some trees can change the way the environment looks and works. You can compare how it looks when you don't put in the effort, and this is what it looks like when you do, and you can see on the other side of the valley what kind of result it can have really clearly.

Harry Ell is a notable figure in the history of the Port Hills. As discussed in Chapter 3.1, Ell was pivotal in both preserving remnant native forest in the Port Hills, as well as introducing the idea that it should be an area open to the public for recreation. Several participants use the Harry Ell Walkway in Victoria Park to integrate Ell's history and vision into their outdoor programme. Rebecca talks about she uses this Port Hills' history to get her students to think about, and critique, contemporary ideas and current developments in this area.

We use the Harry Ell Walkway up to sugarloaf carpark in Victoria Park to look at values and the idea of preservation and conservation, recreation and the values of the likes of Harry Ell and his desire to provide recreation opportunities for the community as well as preserve our local wildlife or wild areas. Yes, so looking at his values and then looking at the different things the Port Hills has been used for as well, so on the way we spend time discussing the Adventure Park and the recent fires which generates all sorts of conversations about those things.



Figure 43: Hidden Valley from Victoria Park, Pete, 2017

Victoria Park is also well known for its wide range of outdoor activities that it supports (for an overview see Chapter 3.2). The two activities most used by the participants in Victoria Park are orienteering and mountain biking. In an outdoor education practice that is responsive to place, the role of adventure activities changes. Pete describes this as follows:

So a day of orienteering here can be about the kids having a map and having to locate something unique about this place that they've discovered, like a type of plant, or an historical plaque. And they hide something that others have to find and then come back

and give those problems to other groups, so you get this sort of dual exploration. One group who finds their place and they give it over to others to discover. That sort of activity is rich, there's so much for kids in that and there's tons of engagement in it.

Embedding a deeper level of discovery and knowledge development into outdoor education activities that maintain student engagement, whilst exploring place in all its facets, is arguably the biggest and most interesting challenge for outdoor educators. Victoria Park offers a host of opportunities for such an approach. As Pete states:

I reflect on how the kids make those connections and how you bed them in really. I guess with that comes that kids can see a place like this and that it has its own identity, its own value, which makes it something to look after.

Victoria Park is one of the most developed parts of the Port Hills, in terms of recreation infrastructure, visitor numbers, and exotic and native planting areas. It forms a significant link between historical and current approaches to both conservation and preservation of ecological systems and recreation opportunities. As such, Victoria Park enables the participants to explore a wide range of socio-ecological themes, as well as integrate the concepts of investing in place, and constructing place, into their outdoor education practice.

7.5 Chapter Summary

This chapter discussed the concept of kaitiakitanga, and how it relates to place-constructive approaches to outdoor education. Place-responsive approaches support the notion that integrating place into outdoor education practice is important in fostering connections between students and place. This chapter concludes that outdoor education has the potential to move beyond being responsive to place, by developing an approach that explicitly recognises the reciprocal nature of the person-place relationship. The participants describe approaches to outdoor education which look not just at how students experience, interpret, and develop connections to the Port Hills, but also at how activities by students are of benefit to the Port Hills themselves. An understanding of kaitiakitanga allows the participants to experience for themselves, as well as introduce to their students, the idea of responsibility and guardianship for a place that results from developing a connection to a place.

The participants use place-constructive approaches in a number of ways. Through joint projects with the local community, schools, and other kaitiaki such as local tangata whenua, councils, and other agencies, the participants build the relationships necessary for a place-

constructive practice. This takes time and effort, and is part of how they apprentice themselves to place. Projects such as the Drayton Reserve ecological restoration project also allow for educators to foster connections between the students, their families, and the school itself.

The role of activities in a place-constructive approach to outdoor education changes from being a central focus, to a method that enables students to confidently explore place in embodied and positive ways. Although this does require some outdoor skill development in order for students to be able to be comfortable and confident in their explorations, educators must take care to use activities that are both appropriate, responsive, and certainly not detrimental or destructive to place. This perspective on outdoor education rejects the circular reasoning prevalent in many approaches to outdoor education which includes driving long distances to locations for the sake of doing a particular activity in order to develop the skills for that activity. It is the central position of place, and the wellbeing of the reciprocal student-place relationship in its broadest sense, which becomes the central focus of place-constructive outdoor education.

Chapter 8: Discussion and Conclusions

8.1 Introduction

The aim of this research was to explore the Port Hills as a place for outdoor education and to understand the relationships between outdoor educators' sense of place of the Port Hills and their teaching practices. The findings presented in the previous three chapters are diverse and cover a broad range of themes relating to this research aim. In order to draw out the connections between these themes this chapter discusses the main findings in relation to the research questions and relevant literature in sections 8.2 and 8.3. In addition, section 8.4 presents a model that proposes a framework for outdoor educators who wish to use a more place-responsive, or indeed place-constructive, approach in their practice.

8.2 Aspects of Sense of Place

Chapter 5 discussed how the participants express a sense of place for the Port Hills and how this connection to place has developed. It concluded that these connections to the Port Hills are deeply seated. In fact, the participants' lives are to a large degree integrated with the Port Hills, and are an integral part of their personal identity. As discussed in Chapter 2, the relationships between people and place are interdependent. Places are dynamic arenas that are both socially constructed and constructive of the social world (Dixon & Durrheim, 2000). People are able to create and sustain a coherent sense of self through their interactions with places of importance (Prohansky et al, 1983). In other words, how the participants experience, interpret, and build their lives around the Port Hills has become a significant part of who they are. The next section discusses the components that make up the participants' sense of place.

8.2.1 Sensing Place

Humans are able to know a place by being in a place, and by experiencing it through their sensing bodies (Casey, 1996). As Pink (2009, p. 30) argues, "We cannot escape from place, since it is simultaneously what we are seeking to understand, and it is where our sensory experiences are produced." The participants clearly express their sense of place of the Port Hills through the use of all their senses: from the rough trail that Dave felt through the soles

of his shoes, and the balance that Susan needed when the track was muddy and slippery, to the way Alex observed the cloud patterns moving across the hills.

For outdoor educators it is important to realise that the full experience of place, through all of their students' senses, is an aspect that they should integrate into their practice. Experiencing and interpreting place is a combination of emotive, cognitive, and embodied work. Tuan (1974; 1979), argues that explorative movement is also important in the development of place. Through ongoing experiences of place, the daily activity of living in, and moving through, specific environments, people develop attachments to these places. Outdoor education is well situated to develop place-responsive practices, when it explicitly recognises the connections between self, movement, and place. Not all outdoor education activities are place-responsive however, as this requires students to be confident, comfortable, and interacting on an ongoing basis with place. Such interactions require carefully scaffolded development of activities, and the use of a slow pedagogical approach (Martin, 2004; Payne and Wattchow, 2009; Straker, 2014). Payne and Wattchow (2009, p. 16) argue:

“Our ‘slow pedagogy of place’ highlights the importance of the body in an education with various environments [...]. A slow pedagogy, or ecopedagogy, allows us to pause or dwell in spaces for more than a fleeting moment and, therefore, encourages us to attach and receive meaning from that place [...] there needs to be a shift in emphasis from focusing primarily on the “learning mind” to re-engaging the active, perceiving, and sensuous corporeality of the body with other bodies (human and more-than-human) in making meaning in, about, and for the various environments and places.”

The implications of a slowed-down, local approach to outdoor education are discussed in section 8.3. What follows next is a discussion of the opportunities relating to wellbeing that result from a place-responsive approach to outdoor education.

8.2.2 Ngahere: The Many Strands of Wellbeing in the Port Hills

The second component of the participants' sense of place focuses on elements of psychological, physical, and social wellbeing. The Port Hills allows the participants to integrate all of these aspects of wellbeing into their lives.

There are a wide range of discourses related to sustainability (e.g. MEA, 2005; Haines-Young & Potschin, 2010; Steffen, 2015), deep ecology (e.g. Naess, 1973; Devall & Sessions, 1985) and human wellbeing (Van Kamp et al, 2003). Although emerging from very different

philosophical and research paradigmatic positions, these discourses all present the same fundamental proposition, which is that the flourishing of human life is fully dependent upon the wellbeing of many other components of earth's ecological system.

The participants' relationships with the Port Hills provide a clear example of a socio-ecologically integrated approach to wellbeing. The following explanation by Jason of how he uses the concept of ngahere (forest) in his practice is instructive:

I would talk about ngahere when we are amongst native forest. Ngahere is actually part of the same kind of concept as herenga tangata. So 'here' is like a rope, a strand, herenga is the strands. Herenga tangata is the strands that connect the people. Ngahere are the many strands. So if you think about it in terms of Te Ao Māori, ngahere is actually when you see a truly healthy native forest it's not just one type of rakau. There's many types of things growing that support each other. When you have something that supports the mana whenua, the mana of the land, then it will be multiple things.

A focus on place allows outdoor educators to weave together the many strands, ngahere, of wellbeing that Jason discusses. Jason was running up the Harry Ell track with his clients when one of his colleagues used that particular whakatauki to express his sense of gratitude for the unity and support that one client provided. Jason's clients are often detached from their place: from their whakapapa, their tīpuna, and their marae. Relph (197) describes placelessness as a lack of authenticity which manifests itself through processes such as mass communication, and mass culture, and is the "undermining of place for both individuals and cultures, and the casual replacement of the diverse and significant places of the world with anonymous spaces and exchangeable environments" (Relph 1976, p. 143). In a Māori worldview placelessness also means that a person is detached from their past and future. Outdoor education, from the perspective of ngahere, can foster the (re)development of connections to place, especially when taking into account that place-responsiveness demands that outdoor educators weave together all strands of wellbeing.

8.3 Aspects of a Place-Responsive Outdoor Education Practice

Chapter 6 focused on the outdoor education practice of the participants and explored the questions: how do outdoor educators incorporate the Port Hills in their teaching practice, and in what ways do they integrate a place-responsive approach to outdoor education in their Port Hills-based practice? The current section discusses the key findings in relation to these questions. The main conclusions from Chapter 6 are that the Port Hills play a prominent role

in the participants' practice, and that they use a wide variety of approaches to maximise their students' learning in, and about, place.

8.3.1 The Local Aspect

Since the 1970s outdoor education practices in Australia and New Zealand have predominantly involved taking students away from their everyday lives, into wilderness settings, for the purpose of adventure activities, and personal and social development outcomes (Lynch, 2006). This approach has drawn increasing criticism from a wide range of scholars such as Payne (2002), Brown (2010), Wattchow and Brown (2011), Boyes (2011), and Hill (2013). As Hill argues "While few would disagree with conserving beautiful landscapes and wilderness places, I would argue that learning to live sustainably is really about the choices and behaviours we exhibit every day in local, home places" (2013, p. 27). Boyes (2011) calls for approaches to outdoor education that encourage students to find and explore their local 'wild' places.

The participants acknowledge the unique ability of the Port Hills, due to their geophysical and aesthetic characteristics, to foster such a local place ethic. Other reasons for 'loving the local' (Hill, 2013) are the benefits associated with the proximity and accessibility that the Port Hills offer, such as time and resource efficiencies, a smaller carbon footprint, and reduced risk of fatigue associated with long journeys by vans (Potter, 2013). Moreover, a local approach allows students to make connections to the places they live in, or close to, and through these developing connections expand their notions of what constitutes their home place. This expanding sense of home has the potential to act as a catalyst for further local exploration, which is supported by knowledge of, and confident movement in, local outdoor places such as the Port Hills. Thus, local approaches to outdoor education can result in synergetic programming that enables student-place relationships to develop beyond the confines of the program itself.

It is important to acknowledge here the limitation of local approaches to outdoor education both with words of caution and of context. Merely visiting local places is not sufficient for enduring and powerful relationships to place to develop. For outdoor education to fulfil its potential in developing student-place relationships, students need to spend enough time in local places, and frequently return to the same places in different circumstances, such as

different times of the year. In addition, as Hill argues: “moving quickly through places, or from one activity to the next, as some outdoor education practices do, may be insufficient to develop connections or intimacy with place” (2013, p. 28). By adopting approaches that include elements of ‘slow pedagogy’ (Payne & Wattchow, 2008) outdoor educators can support students to look, listen, smell, feel, taste, and think- in other words fully experience and make sense of- a place. Increasingly, outdoor education scholars argue for local approaches to outdoor education that go beyond ‘place-based’, towards approaches that are ‘place-responsive’ (e.g. Gruenewald, 2003; Payne 2002; Sobel, 2004; Wattchow, 2005; Wattchow & Brown, 2011), and it is to this aspect of practice that the discussion now turns.

8.3.2 The Critical Socio-Ecological Aspect

“Once in his life a man [sic] ought to give himself up to a particular landscape in his experience, to look at it from as many angles as he can, to wonder about it, to dwell upon it. He ought to imagine that he touches it with his hands at every season and listens to the sounds that are made upon it” (Momaday, 1993, p. 83).

How participants address the ‘angles’ of place that Momaday (1993) talks about in the quotation above, are discussed in Chapter 6. Responsiveness to place constitutes an approach to outdoor education that is multidimensional. It connects experiences of place with knowledge, interpretation and meaning-making, and the development of affective relationships with place. An important aspect of such an approach is the use of critical inquiry of the socio-ecological context of the place itself. The participants use this form of inquiry extensively, through continually asking their students to consider where they are, what has happened in the Port Hills in the past, and what has changed. They also ask whose place it is, and what the historical and contemporary issues of power and social justice in relation to the Port Hills are. Finally, they ask what changes have been detrimental to the Port Hills, why that is so, and what has, or can be, done to address these issues. It is a socio-ecological approach for two reasons. First, because the questions posed by the participants in their practice pertain to all organisms that make up the community of place in the ecological world, including the abiotic elements that underpin it. Second, it recognises the interdependence, from a perspective of wellbeing and equity, between the social and the environmental contexts of place.

8.4 Kaitiakitanga: Towards a Place-Constructive Outdoor Education Practice

David Orr (2004) alerts educators to the dangers inherent in promulgating an unexamined approach in their teaching practice. Chapter 1 outlined a range of socio-ecological issues which, if not addressed, will have a potentially catastrophic effect on human wellbeing. Anthropogenic climate change, mass loss of biodiversity, and fresh water issues- alongside increasing socio-economic inequality- will increasingly challenge and shape New Zealanders' opportunities for wellbeing. These issues, however, are not isolated, nor are they individually solvable by the implantation of specific technologies or efficiencies (Thiele, 2016). They are the result of the systemic failure of our modern globalised culture to sufficiently understand that our societies, and all our economic activities contained within, are fully dependent on the continued functional stability and resilience of earth's ecological systems. We continue to fail to account properly for the deleterious impact of human resource consumption on the underlying ecological systems, which is the basis of life itself (Steffen, 2015). If we accept Orr's position that *all* education should be critically examined, and geared towards developing socio-ecologically literate, and action competent citizens, then we must do the same with outdoor education.

Outdoor education, in its dominant modes of practice, has high levels of ecological impact through extensive use of energy intensive equipment and travel. In addition, discourses within outdoor education that emphasise adventure activities in pristine wilderness areas, can cause students to develop a problematic dichotomy between what is of value and deserves to be looked after (the remote, the wild, the untouched natural world, the pristine outdoors) and what is not (urban and rural areas) (Hill, 2013). This research argues for outdoor education practices that develop students' empathetic sense of connection to local places, as well as build their understanding of the complex interdependencies between places on different scales. This does not mean that traditional outdoor education wholly fails in this agenda, however where it gets it right this might well be coincidental, rather than the result of a well examined and coherent educational practice.

Place-responsive education means that outdoor educators build and foster students' curiosity for, and connection to, particular locations on earth. It also recognises the multiple layers, and contestability, of local histories, ecological changes, and values pertaining land use, that

are associated with any particular place. However, with Orr (2004), this research argues that outdoor education needs to move beyond a place-responsive approach, towards an approach that is also *for* place. The next section discusses the potential of such a place-constructive approach to outdoor education.

8.4.1 Kaitiakitanga: Investing in a Reciprocal Relationship with Place

Kaitiakitanga encompasses the broad responsibility for a place that comes from being a local, and having mana whenua through one's ancestry. Although often too narrowly defined as guardianship, the concept of kaitiakitanga does allow outdoor educators to explore the various dimensions of, and associated responsibilities for, place. Kaitiakitanga encourages outdoor educators to consider the natural and cultural histories of place, the tangata whenua, and being sensitive to the needs and characteristics of the place itself. As such it provides a coherent link between students' responsiveness to place, and their investment in place.

“Thinking, doing, and making exist in a complex symbiotic relationship. [...] We are in fact homo faber, whose identity is defined by the close interplay between thought and making” (Orr, 2004, p. 57).

Orr's concept of homo faber relates to the ontological dimension of place, discussed by Mannion et al (2013). Place and pedagogy are ontologically linked dimensions of a process in which teachers and learners work and are themselves re-worked (Mannion et al, 2013). Such a view of the student-place relationship requires a shift in thinking for many outdoor educators. This research argues that it is not enough to ask critical questions of place, and to allow students to experience place as outsiders, even in ways that are responsive to place. Outdoor educators must encourage students to make, or *construct*, a place, and in the process be remade themselves. This construction of place needs to be sensitive and responsive to place. Indeed, it should be the result of careful observation of, knowledge about, and embodied being in, place. If, as Hutchison (2004) argues, all education is about place, it becomes possible to present a model of outdoor education that enables a critical assessment of how place is integrated in any given outdoor education programme or practice.

8.4.2 The Role of Place in Outdoor Education: A Conceptual Model

The findings presented in the previous three chapters support the idea that the role of place in outdoor education has two distinct dimensions. Figure 44 presents a conceptual model of how place can be integrated into outdoor education practices. This section discusses the aim and parameters of this model, and defines its components.

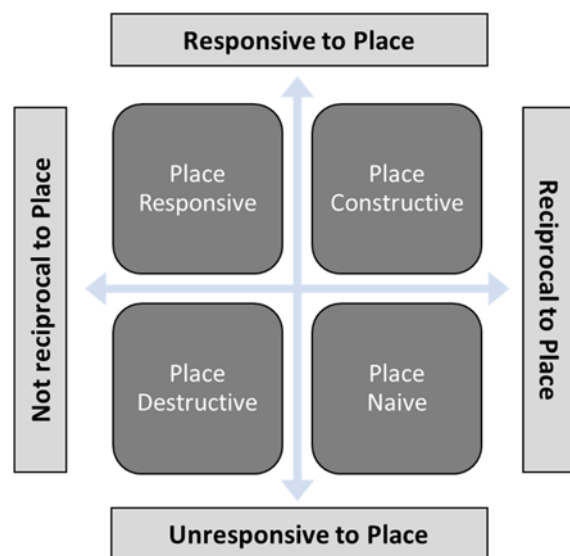


Figure 44: Conceptual Model of Place-Constructive Outdoor Education, Heijnen, 2018

The aim of the model is to theorise what types of engagement with place are possible within outdoor education, and to allow outdoor educators to critically assess their practice in relation to place. The model consists of two axes which represent the attitude towards place that outdoor educators can have, and four boxes which represent the modes of outdoor education that result from choices that are made in relation to place.

The axis labelled **Responsiveness** is the level of place-responsiveness of the programme. In other words, does the programme allow students to fully experience, explore, critically examine, and develop connections to place? Are the outcomes and learning activities appropriate for, and sensitive to, place? Are local places used, and are students able to make explicit connections to home? If the answers to these questions are 'yes', then the programme sits higher on the vertical axis of the model.

The **Reciprocity** axis represents the level to which outdoor educators recognise the interdependent and reciprocal relationship between students and place. Do the outcomes, pedagogical approaches, and learning activities contribute to the wellbeing of this place, as

well as the students? Are students taking an active role in its conservation or restoration? Does the programme allow for ongoing relationships between students and place, which are founded on social justice, respect, intimate knowledge, and investment of time and work in place? If the answers to these questions are 'yes', then the programme sits further on the right on the horizontal axis of the model.

When both axes are taken into account, it becomes apparent that there are a range of ways in which an outdoor education practice can (fail to) integrate place. The following four modes are illustrative of the participants' outdoor education practices, or practices they have observed in their professional capacities. These four modes represent proto-typical approaches to outdoor education, but should not be interpreted as definitive or exclusive modes of practice. What follows next is a description of each mode, which includes links to examples provided by the participants.

Mode 1) Place Destructive

This mode of outdoor education is ignorant of place and it does not recognise the characteristics and opportunities that a particular place allows. It ignores or rides roughshod over layers of history or ecology without taking appropriate notice, and the focus is mostly on the outdoor activity itself. Place-destructive outdoor education is not just ignorant of place, it uses and degrades it without appropriate consideration. Destruction of place can be *direct* (e.g. leaving waste, impacting vulnerable social or ecological communities, or desecrating cultural sites or values) or *indirect* (e.g. driving or flying long distances, uncritical promulgation of cultural stereotypes).

Although none of the participants shared stories of their current practice that could be defined as place-destructive, several gave examples of place-destructive practices either in their organisation, or in the wider sector. Participants also reflected on their past practices as being unresponsive or not reciprocal to place. An example is Carla who used to drive for many hours to a river for white water kayaking, when the ocean, with its wide range of local opportunities was on her doorstep. Many participants argued that old habits of practice, and lack of reflection, were the most common reason for such practices to endure.

Mode 2) Place Naïve

This mode of outdoor education is ignorant of place in much the same way as mode 1, however there are attempts to involve students in positive actions that aim to build their connection to place. Whether such activities are helpful is doubtful as little or no consideration has been given to the needs and contexts of the place itself. From such programmes students gain generic skills, and connections, however as these have not been examined, or adopted to suit the particular needs of place, any constructive outcomes should be considered as fortunate, and unlikely to occur.

Several participants argued for the necessity of integrating socio-environmental actions within an outdoor education programme, and make clear links to all other parts of the programme, including assessment tasks. They also argued that without developing a sense of place, and allowing a place to become home, any socio-environmental actions are unlikely to bear fruit in the long-term.

Mode 3) Place Responsive

This mode of outdoor education practice is highly responsive to place in all aspects. It uses local places where possible, a critical socio-ecological approach is incorporated, and students are engaged in slow, meaningful, and holistic experiences and interpretation of place. However, in this model, students are not engaged in a reciprocal relationship with place. Students may well have developed a significant and responsive relationship to place, it is unclear what the benefits to the place itself are. In fact, if no clear benefits to place are integrated in the education programme, outdoor educators should re-examine their practice in accordance with Orr's (2004) challenging question: *what is education for?*

The participants discussed their personal relationships with the Port Hills, as well as their outdoor education practices, using the place-responsive discourse. From their stories of field trips, programmes, and pedagogical approaches to outdoor education, it is clear that being responsive to place provides a wide range of exciting opportunities for outdoor educators. However, only three of the participants spoke clearly about the interdependent and reciprocal nature of the student-place relationship, and the implications for practice that this has. The other participants did not acknowledge that direct constructive action, by all stakeholders

including their students, in and for place, would further develop their outdoor education practices.

Mode 4) Place Constructive

This approach combines high levels of responsiveness to and reciprocity with place. It maximises the potential of an outdoor education pedagogy of place for both students and place, by recognising opportunities, and actively building positive interdependent and enduring student-place relationships.

The three participants that use a place-constructive approach to outdoor education provided a range of examples of this in the stories of their practice. In fact, two of the participants chose areas where they have been involved, or want to get involved, in place-constructive programmes, as the location for their walking interview. Mary, for example, was able to talk clearly about her outdoor education practice, by showing me around the Drayton Reserve.

The next section provides both a visual overview, as well as further discussion of how place-constructive outdoor education fits within the model, and what its key principles and pedagogical methods are.

8.4.3 Place-Constructive Outdoor Education

To be very clear, the idea of place-constructive outdoor education does not deny the importance of place-responsive approaches. Rather it seeks to further build on these. An outdoor education practice cannot be place-constructive if it is not responsive to place first. The concept of place-constructive outdoor education, however, highlights a critical second dimension, which is the reciprocity of the student-place relationship. This next section discusses the key principles and components of this concept.

Figure 45 shows the key principles and pedagogical methods of a place-constructive approach to outdoor education. Place-constructive outdoor education has as its main principles that all teaching and learning should be in, about, and for place, and that place should be central in all aspects of programme design and delivery. This means that experiential, local, and constructive approaches to education guide the thinking at all levels of programme design, planning, and delivery. This includes integrating place into the programme values and philosophies, learning outcomes, pedagogical approach, session planning, learning activities,

and resource allocation. Fostering the development of a reciprocal student-place relationship requires a fundamental change in thinking for many outdoor education programmes. For example, it is not sufficient to simply add a native planting session at the end of a programme that has ignored the needs of place, and expect it to be place-constructive. The question: “*how does this (programme, module, session) benefit the reciprocal relationship between students and place?*” requires outdoor educators to acknowledge that the programme is not just about the student learning outcomes, it is about the outcomes for place as well.

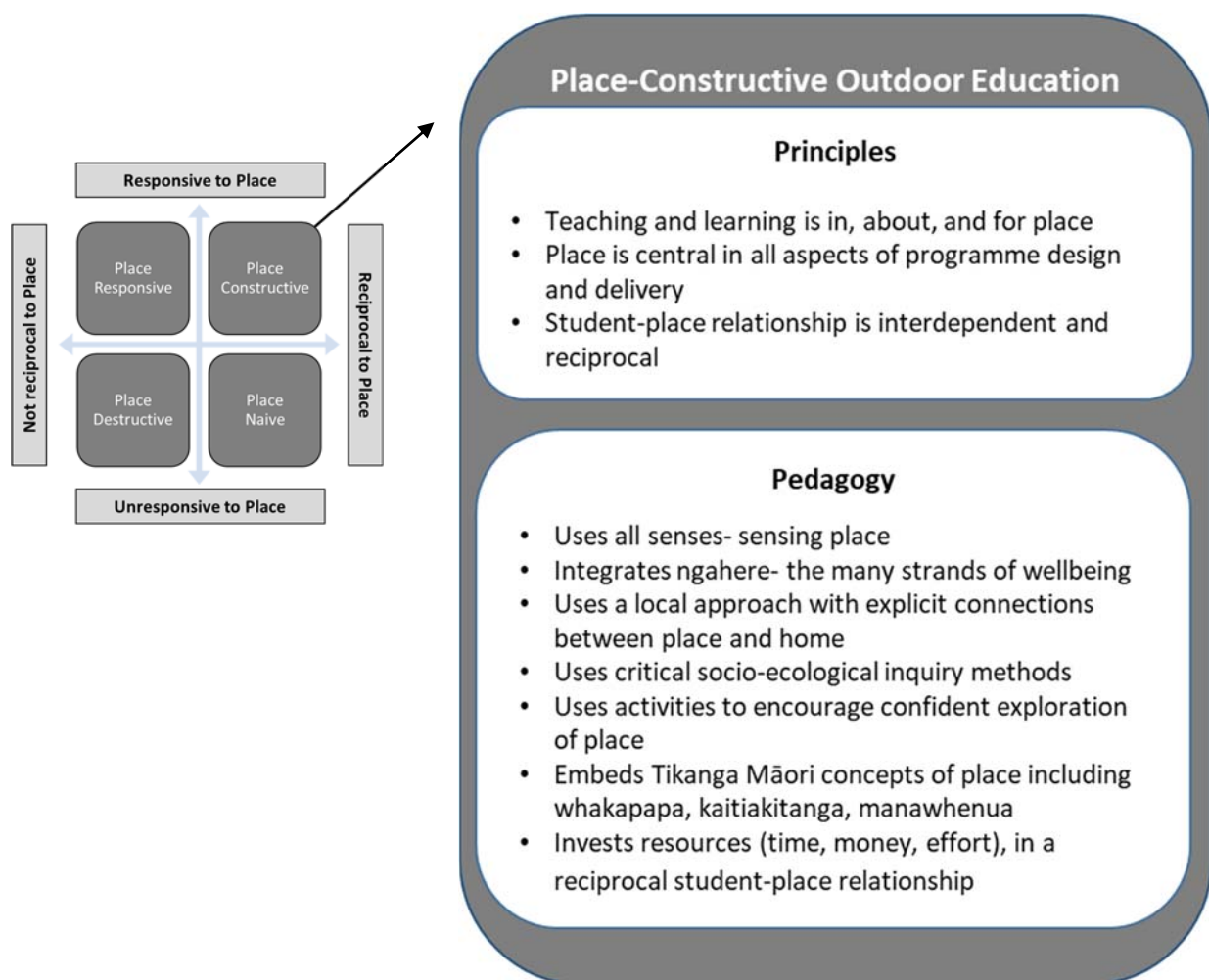


Figure 45: Place-Constructive Outdoor Education- programme principles and pedagogy, Heijnen, 2018

The pedagogical approaches used in this model are designed to support the development of reciprocal student-place relationships, as students are encouraged to spend time in, learn from, about, and ultimately care for, *their* places. The word *their* is italicised to emphasise the importance of students seeing places as their home place, with its associated moral and behavioural implications. A pedagogy of critical socio-ecological inquiry helps to avoid

simplistic or dualistic conceptions of place, and recognises the need for close scrutiny of the socio-ecological histories, conflicts, and other contexts of a place. These understandings are gained best in embodied, and holistic ways, which encourage skilled and confident movement in ways that are appropriate to, and do not negatively impact, a place.

Using Tikanga Māori (Māori socio-ecological practices and traditions) is critical in place-constructive outdoor education in New Zealand, and it is likely that similarly overseas indigenous knowledge frameworks need to be integrated. In this worldview, custodial rights and responsibilities go hand in hand with being tangata whenua, as does the understanding that as humans we are a part of, not apart from, our places, and indeed earth's ecological system itself.

Place-constructive outdoor education practice allows students to invest in their place. This means that they are involved- often together with their whanau, local community, hapū, and council agencies- in contributing to the improved wellbeing of a place. Examples of such activities that the participants use in their practice are native planting and weeding, pest control, track building, monitoring of threatened species, rebuilding recreation, housing, or community infrastructure after adverse events (e.g. floods, fires, and earthquakes), beach clean-ups, and a range of other action projects.

Limitations of the Model

It is important to note that the four modes of outdoor education presented here are not static, nor do they fit as neatly into a two dimensional model as represented here. However, this research has demonstrated that the four modes do illustrate the possible interactions with place. There would be many examples of outdoor education practices that fall somewhere in between these four modes, however they would all be contained somewhere within the model.

Readers may disagree with the way in which the term place-responsive outdoor education is defined and used in this model, and argue that a reciprocal relationship to place is *part of* a responsive approach to place. The purpose of this model is to theorise what outdoor education approaches *can* exist in relation to place, and the research contests that the concept of place-constructiveness is well positioned to bring together discourses of outdoor education and sustainability education.

In bringing together these discourses, this model allows outdoor educators to develop an approach to their practice which is appropriate for their context, and which is coherent and defensible in its philosophy and values, learning outcomes, and pedagogical approach.

8.5 Limitations and Opportunities for Further Research

There are a range of exciting research opportunities that flow from this thesis. First, the model of place-constructive outdoor education presented in this chapter is conceptual and based on the interpretive analysis of a small sample of outdoor educators. Further research is needed to flesh out and describe both the dimensions and modes presented in this model.

Second, further quantitative testing of the aspects of place-constructive outdoor education practice, presented in this thesis, would allow researchers to refine- or reject- these aspects. It was not the aim of this research, nor was it practicable, to collect data from a wide range of outdoor educators, and the findings presented in this thesis are limited in terms of representativeness in their locus and focus. Further research could investigate which modes of outdoor education are more prevalent in the Port Hills.

There are also opportunities for additional qualitative research in this area. Participatory research methods, or field observations of outdoor education practices in place would potentially yield a wealth of knowledge, and the voices of students themselves would be very useful in expanding this developing field.

Third, the conceptual model presented in this thesis is based on research conducted in, and about, the Port Hills. As a single case study it is only applicable to the Port Hills, or more broadly speaking, to New Zealand. Replicating this research in other places would provide interesting new dimensions and develop our understanding of place-constructive education practices, across places, and would also enable us to draw more generic conclusions.

8.6 Concluding Thoughts

This research has sought to explore and connect outdoor educators' sense of place and their outdoor education practices, in relation to the Port Hills in Christchurch. It has found that the research participants have developed strong connections to the Port Hills in a variety of ways, which together allows them to live flourishing lives. The Port Hills, with their unique layers of natural and human histories, their variety of landscapes and land uses, and their breadth of

recreation opportunities, play an important role in all aspects of the participants' lives. These relationships between the participants and the Port Hills are reciprocal, as participants live in, and in tandem with, the Port Hills.

Sensing place relates to the weather, moods, views, and unexpected adventures and encounters that the Port Hills allow the participants to experience, often in highly embodied ways. These experiences also shape the participants' outdoor education practices. During our walks in the Port Hills, participants described a wide range of values, ideas, and examples of outdoor education programmes and activities in the Port Hills. These examples are often strongly associated with a deeply felt sensitivity and awareness of the Port Hills themselves. This place is not a blank canvass for these outdoor educators, nor is it an outdoor gymnasium. Indeed, the conceptualisation of place-constructive outdoor education comes from the ideas and practices of the participants shared in the interviews.

As traditional approaches to outdoor education are increasingly being challenged by academics in New Zealand, and around the world, outdoor educators may well develop uncertainty about their values and practices, and indeed about their role in education itself. This research has shown that outdoor education is potentially well situated to contribute strongly to a changing and increasingly volatile world; a world that requires critical and socio-ecologically literate citizens who understand, and are resilient to, the challenges we face. Place emerges as a valuable concept that enables outdoor educators to integrate discourses of outdoor education and sustainability education. Sitting at the nexus of these two discourses, place-constructive outdoor education allows outdoor educators to develop a practice that is coherent, consistent, and appropriate in terms of its philosophy, outcomes, and pedagogical approach.

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Appendix A: Information and Consent Sheet

Information for prospective interview participants

What are the aims of the study?

To explore the Port Hills as a setting/ place for outdoor education and the relationships between outdoor educators' sense of place of the Port Hills and their teaching practice (philosophy, curriculum, and pedagogy).

What will you need to do?

Your participation will involve **two** face-to-face interviews which will be administered by the lead researcher. The first interview is expected to take approximately 45-60 minutes to complete and you will be asked various questions about experiences of personal time spent in the Port Hills, perspectives on outdoor education in general, and on your practice of outdoor education in the Port Hills in particular. After this initial interview you will be asked to identify a suitable location in the Port Hills for a second interview, which will involve an active/ mobile component, and will take approximately 60 minutes to complete. During this second interview you will be encouraged to take a small number of photographs on your phone or camera and provide brief written comments on a small selection of these, which should take not more than 30 minutes to complete.

What rights do you have as a participant?

You have a number of rights as a participant in this study, and we take these very seriously. These are described below:

- All information you give us will be anonymous and confidential. You will be provided with your own identification number/ pseudonym, which will be used in place of your name throughout any written or oral presentations of this project.
- No one but the lead researcher (Ivor Heijnen) and the research supervisors (Emma Stewart and Stephen Espiner) will have access to your information.
- Participation is completely voluntary. You can choose not to answer any, some, or all questions. You can withdraw from the study at any time before January 1, 2018 by contacting one of us (contact details are listed below).
- Interviews will be conducted at a time and place to suit you and will be digitally recorded if you provide consent to do so. The interviews will be transcribed in full and you will have the opportunity to review your own interview transcript if you wish. Any changes you wish to make to the interview transcripts will need to be communicated to the researcher within two weeks of received the transcripts via email.

What if you have any questions?

If you have any queries or concerns about your participation in the study, please contact me (Ivor Heijnen) or my supervisors. We would be happy to discuss any concerns that you have about your contribution to this study.

Thank you for your help!

Researcher: Ivor Heijnen, Master in Social Science, Lincoln University

Ivor.Heijnen@ara.ac.nz

Ph. +64 (0)273482035

Supervisor: Emma Stewart PhD, Senior Lecturer in Parks & Tourism, Lincoln University

Emma.Stewart@lincoln.ac.nz

Ph. +64 3 423 0500

Supervisor: Stephen Espiner PhD, Senior Lecturer in Parks, Recreation & Tourism, Lincoln University

Stephen.Espiner@lincoln.ac.nz

Ph. +64 3 4230485

Consent form for interview participants

I have read and understood the description of the above-named project. On this basis I agree to participate in the project, and I consent to publication of the results of the project with the understanding that anonymity will be preserved. I understand also that I may withdraw from the project, including withdrawal of any information I have provided, up to the 1 January, 2018.

Additionally,

- ☐ I consent to having an **audio recording** made of my interview
- ☐ I consent to having **notes taken** during the interview

Name: _____

Date: _____

Signed: _____

Appendix B: Interview Schedules

Interview Schedule # 1:

Participant background

Where do you live, how long have you lived there for?

What were the reasons for deciding to live there?

Have you ever lived on/ near the Port Hills (PH)?

If yes, why did you live there and what was it like?

Port Hills general

How long have you been going into/ visiting the PH for any purpose?

How often do you go there?

Can you describe an average visit to the PH for you?

Can you describe the most memorable time you were in the PH?

What is important and/ or special for you with regards to the PH?

What is your favourite place in the PH, and why is this your favourite place?

What role does the PH play in your life?

What meanings do the PH have for you?

Recreation in the Port Hills

How often do you recreate in the PH area?

What kind of activities do you engage in regularly and occasionally?

What is your favourite recreational activity in the PH?

Where in the PH do you prefer to go for recreational activities and why?

Do you visit the PH on personal trips for reasons other than recreation?

Outdoor Education Practice in the Port Hills

When do you go to the PH for work/ outdoor education (OE) purposes?

How often would you visit the PH- regular/ irregular?

Why do you go to the PH for OE?

What are the places/ areas you most visit as part of your OE practice?

What do you do there?

What are OE teaching/ learning outcomes that you aim to achieve in the PH?

What is unique about the PH for your OE practice? What could you only achieve in the PH?

(How) do you integrate various themes and curriculum topics in the Port Hills?

Other

What are, if any, connections between your personal and professional life with regards to the PH?

How have you become knowledgeable about the PH?

What are problems of the PH in relation to your practice?

How have the 2010/11 earthquakes impacted your personal enjoyment, OE practice, etc in relation to the PH?

How have the 2017 fires impacted your personal enjoyment, OE practice, etc in relation to the PH?

Interview Schedule # 2: Walking Interviews

While Walking

Please describe the walk that we are going to do/ doing

Where are we and why have you chosen this route/ track?

How often do you come here?

Do you use this track for OE, why (not)?

Is there a particular aspect of this track and area that appeals to you? Prompts: historic, conservation, flora/ fauna, views, other?

Describe to me what you can see/ feel/ smell/ hear?

What does this track mean to you?

What are the familiar/ unfamiliar things that you are noticing now we are here?

Why did you want to come here?

When do you come here? Do you bring students here? Why (not)?

What does this setting mean to you? What is particular/ stands out about this location?

Outdoor education

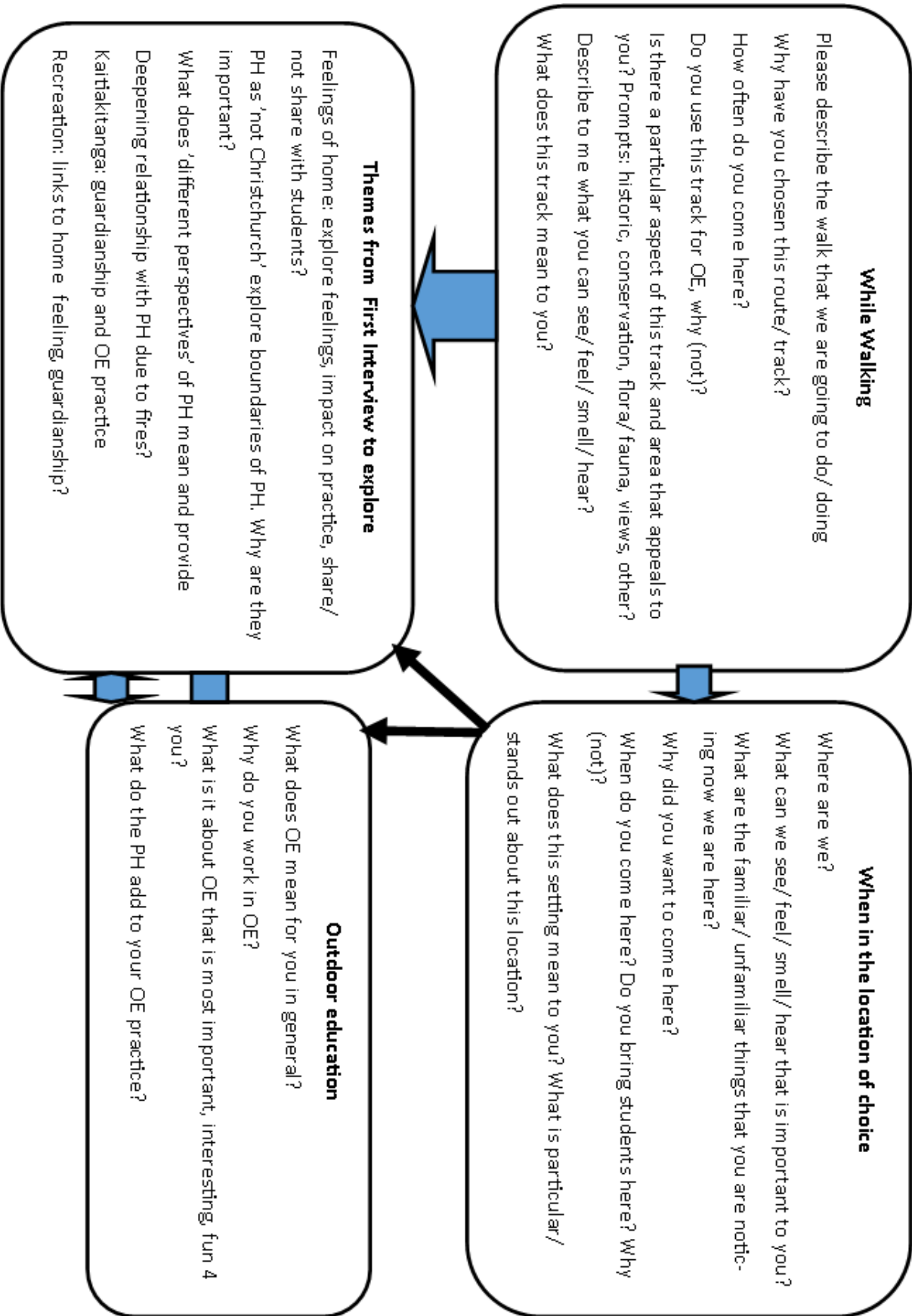
What does OE mean for you in general?

Why do you work in OE?

What is it about OE that is most fun, important, interesting to you?

What do the PH add to your OE practice?

Appendix C: Example of walking interview question sheet



Appendix D: Glossary of names and terms in Te Reo Māori

Māori	English	Māori	English
Aotearoa	Land of the long white cloud- New Zealand	Pā	Fortified village
Awaroa	Long river- Godley Head	Pākehā	European- foreign
Hāpu	Subtribe	Papatūānuku	Earth mother
Huanga	Crop	Rāhui	Restricted access
Iwi	Tribe	Rangatira	Chief- of high rank
Kaitiaki	Guardian	Rākau	Tree
Kaitiakitanga	Guardianship	Ranginui	Sky father, husband to Papatūānuku
Kaumatua	Elderly person of status	Rapaki	Hill- area in central Port Hills
Kete	Basket	Tangata whenua	Indigenous people
Mahinga kai	Food-gathering place	Tapu	Sacred, prohibited
Manaaki	To support/ take care of	Te Ao Māori	Māori world view
Mana whenua	Authority over the land	Te Poho ō Tamatea	The seat of Tamatea- The Port Hills
Marae	Formal meeting area outside main building	Te Rauparaha	Chief of Ngā Puhi in 1840s.
Mauri	Life force	Te Tihi ō Kahukura	The Citadel of Kahukura- Castle Rock

Ngahere	Forest or many strands	Tikanga	Custome, practice
Ngāi Tahu	Largest tribe in South Island	Tīpuna	Anscestors
Ngā Puhi	Large tribe in Northland	Tohunga	Expert
Ngāti Māmoē	Tribe in South Island, mostly replaced by Ngāi Tahu	Tuku	To present
Ngāti Toa	Tribe in the Kapiti/ Wellington area	Tūrangawaewae	Place of residence, where one is allowed to stand
Ohinetahi	Place of one daughter- Governor's Bay	Utu	Repay, compensate
Oketeupoko	Place of the basket of heads	Whakapapa	Geneology, descent
Ōtautahi	Christchurch	Whakaraupō	Lyttelton Harbour
Otutokai	Dyers Pass	Whakaaro	Thought, opinion

1. In spoken Māori: "wh" is pronounced as "f"; the "g" is soft if preceded by an "n", as in "nga", pronounced as "nah"; for vowels, "e" is pronounced as "a", "ae" or "ai" as "i", "au" as "ow", "aa" as "aah"; other vowels which are alongside each other are each pronounced singly.

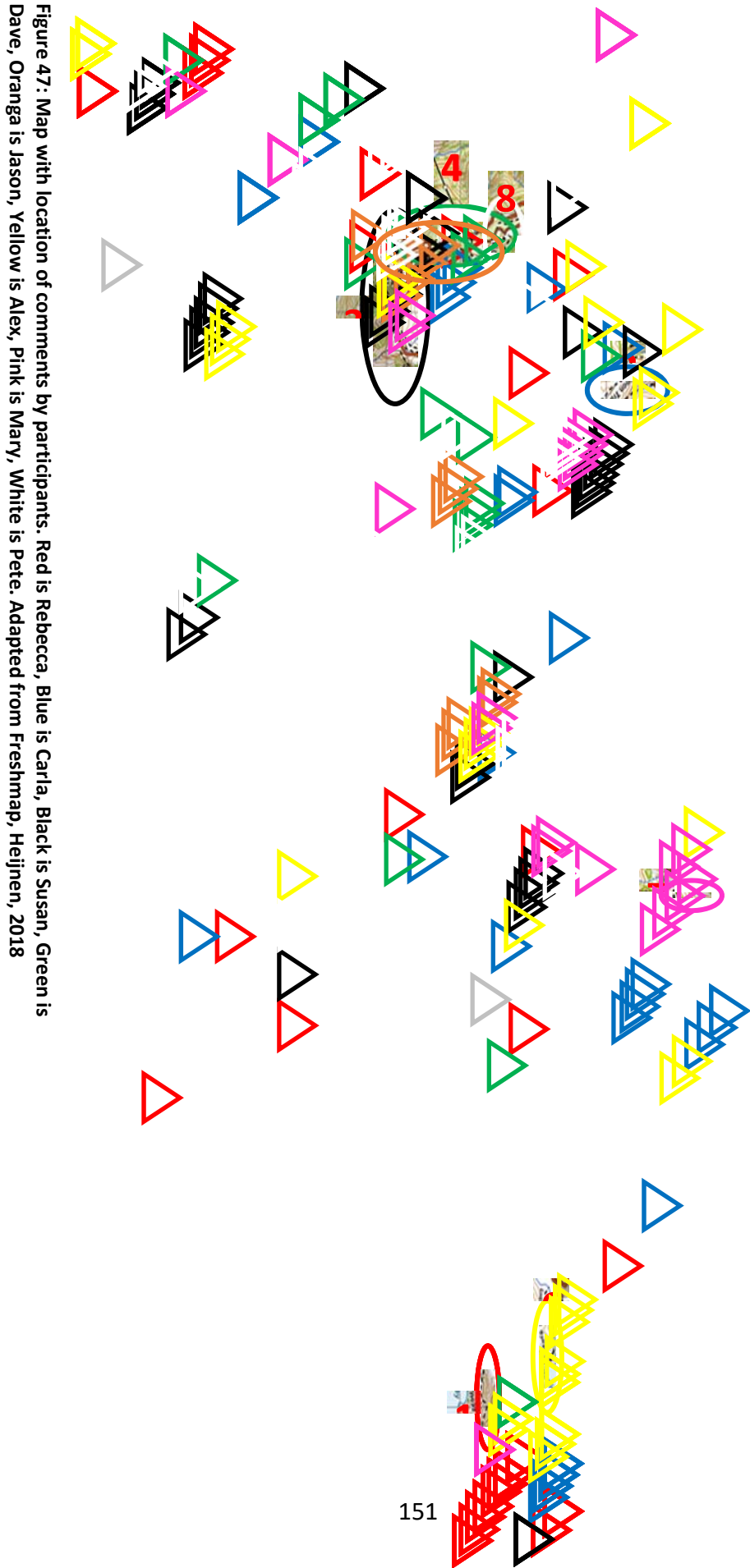
2. Source for English translations: www.Māori dictionary.com

Appendix E: Map with Interview Locations



Figure 46: Map with numbered locations of walking interviews. Adapted from Freshmap, Heijnen, 2018

Appendix F: Port Hills Map with Participant Comments



Appendix G: Map of Case Study Areas

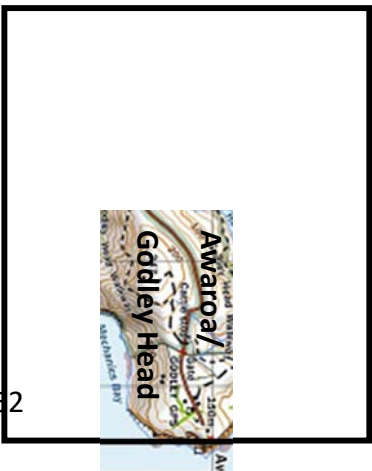


Figure 48: Map with Case Study Areas. Adapted from Freshmap, Heijnen, 2018