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Design and Representation in Landscape Architecture:

Imagining Place

A design-directed research thesis on place, design and representation for national parks in China and in New Zealand

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Design and representation in Landscape Architecture: Imagining Place

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Abstract

This research explores designing through representation of place, focussing on the experiential dimensions of landscape architecture. The context for the research is two national parks, in very different geographic locations, but sharing richness in their environmental, cultural and aesthetic perspectives, including human perceptions, emotions, experiences and memories, in and from nature. National parks are regarded as utopic destinations, especially in the context of contemporary, highly urbanised cultures. The eye-dominant lifestyles of city dwellers contribute to sensory deprivation, and experiences are dominated by the visual sense when they visit places like national parks. Visitors’ journeys produce both collective moments and ephemeral experiences, and the presence of place through design reshapes and manifests human affections and memories, including both the good and the unpleasant, in visible and invisible ways.

The research involved a range of approaches, for landscape architects and landscape architecture students, to understand, know and imagine places, as well as to reveal some phenomenal facets among humans and nature. In particular, model making and ‘photo making’ were identified as ways to investigate the multi-sensory and imaginative dimensions during the design process. Findings included the appreciation of how design in landscape architecture can be regenerated and communicated as well as embodied through a range of representational forms, such as words, maps, paintings, photographs and so on. Beyond these representations, the challenge is how the imaginative and sensory experiences can be manifested in design, as well as in place. Design-directed research via phenomenological lenses
provided the main approach for my investigations. The objective of this research is to investigate design through representation, paying particular attention to how it relates to a sense of place. By processes, sensations, performances, experiences, engagements, encounters and inhabitations, design can display phenomenal engagements beyond the visual. Representation and design of place challenge designers to rethink, check, sense, and examine the relationship between self and place, self with place and self in place. These findings open up opportunities for further research especially in professional landscape architecture practice.

Keywords: sensory experiences, phenomenology, design and representation, sense of place
Preface

In this thesis, the exploration begins not from a prior position but from an orientation of questioning on nature, place, design and representation. With my Chinese cultural background and language as a bridge, I can see that the view in perceiving national parks directs the process of exploring how representation and design can be influential in projecting place. Chinese gardening invokes a sense of romance and poetry, which leads me to engage landscapes during my research with a layer of imagination and literature. Although the word “garden” is very different from the word “national park” literally, they both physically share the land, the light, the sun, the rain and the space and they are both cultural landscapes. How can these phenomenal aspects of light and atmosphere be applied and manifested in the process of landscape architectural experiments? In other words, place is involved in many landscapes and is shaped by landscape phenomenologically. This research is focused on place in the context of national parks.

During my core research, I explored how design engages with experiences, memories and emotional responses through landscapes in two national parks (Meili Snow Mountain in my home country of China, and Aoraki Mount Cook National Park in New Zealand, where I am studying). The two comparative sites resonate with the sense of loving a place in different ways; for the Tibetans, the bounded love as an ethnic unity is to condense human emotions into a location to value what is in Meili Snow Mountain National Park; for New Zealanders, it is the unbounded appreciation of a greater awareness of caring for the environment and the pure nature in Aoraki Mount Cook National Park. Love requires a sense of responsibility for humans at the same time. In consideration of environmental problems, especially in national parks, how can designers address the sense of place with love and care while heightening awareness of the human impacts on nature?

Landscape is dynamic and seen in temporality (Ingold, 1993). Humans perceive landscapes by engaging with their eyes and by
reading stories and meanings. Such communications challenge the quality of the relationship between humans and nature, where nature performs while humans perceive and act. In order to express the intangible emotions about the place, especially about national parks, design and representation become vessels to orchestrate the phenomenal world of place. Representation in this case is not about resolving to be visualisation through drawing or photographing, but providing a platform to gather sensory experiences and mingle with emotional moments in materials, visibly and invisibly. No matter if it is represented through maps, models, drawings, photomontages or photographs, the heart of representing national parks is to understand and reveal what nature generously gives and offers to designers through resources and energy, space and time, life and death, humans and place. How to bring about nature and landscape vocally, visually and virtually in design challenges me to understand and operate design through representation in model making and photo editing.

Model making by hand needs touching and making, which simultaneously opens a door to encountering materials. Ideas on paper through drawing, as an intermediate transition between doing and thinking, have moved forward from abstraction to realization. Photo making by using computer programs like Photoshop allows for engaging aspirations with embodied visions. Symbols are repeatedly used in design to explore the mysteries of place. All these different methods to explore in designing and representing have set up a multi-energetic system about design, representation, theory and phenomena.

The task to devote myself to in this research is to explore how to bring the “nothingness” in the image of nature, landscapes and place to embody humans’ perceptions and sensory experiences as well as spiritual and emotional satisfactions in national parks. This brings design to the shaping of place as a world that is fearfully and wonderfully made by imagination.
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Thank you so much for the love and the grace that Jesus has redeemed on the cross for me and everyone else on earth. And I wish that everyone who reads this may receive the same blessings that I have received or even better from our heavenly Father.

In the Mighty Name of Jesus. Amen.
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An introduction about place, representation and design

Landscape history is a history of representation in both literal and figural ways. It is a history of places that have been richly imagined and represented, but not all of these places are destined to be built. The oldest landscape is Eden, a dreaming garden, represented by words, blooming in the Holy Bible (Genesis 2, 4-14). From this earliest imagined landscape, representation has continued through a long history of art and architecture in a variety of ways including texts, diagrams, paintings, maps, and drawings, and has described many possibilities of designing (Cosgrove, 1999). Representation and design are the vital components of the imagining of place in terms of this research, shaping unique multi-sensory combinations.

“Design”, “representation” and “place” are central to my research, to imagine a phenomenological dimension in a relationship between people and nature. Phenomenology brings associations with sentiments, perceptions and experiences and deepens connections with place. Apart from consolidating nature ecologically and environmentally in a dominant human way, the idea of respect and submission to nature is essential to mediate with phenomenology, ecology and ideology. From the tangible nature of substances – of rocks, water, trees – to the intangible world of perceptions, senses and consciousness, phenomenology can relate to a specific and precise idea in landscapes. At the same time, it can be involved with deconstructed layers of place, and in an embracing of complexity and ambiguity. This dual facet of phenomenology is an opportunity to explore substances and phenomena, the tangible and the intangible, the specific and the ambiguous, in the act of designing through representation.
Diagram 1
The correlation between design, representation and place is signified by phenomenological being, drawing, making and sensing, which encourages designers to constantly interact with the material world through these four acts. The diagram indicates how designers in a human-centred perspective allow inner thoughts to interact with the outward world by design, representation and place.

My research is focused on the imagination of place in landscape architecture design and representation, which is interwoven with other disciplines including philosophy, architecture and geography. In this thesis, the design-directed research process extends the territory of designing with questions and theories. By taking different engagements through being, making, drawing and sensing in a recursive process, the intimate relationship between place and representation deepens (Diagram 1). At the same time, designerly depictions of landscape have been gradually navigating and shaping places. Seeking the interconnections between design, representation and place draws not only on a phenomenological perspective, but also opens all the other theoretical lenses for perceiving this world, for example, artistry, technology and literature.
The biggest challenge
The tendency towards a visually dominant relationship with the world and humans influences perceptions of and engagements with landscapes (Bowring, 2007). The picturesque is an exemplar of how vision has been changing the landscape and dominating other senses in design. It is based on replicating aesthetic images, where pictures become landscapes, gradually leading to the loss of richness and reduction of the sensory. Representation, to designers, in some ways, has been misunderstood and misused because of this visual invasion. People may pursue visual satisfactions from artistic images or pictures regardless of certain meanings and stories behind those representations. This dislocation between what a representation might embody, and the superficial ways in which it is appreciated, brings about confusion and misinterpretations that flow through into the problems surrounding representation in landscape architecture. My research explores within the context of some overarching questions about design and representation: What is the role of representation in the task of design? At what point in the design process should representation be used? What are the productive interrelationships between design and representation?

In this research, many experiments are developed to explore the nature of representation and design, including visual and non-visual. Through experimentation, I seek to uncover some of the phenomenal characteristics of landscape (water, light and air), and to expand the discussion about representation, place and design in the setting of national parks. Researching in design and representation brings an opportunity to explore the cultural, social, and environmental contexts of national parks and the unbuilt landscapes toward design, representation, and theory in landscape architecture.

Drawing on the extensive history of designing and representing landscape, the research explores the relationship between imagined landscape designs and the unbuilt natural environment. Research questions that lie at the heart of
my research include: What is the relationship between representation and landscape design? What roles have ideas of phenomenology and representation played in places, national parks, and landscape architecture? How have phenomenal places and landscapes been represented over time? How effective are “traditional” landscape architecture techniques at representing phenomenological and sensory design? How can traditional tools – such as drawing and model making – as well as modern tools like Photoshop and photography, be used in the representation of phenomenologically rich design responses?

The structure
The thesis is structured into six chapters. It begins with a chapter introducing the research context which is spatially located in two national parks, one in China and one in New Zealand. Research methods through four acts of being, sensing, drawing and making, have been used to explore how phenomenal characters are contributing to landscape design that mitigates human-resulting problems in nature. The second chapter moves further to look at place in a wider context and to navigate a way of recognizing and reconstructing possibilities among people and nature. Chapter Three introduces the overall concept of place in a phenomenological investigation and the relationships laid out between place and representation in design. It starts the investigations on model making to reveal a hidden relationship between substances and the sentient world in human bodies. Chapter Four then focuses on how digital making in Photoshop attaches senses and emotions to present a sense of place through images and Chapter Five employs landscape theory as a means to discuss seven insights on the theme of representation and design about place. Finally Chapter Six displays some implications on design and representation for landscape designers and students in a new and free perspective, and suggests some outlooks toward future built projects in practice.
Chapter 1

RESEARCH CONTEXTS
Introduction

In the early nineteenth century, the United States national park management regulated the function of national parks to entertain humans as well as to maintain such enjoyment for the next generation (McClelland, 1998). Thus enjoyment and preservation are the top concerns in creating national parks. However, my research is focused on studying wilderness from experiential and philosophical aspects, rather than as environmental preservations, particularly on the way the two national parks share “similar” scenic views in visual terms, but different qualities of culture and meanings.

Wilderness is widely understood as untouched nature in conservation estates (Abbott, 2008). Yi-Fu Tuan argued that the preservation and the protection of wilderness subdues its initial meanings so that it loses its wilderness through definition (Tuan, 1974, p. 112). Tuan drew the conclusion that there should be no objective definition of ‘Wilderness’ (Tuan, 1974, p. 112). Andrew Jackson Downing shifted the idea of wilderness from aesthetic satisfaction to dynamic moving experiences through space in wilderness (McClelland, 1998). He addressed that it is the meaning behind the scene that enhances the individual’s enjoyment in physical experiences and spiritual emotions (McClelland, 1998).

Human interactions and involvement with wild nature are sophisticated which makes the concept of “wilderness” more perplexing. “While wilderness may act as a lens for people to perceive nature,” Mick Abbott pointed out in his research that, “the presence of people” may degrade the values of wilderness, which make wilderness bewildering and problematic (Abbott, 2008, p. 15). National parks are the cosmic gardens of the earth without being intentionally shaped and decorated for us. However, today landscape as a productive site is problematic, as humans’ self-satisfaction tends to be at a cost for environmental health (Estrada, 2016; Picon & Bates, 2000). Nature can no longer obliterate the huge amount of man-made artefacts, especially materials that are upgraded in quality and resist time (Picon & Bates, 2000). The framework of the problems in
the environment is easy to outline, but responses from human beings are hard to produce properly (Picon & Bates, 2000).

Marc Treib described Eden as a model of paradise in perfection,

One begins in Paradise. Eden provided the model; the Bible narrated the story. The garden, we are told, spoke of abundance: the flow of several rivers, luxuriant growth, flowers, and animals living in harmony. Despite the Fall, the dream of Eden has persisted, and much of the history of garden-making rehearses the aching desire to recreate an Eden that surpasses our quotidian world in abundance and delight, and that escapes the limitations of the immediate site and the constraints of climate and topography. (Treib, 2016, p. 10)

No matter how perfect the place it is, even it is Eden, there is imperfection when humans appear. By paraphrasing Marc Treib’s descriptions, botanical gardens in each city simulate a lush paradise in concrete space and express a sense of regret at the beautiful landscapes that have been lost and interrupted because of humans (Treib, 2016). Eden and utopia as concepts of ideal worlds of beauty reveal a human heart which desires peace and harmony in a place. In particular, as utopia has been fully explored and referenced in many movements such as the garden city movement, this research is rather intended to focus on future imaginings on how landscape design becomes more sentient to express national parks than developing utopianism or perfect systems dealing with environmental debates about nature.

The initial utopian idea mainly serves as mankind’s needs, infinite resources and energy, granted peace and entertainments. It is important to understand the very essences in utopia and Eden, namely their characteristics that drive landscape architecture into the flow of the imagination. An enclosed or floating state of utopia stands out in comparison to other realistic gardens and cities. It is a place which humans
can never reach and makes the imaginative places isolated, separated and even attractive. National parks also have a precise boundary to separate nature from the humanly occupied world. National parks are an expression of utopia and Eden, formed by sublime scenes in their wildness. To minimize humans’ influences on national parks, more humans’ experiences are needed as well as human awareness to understand nature’s voices, meanings and stories, surpassing visual evaluations or vision perfections.

Humans are chasing a type of “ideal wonderland” which is filled with utopic scenes in national parks. National parks are perceived as public paradises with a package of wild moments for urbanized people. CGI images, rendering scenic views, project the social needs of visual satisfaction in wilderness. The series of films “The Lord of the Rings” tried to bring the wild moments to urbanized citizens and caused a fashion that led people to pursue scenic landscapes in New Zealand.

However, visual promotions of national parks can be deceitful and portray nature as spotless in vision. Wild nature satisfies our expectations through experiences (Seamon, 1993). Andrew Jackson Downing shifted the idea of wilderness from aesthetic satisfactions to compelling experiences in wilderness (McClelland, 1998). He addressed that it is the meaning behind the scene that enhances individuals’ enjoyment in physical experiences and spiritual emotions (McClelland, 1998). This led me to perceive national parks from a haptic perspective, which requires less visual-only exercises and experiences.

Two geographically and culturally different wild places are selected: Aoraki Mount Cook National Park in New Zealand and Meili Snow Mountain National Park in China. The purpose in selecting two sites is to enable an exploration of some phenomenal aspects of design, representation and place which might be related to a specific site, while other aspects might be applicable beyond site specificity. But each is also culturally productive, allowing examination of the cultural dimension of national parks, as well as the position of the researcher looking from one culture into “national park” ideas.
Image 1.1.1
Walking tracks in Aoraki
Mount Cook National Park
1.1 Research Sites

Aoraki Mount Cook National Park, New Zealand

Aoraki Mount Cook National Park has a total area of 70,728 hectares, and high ecological values, but at the same time, it faces challenges such as waste management in a pristine landscape. The customs of local Maori are still significant for Aoraki Mount Cook, but this cultural value is not obvious. Aoraki Mount Cook is the most sacred of ancestors for Ngāi Tahu and provides the tribe with its sense of social identity.

As a sacred mountain, Aoraki is subject to limitations on use. Ngāi Tahu has a certain degree of protection on all the areas in Aoraki (Stephenson, Abbott & Ruru, 2010) and the legislation of managing Aoraki protects the original natural landscapes, while the regulations limit further development in humans’ experience of conserved nature.

In Aoraki, many walks are a relatively short distance but give a sense of endless walking (Image 1.1.1). There is one track stretching to the horizon with one regular walking pace that does not change and with one identical destination for everyone, and only one experience remains in Aoraki Mount Cook National Park. The few resting areas along the journey are too exposed for people to shelter from extreme weather conditions especially in winter (Image 1.1.2 & 3). The average stopping time in these spots is brief and quick. In this experience the landscape during this three-hour walking journey in Aoraki loses the capacity to generate dynamic experiences, due to lack of interactive atmospheres of land, people and facilities.
Walking tracks are important in order to have an experiential journey. “Roads were more than just a necessity leading visitors to scenic points and the comforts of developed areas; they were an integral part of the park experience.” (McClelland, 1998, p.177). Engineers and designers try to minimise the influence and preserve the natural scenic view to accommodate public needs, although constructing road leads to further destruction of nature (McClelland, 1998).

User experiences in Aoraki currently face a number of challenges. It only takes four hours to complete the Hooker Valley Track in Aoraki Mount Cook National Park and the uniform steps and easy gradient turn visitors into a walking machine in pursuit of arriving at the final destination. This issue derives from the actions of curiosity about nature and people’s responsibility for preserving the wilderness. Because of this, tracks can seem intrusive where they are singularly functional, but lose the atmosphere of a journey within the wilderness. The pace of travelling alters visitors’ emotions and feelings along the trip and the rushed feeling of experiencing in a repeated walking movement makes humans inanimate. As Jacky Bowring explained, “Slow landscapes, too, demand of the beholder a certain commitment, and in return provide enduring repositories of emotion. Slowness embeds an awareness of space and time, and melancholic places are both retrospective and prospective.” (Bowring, 2016, p. 55) Quickness skips many details of emotions and memories on the journey.
Modern citizens across cultures, produce an immediate “fashion” that requires everything to be done quickly and instantaneously. For example, many Chinese tourists bring selfie sticks with them wherever they visit to take nice photos of themselves and the scenery by simply clicking the button on the sticks. In the crowded and intensive tourism in China, tourists use selfie sticks to keep up with the pace. They take photos of themselves with selfie sticks instead of asking for help from strangers, for the sake of convenience and to save time on their journeys. This tendency for a fast pace challenges the processes of time to brew, transform and receive sensory experiences and human perceptions in national parks.

How can visitors enhance their sensory experiences in nature phenomenologically? How can sensory experiences be manifested through representation? How can designers respond to the instantaneous experiences, whether to accommodate and give a “quick fix” solution or to reveal and mediate more values of slowness in landscapes? Moreover, how can place empower itself through landscape narratives in ways which draw on human awareness physically and spiritually?

Given these constraints and opportunities, the relationship between humans and nature in the natural landscape at Aoraki Mount Cook National Park, provides a significant context for research.
Meili Snow Mountain National Park, Yunnan, China

Situated in the north-western part of Yunnan Province with an abundant land area which covers 96,000 hectares, Meili Snow Mountain National Park has great richness in ecosystems and cultural diversity (Image 1.1.4). In 2003 it became one of eight areas in the Three Parallel Rivers Natural World Heritage Site established by the World Heritage Convention of the United Nations Educational, Scientific, and Cultural Organisation (UNESCO WHC).

Meili Snow Mountain National Park is regarded as one of the sacred Tibetan mountains and attracts many visitors from around the world. Most of the visitors, as well as the villagers, are Tibetan people who have a vibrant culture, especially in terms

Image 1.1.4
Distribution of vegetations in Meili Snow Mountain National Park.
Photo taken from Tsinghua University.
of religion and ritual activities. Holy lakes, sacred mountains and the temples have been the main stopping points for Buddhists on their pilgrimages, as they move around the holy mountain to express their worship each year (Image 1.1.5). Meili Snow Mountain National Park is a culturally rich landscape with significant environmental features, embedded within a sensitive area of ecology and biodiversity. At the same time, it is facing challenges from increasing tourism, including wastewater treatment and the future development of Yubeng village. This diversity of culture, ecosystems and ethnicity, along with problematic human influences and actions on the environment provides an opportunity to rethink and restore relationships between the human realm and the natural world.

Image 1.1.5
Hordes of Tibetan people on the way to the Sacred Waterfall in Meili Snow Mountain National Park
In 2000, most Yubeng villagers have participated in tourism development and it has become the main income of the village, overtaking agriculture. Since then, many investors within the Yubeng villages and other villages nearby have also joined in tourism development of Yubeng. Numerous guest-houses have been built in Yubeng and the village development required a large amount of timber which caused deforestation in Meili and interrupted the diversity of ecosystems in this region (Image 1.1.6). With the increasing number of tourists each year, the pressure of heavy garbage disposal has become severe (Image 1.1.7). The environmental problems challenge the title of “sacred” and “holy” for which Meili Snow Mountain National Park is known.

As the number of visitors is increasing each year in Meili Snow Mountain, some problems have gradually become significant. There are countless discharges from mules along the dirt road, rusty sewage pipes with black waste water running out on to the open ground and the ubiquitous trash everywhere.
Everything appears in a desperate condition in Yubeng village compared to lush forests and crystal clear sky. The village is located in the heart of Meili Snow Mountain National Park, and is the access point for visiting significant glaciers, snow-capped peaks, virgin forests, and a sacred waterfall. It is located at an elevation of 3,200 metres in Meili Snow Mountain and many people experience altitude sickness as they climb higher above the village (Image 1.1.8). The meaning of “Yubeng” is “accumulation of turquoise rocks”. Given the altitude constraints and harsh climate, Yubeng was a semi-nomadic Tibetan village and the scenery and local life style are austere and idyllic. Barley, wheat, corn and potatoes are grown by the villagers for their consumption, and the main livestock are yaks and yak-cow hybrids which supply meat and dairy products to local Tibetans. However, the constraints of transportation and the high altitude limit the economy of the villagers.

Currently, there is no vehicle access to Yubeng village which is challenging for garbage disposal and delivery of goods. There
are two access points for foot traffic which require all visitors and livestock to travel uphill for 12 km and then downhill for 6 km to get to Yubeng Village (Image 1.1.9). These physical constraints offer a valuable context for exploring through design, especially in comparison to Aoraki Mount Cook National Park which has similar terrain but easier access. This situation also raises concerns about issues relating to the protection of the natural environment versus a desire for economic development. Many local users from various departments within Diqin County have opinions about this issue, highlighting the need for more research on suitable options to address these issues. Alongside these ecological and economic concerns is the need to design for the wellbeing of humans and the natural landscape. It is here that my research focuses on the intangible layer of phenomenal relationships between people, nature and place.
1.2 Methods

Theory

Theory can guide practitioners with a framework of consistent and generalized knowledge, as well as carefully critiquing and reconfiguring assumed thinking into alternatives (Swaffield, 2002). The position of theory in research is not isolated, and not for its own sake. Rather, theory is a way of asking questions and connecting to other disciplines. Theory underpins critical thinking and provides the indicative orientation for research.

In outlining the range of landscape architecture research, M. Elen Deming and Simon Swaffield encourage landscape researchers to have a wider understanding and definition of theory (Deming & Swaffield, 2011, p. 32). They further illustrate Corner’s advocacy of attaching theory to the phenomenological approach to relink this mechanical world with senses of dwelling (Deming & Swaffield, 2011, p. 33). Phenomenology opens
up a paradigm of theoretical imagination so that landscape architectural projects can be theorized in creativity and consistency (Deming & Swaffield, 2011, p. 33).

The name “phenomenology” implies the “science of phenomena”. The meaning of phenomena as derived from Greek means “to show itself” (Heidegger, 1967, p. 28). Martin Heidegger explained that “the expression in phenomena signifies that which shows itself in itself.” (Heidegger, 1967, p. 29) In this way, phenomenology relates to being seen or felt.

Phenomenology is a strand of theory which informs the research approach through the foregrounding of phenomena. It requires people to constantly engage with experiences and perceptions (Murphy, 2014). Murphy (2014, p.3) explained phenomenological embedment as “each person holds a unique, perspectival engagement with the world which necessarily forestalls a ‘complete’ apprehension of the world.” Awareness of the architectural theorist Juhani Pallasmaa is especially valuable in providing direction for bringing phenomenology and the sensory into thinking about design (Pallasmaa, 2000; 1999; 2002).

David Seamon (1993) explained the reciprocity of joining people and the world through building elements, in which the nature of architectural elements provides spontaneous meanings. He introduced an architectural phenomenology started by Ronald Walkey, who introduced architectural qualities including “seasonal activity, sense of front and back, protection versus openness, ascending lightness, centeredness, and so forth” and emphasized that “these qualities resided intuitively in the builder’s imaginations and were automatically called forth when a particular dwelling was built.” (Seamon, 1993, p. 6) These qualities which unite functions and meanings within people and
the environment guide my research design with a good balance on functionality and aesthetics, a sense of place and experiential processes.

Moreover, phenomenology tends to bring a sense of harmony among division and isolation in places and humans intellectually and physically. In contrast to the Western philosophy of binary separations of self and world, body and spirit, substance and nothingness, phenomenology brings these dichotomies together and immerses them to enhance a sense of wholeness (Seamon, 1993). This method has been used throughout my whole research. The protected natural areas of Meili Snow Mountain National Park and Aoraki Mount Cook National Park provided a setting that was suitable for a phenomenological approach, as deeply sensory and spiritual places.

In my research, I am using the interpretive approach to theory, which means understanding the world better without adjusting or controlling it. Corner advocated that it is a phenomenological formation of theory reconciling with theory making to relink practical action to poetry-like dwelling (Deming & Swaffield, 2011). Through the process of ingesting, probing, designing, critiquing, and regenerating, it opens a new network in design and theory for my thesis (Diagram 1.2.1).
Design and research

“Research by design’ is an emerging field with many questions to ask and traditions to establish”. (Berger, Corkery and Moore, 2003, as cited by Abbott, 2008, p. 36) Landscape architecture is both art and science, and unites both knowledge and imagination. How can landscape architects use design to research? How can theory enrich and frame the design process innovatively, theoretically and critically?

Design-directed research encourages a focus on both creativity and knowledge through the laboratory approach (Abbott and Bowring, n.d.). Design-directed research uses the frame of “laboratory experiments” in design that not only serves the need to solve problems, but also to explore a design territory with thoughtfulness and creativity. The design-directed research is a collaborative research in the body of Landscape DesignLab, in the School of Landscape Architecture at Lincoln University (Abbott, 2008; Murphy, 2014; Rae, 2014; Copley, 2014). This design-directed method fosters creativity in research as well as preciseness in design. This position enables this research process, emphasising richness and consideration on how to communicate and disseminate the work to other researchers, practitioners and students.

Researchers tend to aim for answers and easily dismiss what the questions are (Abbott and Bowring, n.d.). Designer and theorist Charles Owen provided an illustration to address the problem in designing that overemphasizes how to make it and neglects what to make it, “where a tradition of dealing with ‘the site’ can result in looking only towards site solutions in the exploration of a question. However, it may not be the site that holds the innovative potential for exploring the question – there may be more imaginative scope in an expansive framing, investigating for example the prospect of a hand-held device as much as a designed place, or an item of footwear as much as a boardwalk.” (Abbott and Bowring, n.d.)

The nature of theory and the role of the critiquing theory have been debated over the last a few decades, and the significance
of practising theory has been important for researchers (Deming & Swaffield, 2011). Critique is a stage which is often overlooked in the design process. For design-directed research, critique can be especially important, as it is a further interfacing of theory with the outcomes. Designing can itself be a form of critique, a way of exploring a situation critically. Deming and Swaffield drew the conclusion that one of the tasks that landscape architecture needs to complete is to intertwine traditions of media and representational methods in a theoretical and critical assessment through all research processes (Deming & Swaffield, 2011).

To avoid “little systematic theoretical understanding of either the process or the outcomes”, I have divided two main streams to categorise the theoretical tools in my research- one is from non-landscape architectural theorists and the other part is from landscape architectural theorists (Deming & Swaffield, 2011, p. 34). Landscape architectural theory is the vessel of this thesis that constantly supports and delivers nutrients, whereas non-landscape architectural theory is the branches and leaves. I have studied and used other theories from the fields of philosophy, phenomenology, geography, psychology, architecture to critique and trim my design representations from previous development. This offers me opportunities to see design outcomes from different angles and gives accountability to my work.

What it offers more is that it opens up a chatroom for different theorists to talk to each other through this process. As McAvin describes it, the efficiency of developing theory and critique is “to promote conversations and dialogue between alternative positions” (Deming & Swaffield, 2011, p. 35). “Each carries different assumptions and implications about the way in which knowledge is created, codified, and validated, and each sees different implications for the way theory is defined and constructed.” (Deming & Swaffield, 2011, p. 35)
Four acts to integrate design with theory
And back to the core topic in this research, the question of how theory can be used in representational orientation is raised in this research process. “The relationship of representation to landscape experience and the creation of systematic knowledge is profoundly complex and central to the future of the theorising in the discipline.” (Deming & Swaffield, 2011, p. 34) In the recognition of these two stages, theory and design research, required in designing, my research focuses more on what place and representation are and how place and representation actively perform in landscape architecture design (Diagram 1.2.2). Through this diagram, I will further introduce four ways of engaging design and theory- Being, sensing, making and drawing.

My research employed phenomenological methods in an iterative process through four acts- being, sensing, making and drawing. Focusing on these four acts explored the question of how design can approach place and representation, within a phenomenological frame. How can place be manifested in representation? And how can landscape architecture close the gap and erase some misunderstandings of the representation in design and communication? How can these four perspectives - being, sensing, making and drawing - in design display the presence, the meaning, and the narrative of place?

Being
According to Owain Jones and Louisa Fairclough (2016), being-in-the-landscape through “wandering, walking and sleeping” opens up “bodily inflections” of emotion. I stayed in the villages of both national parks for a couple of nights, interacting with local people- eating, sleeping, drinking, remembering, recording and learning to situate the body beyond space and time and be more focused on affective reflection. What is more, spending time with materials, for example, is also one of the ways to be on the site. I sat along the walking tracks in both national parks, resting on the rustic rocks, lying on the clay, touching wild alpine plants, smelling the aroma from forests, breathing in the fresh air, enjoying the scenery of distant mountains, hearing the murmuring voice of rivers and photographing with my phone.
There is no particular action to perform being but a mind-set of reinforcing body, mind and soul in the places rather than separation and isolation from place.

As I developed my research questions, the design aspects of being and dwelling in national parks became more significant, and with this the question of representation. I started to investigate how representation can embody the emotional aspects of site experience through dwelling and being.

Sensing

Experiencing the world is, at the same time, perceiving this world. Being and experiencing this world are often associated with meaning-embedment and self-immersion. The phenomenal being is further explored in Chapter 4.1.

Humans perceive the world with all the sensory tissues together, spontaneously. This has been addressed to meet the demands of multi-sensory experiences (Pallasmaa, 2000; Tuan, 1974). Phenomenology has a closer relationship with being and multi-sensory engagement in place. Pallasmaa (2012) highlighted, in Merleau-Ponty’s perspective, that the human body is the core of
experiencing the world. In Pallasmaa’s words,

I experience myself in the city, and the city exists through my embodied experience. The city and my body supplement and define each other. I dwell in the city and the city dwells in me. (Pallasmaa, 2012, p. 40)

As such, when a place is suffused with bodily experiences, the sense of dwelling is simultaneously happening in the place. In national parks, multi-sensory engagements can also draw people near to a place within self-immersion and all of the senses.

Making

Materiality and texture is manifested from the tactile sense. Andy Goldsworthy is a sculptor who specializes in creating ephemeral installations and land art with natural elements, such as ice, leaves, wool and stone. In the film “Rivers and Tides”, he exemplifies the potential of a tactile engagement with nature. Goldsworthy’s work offered me the inspiration to explore the tactile making of landscape on site. This is part of knowing a place through ephemeral moments rather than focusing on making landscape. In working directly with the materials and reshaping them on site, Goldsworthy’s work is not only aesthetic, but also about enlivening landscape. This dual engagement led me to have further discussion on model making and materiality, which I return to later in this chapter. Through “making” landscapes along the journey, I discovered a deeper intimacy with national parks. Weaving tussocks neatly, rearranging the rocks, and picking up rubbish drew me closer into a place.

Making things with local resources created a close bond, helping me to become more than a stranger. I found that now I can get even closer to a place through touching (Image 1.2.1). The works of Andy Goldsworthy, through making, speak of the fragility of nature (Pallasmaa, 2000). Leaves are allocated in permutations and combinations to create a gradient in colour and size. The ephemeral landscapes driven by natural forces become dynamic. Such dialogue of human-driven land arts and nature-driven landscapes gave the voices to Goldsworthy’s works, in a way of being heard and understood by man and nature empathetically.
Drawing

Designers often employ a cyclic process to format and transfigure conception, perception, and representation (in Treib, 2008). Mark Alan Hewitt (2008 in Treib, p. 28) illustrated this mental loop of the idealization process with four stages:

1. mental image or idea;
2. representation of the idea on paper through drawing;
3. comparison between the perception of the drawn image and the mental ‘schema’;
4. the correction or alteration of the drawing to better capture the mental concept.

During the designing process, I found that hand drawing cannot completely express inspirational ideas graphically and visually. Sketches by hand remained at the conceptual level with a lack of representational conviction and communication. This persuaded me to use digital tools to further engage design ideas. At the final stage of experiments, representational photos are made by software, mainly by Photoshop. A sense of place is visually shown because of rendering techniques and texture reformations in software. The alternative approaches to drawing as a way of illustrating and representing design inspirations and imaginations make this research more visually performed.
Conclusion

Two main streams flow through the whole research – phenomena and experiences. How do humans experience nature with perception, emotions and senses? And how does nature nurture experiences with its substances, phenomena and mysteries? Landscape is full of experiences (Ingold, 1993; Potteiger, 1998). Practitioners and theorists conceive of landscape as a multiple medium for addressing dynamic and interactive life in this world including sensory engagements, spatial encounters, energy generators and functions associated with culture, environment and society in meaning and substance (Cosgrove & Daniels, 1988; Ingold, 1993; Potteiger, 1998; Wylie, 2009). To reset the possibilities in designing for national parks allows landscape architecture to become promising in terms of producing generative design solutions in the future of ecology, culture and economy. As such, this led the research into the exploration of how design cooperates in this resonation to address the awareness through the senses to understand relationships between humans and nature.
Chapter 2

PLACE
Introduction

The qualities of place are central to my research. In investigating two national parks I was exploring both their individual qualities, but also broader themes shared by both and suggestive of a wider sense of national parks. A discussion of “place” helps to contextualize my research, particularly how place is both a physical (concrete) thing as well as a psychic, or abstract concept.

The word “place” in English from the Oxford Dictionary is defined as “a particular position, point, or area in space” which indicates one of the essential properties of locality. Geographer Edward Relph understands place as a living space within everyday experiences, and it is distinguished from the words “region” and “area” (in Smith, 2012, p. 382). Relph argued that apart from being a locality, place carries meanings and stories phenomenally (in Smith, 2012). Architectural theorist Christian Norberg-Schulz (1979) described that place is “an integral part of existence” and he emphasised the spatial relationship of “concrete things” and the environment. He further explained that place has the nature of “qualitative totalities”. Since the process of constructing this external environment shows the mental world of human beings, it cannot be measured by the method of science, but by the approach of phenomenology (Tuan, 1974; Norberg-Schulz, 1979 in Smith, 2012).

In this chapter, I review a range of perspectives on the characteristics of place from architecture, geography and philosophy, particularly on the theme of phenomena in the material world. Place is a phenomenon associated with the environment spatially, and landscape is constructed along with a series of components of phenomena including water, light and air (Norberg-Schulz, 1979 in Smith, 2012). The essence of place is that it has a visible reality as well as a psychic realm.
Placeness

Humans often centre themselves to sense the world. Our sensing, or viewing, of this world often comes from self-consciousness. Yi-Fu Tuan used the terms egocentrism and ethnocentrism to illustrate how the “human traits” from individuals to the universe perceive the world in a self-centred perspective (Tuan, 1974, p. 30). He emphasised that humans will “lose human attributes in proportion as they are removed from the centre” (Tuan, 1974, p. 30). The opposite way to perceive this world is from a more-than-human perspective which challenges a human-centred perspective of the environment. Humans cannot control the distribution of nature, for example, there are always mountains, deserts and seas, regardless of our preferences (Tuan, 1974; p. 40). There is equally a right for nature to speak for itself and it is more compelling to see landscape as a combination of the social, cultural and more-than-human (Gibbs, 2009). A human centred view of the world is more than a one-way relationship of taking and giving from the world. Gibbs asserts that we need to adapt ourselves to the context of the progressing and changing environment, especially the abolishing of the old notions of perceiving nature visually and superficially (Gibbs, 2014; p. 233).

When we start caring about nature in a way which is beyond a solely human perspective, we become part of the community. Then the great paradigm shifts are from being centred rather than being in the centre. Great assumptions and adaptions of ecological and environmental concerns may be reborn accordingly (Gibbs, 2014). Humans’ and more-than-humans’ perspectives of perceiving place were useful to my research in introducing insights about place, landscape, and national parks which go beyond the merely physical aspects of place, landscape and national parks. The breath of place, the motion of place and the sense of place are three dynamic characteristics that phenomenally connect landscape and place, place and national parks, national parks and landscape.
2.1 The Breath of Place: Spirit, Emotion and Life

Place has the power of life to breathe in a phenomenal way (Image 2.1.1). The term genius loci, the spirit of place, is a starting point to seek the phenomenal relation of place, physically and spiritually (Norberg-Schulz, 1979). Tuan pointed out that the human brain holds a strong capacity for behaviour which enables the exploration of the relation between oneself and the external world (Tuan, 1974). Genius loci is inspiring for artists, architects, landscape designers and scholars of many disciplines (Smith, 2012). And the concept of the genius loci has become significant in landscape architecture in contemporary design (Smith, 2012). Catherine Howett encourages designers to restore such unique connections between humans and nature to generate “holistic” experiences (in Seamon, 1993; p. 69). Norberg-Schulz quotes Lawrence Durrell to observe: “...You begin to realise the important determinant of any culture is after all the spirit of place.” (in Smith, 2012; p. 370)
Another type of breath displayed in place is the sentiment of place. Topophilia as a sentient register of place presents the passion and the sense of wellbeing in place. Topophilia can be understood as the human love of place embedded in place or environment (Tuan, 1974). Yi-Fu Tuan points out that the respect of the past is critical to embracing the place (Tuan, 1974, p.99). Through melancholy is another way of emotionally responding to the world. Jacky Bowring reveals how places which “have experienced violence, death and damage are redolent in melancholy.” And she encourages designers to embrace all of the pain and darkness instead of “quickly covering it over and replacing it with a benign design” (Bowring, 2016, p. 171). Past, history, memory and ruins are as precious as our emotions, sentiments, experiences and well-being concerning being in the place.
2.2 Place in Motion

Being and sensing involved immersing myself and experiencing the landscape to reveal the multiplicity of understanding and knowing places at a deeper level. Perception, consciousness and contemplation require a heightening of the senses (Pallasmaa, 2012). This section further explores how sensory engagements of materiality in design can be read bodily through the act of making from a phenomenological perspective. The purpose of addressing motion in the landscape is to dynamically immerse the self into different scenarios of place, nature and the “design space”, to investigate the unseen relationship between phenomena and substances through naturally making in place beyond space (over location) and time (toward accumulation).

In the visit to Meili Snow Mountain National Park, there were many landscapes that revealed a consistent practice of making. Millions of cairns are created year by year along the river bed generating a cumulative landscape of making. Image 2.2.1 shows how the ongoing making in the landscape is a constantly, subtly changing dimension. The cairns appear static, while the landscape is in motion through the water, wind and vegetation. Image 2.2.1 is in a state of stillness where millions of rocks stand still and rest upon one another. The significant number of cairns indicates the human activities behind the landscape itself. The phenomenal motion in the landscape is powerful as well as mysterious. Visitors show curiosity in reflecting on the

![Image 2.2.1](image-url)

Stillness of cairns are in the motion of landscape. Photo taken from Meili Snow Mountain National Park.
labour that has gone into making this landscape, and about what motivates people to do this. All we know is that these repeated rocks are part of this place, they are part of the spirit of the place, they speak stories, in harmony with the trees.

However, repeated motion and making does not always produce pleasant landscapes. The influence of phenomenal movements of elements in place is unpredictable. Numerous noodle pots stacked into posts (Image 2.2.2) appear as an invasive landscape, sprawling into nature at Melli Snow Mountain Park. Lacking the consciousness between the self and the environment, humans have lost the intimate relationship with nature, due to ignoring natural laws and only becoming producers altering, consuming and changing nature (Estrada, 2016). Actions carried out by humans such as littering, exploiting and polluting (livestock discharges and gas emissions) are often destructive (Tuan, 1974). Place creation can be detrimental to the environment if the repeated motions are not in the right direction. Small, incremental moves- like cairn building- can create place, emphasizing its phenomenal characteristics of materiality and light. But at the same time, repeated actions like discarding noodle pots can have a negative effect on the creation of place.
In this context, the motion of littering the landscape speeds up the destruction of place. This scene (Image 2.2.3 & 2.2.4) reminds me of Italo Calvino’s city of Leonia where people love using brand new and different things each day and garbage trucks deliver yesterday’s existence to the outside of the city. Each day there is pollution everywhere and people are still busy with making profits and exploring scenic views (Calvino, 1978). Whether this predicament is in reality or in the imagined city of Leonia, it reveals a truth that where there is man, there is waste (Till, 2009). To acknowledge nature, we try hard to think of solutions to environmental problems while there is a lack of realisation that our ideas about ‘problems’ exist only in the human centred world (Tuan, 1974).
2.3 Sense of Place

There is a wide range of definitions of a “sense of place”. John Brinckerhoff Jackson said, “A sense of place is something that we ourselves create in the course of time. It is the result of habit or custom... A sense of place is reinforced by what might be called a sense of recurring events.” (in Cross, 2011) A sense of place expresses a relationship between people and place that creates cultural identities or characteristics through time. In this section, a sense of place is investigated through sensual experiences and phenomenal interactions. The essential components of the world, including trees, air, water and light, make up the body of phenomena, and constitute the physical places (Tuan, 1974, p18; Norberg-Schulz, 1979; Heidegger, 1967, p. 104). Here I look further at how water, light and air are associated with the sense of place.

Water
Water can be regarded as the leading medium to link with the sky, earth, stories and people (Image 2.3.1). Water flows through landscapes, through many meanings and narratives. The engagements and interactions with water express the cultural landscape and social identities and tell stories of the landscape in the national parks. Water is the source of living beings and encoded with meanings in cultural identities (Strang,
From a religious perspective, water is represented as a “holy” entity. For example, Tibetans treat the water, melting from the glacier on the top of mountains, as a sacred object of worship. Thousands of cairns have been made, formed, and have multiplied along the stream from the Sacred Waterfall in Meili Snow Mountain National Park (Image 2.2.1).

In this sense, water has been manipulated as the source of creation in making cairns instead of a creature. While in Aoraki Mount Cook National Park, water is regarded as a pure resource from nature. The physical purity of water from the glacier represents Aoraki mountain within an environmentally sanctified lens. From cultural identities to environmental concerns, water generates energies as well as narratives across time and space in the living world (Strang, 2005).

Although water is in an amorphous state, its functions and meanings are substantial and receptive (Tuan, 1974, p. 23). Yi-Fu Tuan introduces the sacredness of water which represents the symbolism of life and death in different cultures (Tuan, 1974; p. 24). Gaston Bachelard, who makes water into a tranquil being, depicts the other side of water within a feminine character that poetically nurtures man in dreams, reveries and imaginations.
(Bachelard, 1983). From cultural identity to environmental concerns, water as the source of the living world generates energies as well as narratives across time and space (Strang, 2005).

Light
Light separates day and night and creates seasons and years (Genesis 1,14). It has been imposed on shadowing space to create seasonal time (Image 2.3.3). Shadows and lightness bring form to the space and present the dynamic characteristics of the place (image 2.3.3). Light not only creates visual experiences but also forms cultural or emotional atmospheres. It is elemental in material reality and also phenomenal in oneiric atmosphere—hope and security (Bille, 2015). Bachelard furthermore poetically described that light is “the basis for spiritual illumination” (Bachelard, 1964; p. 107). Not only does light have the power to illuminate space visibly and invisibly, but it is also haunting within the ambient atmosphere, where people are, and from which the social identity and the sense of community are formed (Bille, 2015). Heidegger explained the word “illuminated” means “being- in- the- world” which again addresses the neural and emotional connection in light and place (Heidegger, 1967; p. 171). Light envisions the material world through human experiences and embodies imaginations and dreams.
Sound

Sound, one of the acoustic phenomena, makes the place heard. Through the dance of sound floating in the air, it orchestrates a sonic atmosphere. Without sound, visual engagements cannot carry sufficient information about objects (Malnar, 2004; p. 138). Air, sound and ear interact into a phenomenal voice of landscapes. During the trips to the national parks, imaginary visions were formed by closing my eyes and sensing the sounding world: donkeys’ and yaks’ bells ringing from miles away, tussocks constantly rustling, pelting sound against leaves, all these instrumental voices composed a melody that evoked the atmosphere of the national parks (Image 2.3.4). Sound invisibly hovers over the place and emotionally embodies the material world (Jones & Fairclough, 2016). Active emotion registers in the body, and being in the place as a listener boosts tactile richness (Jones & Fairclough, 2016). The cultural use of the sound will characterise the sense of place (Tuan, 1974, p. 81; Malnar, 2004; p. 140). As Douglas Pocock explained, “Sound not only surrounds but can penetrate to the very core of the sentient. This primitive power, which bypasses the cerebral and directly addresses the heart, elicits an emotional response.” (Malnar, 2004; p. 138)

This expansive concept of sense of place brings emotional,
psychical and experiential dimensions to my designing. These more intangible aspects must be in addition to the physical functions, appearances and qualities. All of these things are centred on caring for the spiritual wellbeing of both humans and more-than-humans, including the environment itself. It can be easy to construct design works on sites to simply manifest creativity. However, it is a challenge to design with a sense of place in ways which really engage with these less physical aspects, caring for and celebrating place, and rejuvenating those in that place.

Conclusion
Place is intangibly composed of spirit, motion and senses. To express these invisible and phenomenal layers in place, two design approaches—model making and photo making in the following two chapters—are employed to explore the interrelationships of place, design and representation. Models are more intimate in terms of materials and multi senses, while photos lean more towards technologies and virtual realms. How these two acts integrate with each other is discussed in Chapter three and Chapter four.
Chapter 3

MODELLING
Introduction

Building carefully-designed models to scale often appears in conventional model making in landscape architecture. Model making is one of ways to turn ideas from the mind into reality. While conventional models are focused on precision in scale by using certain kinds of materials, they are not concerned with the sensuous dimensions of the landscape. How can models express the intangible motions in feelings and experiences? How might models embody the acts of creating, making, engaging and shaping this physical world? In my research modelling explores how haptic making can cause space to interact with forms, structures and textures to transfigure design ideas without scale measurements. Haptic making relates both to the modelling practice (being physically involved in shaping and making), and the world which is being shaped and modelled (not simply a mute place which is to scale, but a place of atmosphere).

Ephemeral experiences and haptic senses allow model making to set up a tactile atmosphere to gain a deeper knowledge about substances and materials. The tactility of creating models is both a sensory mode of working as well as the rediscovery of the multi-sensory nature of the world itself.

Pallasmaa noted that:

Our culture of control and speed has favoured the architecture of the eye, with its instantaneous imagery and distant impact, whereas haptic architecture promotes slowness and intimacy, appreciated and comprehended gradually as images of the body and the skin. The architecture of the eye detaches and controls, whereas haptic architecture engages and unites. Tactile sensibility replaces distancing visual imagery by enhanced materiality, nearness and intimacy. (2000, p. 78)
Haptic experiences in representation challenge the traditional way of understanding, which relies on perceiving and engaging with imagery visually. To reassert the critical role of a multisensory approach to representation, model making places the senses and materials into a whole to articulate new expressions in a spatial dimension.

Each of the three models in this chapter illustrate how design ideas perform and represent design motivations and meanings according to shape and structure: from addressing physical shape and pattern to emphasizing the symbolic moment in the presence of place, from presenting the sense of place to creating design manifestation. To explore the potential of making models from an approach of representational design, two questions have been addressed at this stage: First, in what phenomenal ways can making models manifest materials’ qualities and performances through shape, form, texture and structure? And, second, how do these qualities in models evoke a sense of place visually and representatively?
3.1 Model 1: Haptic, Phenomenon, Ambiguity, and Language?

Models can be made to simulate topography, and this more traditional format of model making was also an approach with which to begin in my research. The first model simulated the mountainous topography of both national parks. As plaster has a great capacity to mould, it was used to build up forms and heights. The built element of a semi-enclosed rooftop on an exaggerated scale, performing as a pavilion and a shelter space, was made with rattan and soft paper. These materials are better suited to structural forms and irregular shapes.

The design intent in this model is to redefine nodes for humans in national parks (Image 3.1.1), particularly in Yubeng Village, through a new format and an overarching structure to accommodate increasing numbers of tourists (As Chapter 1 discussed, the current tourism economy has overtaken agriculture).

The overall expression of this model appears in an engineered, concrete and structured way (Image 3.1.2). However, there is a lack of evocative expressions that relate to a sense of place and being. The overarching configuration in this model may meet
Image 3.1.2
Perspective view of Model 1 in wet state: a resting node in an exaggerated scale.

Image 3.1.3
Plan view of Model 1 in wet state: the model shows great structure performance but lacks of captivating the sense of place.
functional needs as well as some aesthetic satisfactions, but it is hard to narrate the atmosphere of place itself (Image 3.1.3). In this respect, a symbolic expression transcends a structural model in terms of representation of place.

Modelling between ambiguity and specification
This model responded to a specific goal and design motive (Image 3.1.4). How can landscape design merge functions with surrounding environments as well as phenomenal performances to create a shelter in a lighter (instead of a heavy) construction? The model, however, had become too specific and too precise to be able to capture the more general sense of place.

The value of ambiguity that Marc Treib addressed is that it “leaves the window open for multiple and varied readings, as one is never quite certain about the precise nature of the conditions or how they should be sensed and constructed” (2016, p. 54). The concept of ambiguity applied to modelling becomes a haptic representation of national parks rather than an outcome that is destined to be built in a particular site. Architectural forms can be alive and dynamic beyond space and time through tactile design. As Pallasmaa (2012) explained, the meaning of buildings is more than just architecture but a solution to fuse ourselves into this material world with spiritual and emotional understanding and engagement.
Image 3.1.5
Fully dried texture of the model skins.

Image 3.1.6
Fully wet texture of the model skins.
Phenomena among weathering conditions

Water was used in this model to attach soft paper to the surface of the rattan. Sprinkled water not only attached soft paper gently to the hard surface of each piece of rattan, but water also blended the light translucency of soft paper into a lucency level (Images 3.1.5, 3.1.6 and 3.1.7). Water enables paper and plaster to have phenomenal states of wetness and dryness, softness and hardness. It perfectly merges plaster, soft paper and rattan into various forms and textures with softness and plasticity. This model embraces the original quality in each of these materials—water, plaster, soft paper and rattan allowing them to behave in one state until a different weathering condition appears. Soft paper becomes more transparent, adhesive and heavy when it meets water. When more water is added, it becomes weak and breaks easily. When the water evaporates, the soft paper becomes less transparent and an opaque white.

This dynamic transformation reveals a language among materials that is not about their separate qualities, but how they communicate with each other through a language of their essential qualities. Materials behave and express themselves through the form they take and the effects of water, including moisture and heat.
Anne Whiston Spirn described how:

Elements of landscape language are like parts of speech, each with separate functions and associations. Flowing, like a verb is a pattern of events expressed in both water and path. Water and path, like nouns, are action’s agents and objects; like adjective or adverbs, their qualities of wetness or breadth extend meaning. (Spirn, 1998, p. 85)

Spirn extended her concept of the language of landscape, explaining that in writing we would not try and put together sentences without verbs. She suggests this would be the same as designing by ‘quoting’ from other designs, and without properly engaging with the site and the design process.

As Spirn further argued,

Many designers compose formal arrangements, quoting the plan of a historic garden, borrowing a phrase here and there from a contemporary work. Many choose material belatedly and consider process rarely, if at all. This is like trying to compose a sentence entirely of nouns and adjectives, without verbs. (Spirn, 1998, p. 86)

The language of materiality is like a verb that enables materials and elements to capture and speak sensuous performances phenomenally. The action of making is a means of tuning into this language of materiality. Just as substance has its language, material and surface speak through time by texture and the degree of corrosion (Pallasmaa, 2000). The surface of the models can appear from solid to transparent depending on the different weather conditions. The texture of the model is understood as a language that tells stories through time, space and environment. Moreover, the language of materiality resonates with phenomena and emotions with substance and the self as we discussed in Chapter 2. Water and light are two phenomenal elements that relate to a sense of fear, love, sacredness and femininity among nature and humans (Bachelard, 1964; Strang, 2006; Tuan, 1974).
3.2 Model 2- Circle, Water and the Presence of Place

The sense of place, as a phenomenal character, is an ambiguous layer to be expressed in landscape design. There is no certain way of designing to manifest the presence of place, but the ambitions of achieving such an intangible concept in design are important. The first model demonstrated the concept of building up ambiguity in structure and dimension, but what stories have been portrayed in models still remains unknown.

Symbolic expressions can run the risk of a hollow process of reproducing clichéd forms or shapes. However, symbols have a great representational potential to speak about human affections and stories about place. As Tuan notes, the circle and the square are powerful symbolic patterns presenting the cosmos and humans individually and universally (Tuan, 1974). The second model is designed to explore how the circle in landscape architectural design can display an holistic moment to form a sense of place (Image 3.2.1).

How can symbolic shapes be used in the model to express genius loci or the meaning of entity? The design intent in the second model is to explore a framework of symbolism to examine how certain shapes and patterns, particularly squares or circles manifest the sense of place. A cluster of clay formed into a circle creates a strong form of an holistic entity of being.
The figure (Image 3.2.2) carefully sets out an abrupt boundary between the model itself and the outward space. The circle gives an elegant and smooth boundary that resonates with the holistic sense of sacredness (Tuan, 1974). The square performs as an aggressive shape with four sharp angles separating the model from the surrounding environment. Since the square can hardly merge the outward space with the model, I decided to trim the edge corners of the plaster boundaries into a circle which appears to be a holistic place with a sense of sacredness (Image 3.2.3). The changing process from square to round in building up the second model reveals a sense of presence in place through forms.

Modelling between patterns and genius loci
In remembering a place, people often look for particular identities and characteristics: an outstanding colour, the configuration of buildings, a significant landmark and so on (Pallasmaa, 2012). These vivid marks in place become more and more significant, whereas place itself remains silent and omitted. How could designers avoid a sense of detachment from place and create a space to present place itself rather than simply its accessories?

The second model is designed to express a simple relationship
between symbolic patterns (circle and square) and the presence of place (meanings and narratives). Symbols as specific shapes have been used in the second model to explore the intangible concept of the meaning and the spirit of place. The challenge is how such representational patterns could be used in modelling to bring out a story that is about the sense of place for humans to discern and understand. How obvious or overt should the symbols and narratives be?

Attaching self into place allows humans’ senses to perceive nature through spirit, mind and soul. The key to encounter the spirit of the place, known as “genius loci”, is by the power of dwelling in place (Norberg-Schulz, 1979). Dwelling is an action to posit self in place, but how dwelling can be useful to design is challenging to designers. In what ways can dwelling be a method of designing for place? James Corner concluded that designing with phenomenological approaches reconnects this sensory-deficient world with the act of dwelling (Deming & Swaffield, 2011). To explore Corner’s observation in a phenomenal perspective further, the following section focuses on the phenomenological attributes of modelling, which explore a sense of place through different states.

Image 3.2.3
Plan view of Model 2 in round and dry state.
Image 3.2.4
Perspective view of Model 2, the centre of the place.

Image 3.2.5
Perspective view of Model 2 in round and dry state.
Dynamic phenomenal materiality


While materials are perceived by aural, visual, and vocal senses, their shape and structure are dynamically changing and transforming in the process and imposed with meanings and marks. The focus of the second model is on addressing the presence of place through shapes and patterns, and demonstrating how water as a phenomenological tool subtly activates a voice of materiality to speak the presence of place.

Using water as the key phenomenal element from the first model, I sprayed water on the second model in order to attach soft paper to the surface of a 50 mm thick and 300 mm wide plaster layer (Image 3.2.1 & 3.2.5). The vein of soft paper

Image 3.2.6
Plan view of Model 2 in round and wet state.
in a regular pattern became visible and invisible depending on wetness and dryness (Image 3.2.6 & 3.2.7). Water spray transformed paper and plaster, absorbing, spreading, being seen, revealing, dissolving, rejoining, bleaching and drying. The dynamic change of texture and transparency is part of the ongoing process through wetness to dry. It is wet and dry, visible and invisible, soft and hard, weak and vigorous. A sense of place, where water makes damp and silent landscapes in this model, has been manifested through such a dynamic process within substances themselves. The sense of place has been represented within space in the fullness of a circle. The integration and the unity of the shapes speaks to one story about the model itself.
3.3 Model 3: From Artefact to Liberty: The beauty of liberated structures/design/free structure

Symbols speak about stories of representation in different ethnic groups, tribes, nations and generations. Even in landscape architecture, it is a usual expectation that landscape designers will adopt a variety of symbols in a two-dimensional plan or map in a project, illustrating specific information on accessibility, density, circulation, infrastructure, usage and so on. However, the purpose of learning and producing shapes and symbols is not only for making site plans or maps to indicate site information, but also to reveal something new and unique in delineated shapes.

The second model investigates how symbol can be used in design in relation to the sense of place. Part of the inspiration to expand the findings from the first and second models is derived from the narrative space created in the mappae mundi. The mappae mundi have shown the unique intimacy associated with symbols in human history, space, time, location and identity of place in one single map. This fact of storytelling in the mappae mundi, as an exemplar, strongly demonstrates how to reveal the untold stories in national parks, that connect pure natural landscapes with cultural mythologies in my two study sites.

The Ebstorf Map (Images 3.3.1 & 3.3.2) represents the earth
in a circle, mingling cosmology, geography, theology, and zoology (Pischke, 2014). This aspect of storytelling is not about emphasising the objective aspects of accurate information and precise measurement, but refocusing on an imagined multilayer world in Jesus Christ (Pischke, 2014). Although the Ebstorf Map performs in a two-dimensional perspective, the narratives it speaks cover four dimensions to emphasize Jesus is the centre of everything, and that he is beyond time and space, the secular world and religions, death and life. The map itself displays a story about how God created Eden, a garden of wilderness, for Adam and Eve at the beginning, and how human history started flowing from this point to the future of the New Jerusalem. The centre of the whole story in the map is about how Jesus laid down his life to save the lives of others and how his crucifixion on a cross performs a significant symbol as well, a symbol which is associated with hope. The unique character that brings the past into the future as well as the future into the past, through symbols, figures and drawings challenges landscape designers to interact over time with the history and the future by using representational skills. This fluidity which it makes of the past and the future is seen in the Ebstorf Map with its unending flow and imagination.
Two-dimensional symbols, three-dimensional designs and one four-dimensional narrative world

As Denis Cosgrove stated, maps can be read and perceived in many valuable ways,

The measure of mapping is not restricted to the mathematical; it may equally be spiritual, political or moral. By the same token, the mapping’s record is not confined to the archival; it includes the remembered, the imagined, the contemplated. The world figured through mapping may thus be material or immaterial, actual or desired, whole or part, in various ways experienced, remembered or projected. (Cosgrove, 1999, p.2).

While modelling is not the same as mapping, in that it is three rather than two dimensional, it does share the symbolic components in representing specific stories. For example, the cross signifies the crucifixion of Jesus, the circle represents fullness and peace in China, the square in ancient China displays the political power in an imperial legacy, and the spiral in New Zealand indicates the Koru fern, which is associated with creation and growth.
Since symbols are viewed in a two-dimensional perspective, the challenge for the third model is how to find a way to shift the two-dimensional symbolism exploration (mainly involving horizontal and vertical dimensions) into a three-dimensional or even four-dimensional design. The main approach is to reveal spatial, experiential and phenomenal design potentials by integrating symbolism to accommodate the needs of space and time and by using a number of the circles as two dimensional facets to create an interactive void bringing light, water, space and time into a four-dimensional model (image 3.3.3).

The purpose of building the third model is to simulate an intertwined sphere with the same materials – soft paper, rattan, water and plaster. Based on the first model and the second model, the question is how to overlay different facets of symbolic shapes in the model to connect outward space and evoke a sense of place phenomenologically?

The third model represents a wilderness that starts from a seed to a world. From the one to the many, a dot stretches into space. What we can learn in this model, from a single point to a complex space, orchestrates design inspirations into design explorations (Images 3.3.4 & 3.3.5).
Liberty in design (humanly constructed versus naturally behaving)

In imitating the uncertainties of what a map produces, the concept of liberty has been borrowed to free materials from design, and will be used in the third model. Cosgrove explained the great potential space of representation in mapping, in terms of understanding and imagination:

[Maps] are also troubling. Their apparent stability and their aesthetics of closure and finality dissolve with but a little reflection into recognition of their partiality and provisionality, their mythical qualities, their appeal to reverie, their ability to record and stimulate anxiety, their silences and their powers of deception. At the same time their spaces of representation can appear liberating, their dimensionality freeing the reader from both the controlling linearity of narrative description and the confining perspective of photographic or painted images. (Cosgrove, 1999, p. 2)

Liberty in the materiality and structure of modelling intensifies territories and spaces of design ideas through its freedom and
Image 3.3.6
Plan view of Model 3 in free structured and dry state.

Image 3.3.7
Plan view of Model 3 in free structured and wet state.
unpredictable performances, which maximizes the qualities of materials in texture, tension, colour and so on (Image 3.3.5).

Further, phenomena are revealed when design gives liberty to materiality. The process of touching materials, helps us to know and feel and remember its texture and general temperature. In the process of making the third model, it was hard to manage the softness of plaster and the tension of the rattan with human forces (Images 3.3.6 & 3.3.7). Liberty with materials also means a degree of yielding to their inherent forces and forms, allowing the materials to express their qualities, rather than imposing form on them. The interweaving vessel blends the lines, surfaces and light into one space (Images 3.3.8 & 3.3.9). The role of soft paper becomes a mediation that creates shadows and enclosed space that separates from hidden light and unseen air. As a result, touching materials builds up the knowledge of the essential attributes in materials, while free structures of materials maximise the characteristics of the model itself.
Conclusion

The method of modelling joins environments, materiality and design inspirations into one to express place. A sense of place is presented through the modes of modelling by form, shape and phenomena, physically and substantially. However, I have presented these models through photos, to capture and visualize their tangible and intangible qualities. Photos allow for comparing the models in terms of representation. Model making is representational, so are photo manipulation tools. Digital photo making, editing and manipulating software, such as Photoshop, Illustrator, Painter and so on, are powerful tools to be used in the design process. Chapter 4 discusses more about how “photo making” as a method links place, design and representation visually, emotionally and phenomenologically.
Introduction

The unique character of national parks, in terms of place, design and representation, is that they hold the spirit of place about nature. Genius loci is intensified in the natural landscapes of national parks, where the spirit of place is both intangible and real. Thorbjorn Andersson suggested that no matter how different are the approaches that we use for representation, the main purpose is to reveal the nature of place itself and the communication among man and man, man and place, place and place (in Treib, 2008, p. 94). It is because of the invisible relationships between humans and nature that the world is rich and multifaceted. This liberates the territory for design and boldness toward functionalism, symbolism and materialism for nature in national parks.

Through exploring the making of models it becomes clear now how the influence of human hands creates haptic experiences. The art of making leads to depicting the sense of place phenomenologically. Such experiential design helps us to understand the phenomenal world through sensory interactions. The way of pure making by hand somehow expresses the nature of the substance itself, showing the many internal qualities of materials revealed in phenomenological ways.

Representation is interwoven with the making of design and the sense of making forms and ways of displaying. As Betsky (2013) explained in the context of painting,

This is a method of working that the painters of scrolls knew well. They slithered in and out of their works, focusing on small details, showing scenes several times from different angles, stringing together landscapes out of isolated elements. The sweeps of
echoing lines folded into a vision that altered and returned the world, transformed, back to the viewer. (Betsky, 2013, p. 7)

This iterative process that Betsky explained is also true for design, where the designer must move the work through various forms - compressing, cutting, transforming and transcribing images, digitally or manually. The processes lead the representation to picture visions and describe narratives. All of these things must happen before the stage of construction.

Today many seek to find ways of using automation in new technologies to formalise representation in relation to understanding, communicating and collaborating in the design process (Porter & Goldschmidt, 2001). But digital technologies such as computer design, at the same time, cause sentient detachments of human perception from sensory cognitions (Treib, 2008). Computers enable designers to produce efficient works, especially with a strong visual presentation. However, Pallasmaa raised a serious concern that relying on computers during the design process would kill our imaginations and flatten our multi-senses on the screen (Pallasmaa, 2012). Vision and hearing are the two significant social senses in the virtual world. The separation of our sensations from reality to media is distinctive and dominant (Pallasmaa, 2012).

This chapter will further discuss the process of making, but the focus shifts to computer making. On the computer the
opposite effects are created. The computer restricts sensory engagement and materiality, but still has the ability to present a place phenomenologically. The virtual world creates a particular context for designing and allows a place to speak in unique ways. Photoshop as a “digital hand” mitigates the weakness of computer-generated images that “are often stiff and numb, lacking the poetry of a more imaginative picture, which at its best may induce the feeling of a fresh breeze, swaying tree canopies, the scents of flowers, and the sound of voices” (Andersson in Treib, 2008, p. 87). Other computer programmes like AutoCAD, Vector Works are less able to draw in this sense, and can only can re-duplicate plans in two dimensions and three-dimensional models from existing drawings.

This exploration also reconsiders the problems of sensory detachment from the computer. “To engage with digital technologies requires new ways of thinking about design methodologies and aspirations. This is the role of theory.” (Walliss, 2016, pxviii) Landscape architecture is equipped with new perspectives of designing through digital eyes. The challenges for designers are how digital representation can be drawn more closely from the digital world to the reality and how designers can make use of this creative medium rather than replicating hand drawing skills on it.
Image 4.1.1
Zaha Hadid's painting.
The Peak, Hong Kong,
China, 1982 – 83
Blue Slabs, 1983 Acrylic on
canvas 187.5 x 286 cm
Image retrieved from:
http://www.zaha-hadid.com/architecture/the-peak-leisure-club/
4.1 Image 1: Making by Digital Drawing and Photomontage: Intermediary

Drawing in landscape architecture may offer a better idealisation of built environments in its “interpretative ambiguity” (James Corner, 1992, in Swaffield, 2002, p. 165). It does not end up with a piece of art nor a tool of communication, but is “a catalytic locale of inventive subterfuges” to make landscape happen in itself (ibid.). There are many common drawing techniques in design practice—mapping, planning, diagramming, sketching, overlaying and so on (Hester, 2008, p. 110). What makes them different is based on what information is conveyed to communicate with other people. Randolph Hester points out for designers that “he or she must imbue each drawing with an understanding of function, dimension, materials, and economy” (Hester, 2008, p. 110). In a phenomenal perspective, drawing not only filters thoughts and imaginations in the mind, but also engraves the intangible realms—senses, memories, emotions, as well as experiences, into embodied graphical drawings.

Drawing, no matter by hand or by computer, is a powerful way to fulfil everything in practice and architecture can be one of a million ways to represent landscape. Zaha Hadid’s inspiring picture (Image 4.1.1) exemplifies how paper architecture enables ideas to be built into reality. Its shape, configuration, and Supremacism create the gap for landscape designers—genuineness, aspiration, and passion. Zaha manifested a pictorial space in architecture, using a landscape analogy to bring inside out and outside in. There is no longer a separation between building and landscape. Landscape participates in the structure and synthetic nature flows in and around the structure. Landscape is like building natural formations and architecture is like bridging landscape into another level. She advocated that building, topography, and city be as one.

At the beginning stage of the image exploration (Image 4.1.2),
Photoshop was used as a digital drawing kit. It offers various possibilities of perspectives, textures, and renderings to perform a human eyes’ function. It is more efficient and productive than pens regarding changing strokes, colours and brushes. It is sufficient to provide a paper resource from layer to layer in a virtual way.

Photoshop, in the meantime, offers the powerful techniques of Photomontage, which as Meeda et al explained, is particularly relevant to the merging and mingling of drawings or other images with photographs (Meeda et al, 2007). Meeda et al (2007) emphasised the value of before and after images as well as the weaknesses in photomontages that can misrepresent the original design ideas. Design ideas can be manipulated or distorted simultaneously as images are highly modified and rendered, as Photoshop can merge, smash, blend, and sew drawings as well as images into a hybrid creation.

The combination of both drawing and photomontaging overcomes this weakness that orchestrates design aspiration leanings toward initial ideas.
Liberation in a digital world

In landscape architecture, the way of perceiving design influences the design outcomes. Betsky argued that design is more about representing a new world with different perspectives, rather than creating technological or constructional inventions (Betsky, 2013). Zaha Hadid believed that design would be free from politics and the constraints of culture, from the history, the past, and our mortal bodies (in Betsky, 2013).

This is a liberating perspective, and inspired me to explore design ideas in Photoshop, which accelerates narratives from reality to utopia, from conscious to unconscious. In a sense, “representational” images in Photoshop are not created from many copied ideas which have been distorted, but are authentic inspirations derived from the maker’s ideas. Representational ideas in design are a means to reshape space, creating places for reverie and a way to go wandering (Betsky, 2013).

Re-imagining Photoshop as an intermediary between drawing and photomontage allowed me to approach representation in a completely different way, to “make” design happen with no sensory engagements or haptic experiences. Image-making depicts and performs thoughts, by using the toolboxes in Photoshop. Feelings and emotions were gathered into the process of representation, directing adjustments in background colour from warm to cold. Design and representation in Photoshop, in this sense, are a way of representing a new world where our ideas can be adjusted, and be edited; a virtual space in which to dwell and inhabit.

The sphere structure in Image 4.1.2 was created when drawing and photomontage were operated simultaneously. This way of making Photoshop images led me to explore more about how design has been layered naturally and phenomenally. For example, in Image 4.1.2 design layers include configuration, function, aesthetics, culture, nature and identity. But when peeling these layers apart, what is left from the image? The eyes of the Tibetan child gaze towards certain wonders, the sound
of a waterfall in the background remains silent, and the wind touches the worship flags in the air. What is the relationship between these “leftovers” and the dome hovering on the surface in the image? Where does design speak through the image? Would it be a design or a representation? Deconstructing the layers in the image reveals the tensions in designing simultaneously in the physical world and the phenomenal world. This led me to look further at how to express the concept of topophilia (the love of place), the sense of place and the presence of place in Photoshop images.
4.2 Image 2: Representation in Photography: love of place and the lie of perfection

Visual representation and phenomenal representation

Representation is often associated with scenery and landscape. Representation in this context is a visual portrait (Tuan, 1974). Yi-Fu Tuan (1974, p. 132) pointed out that there is a vague boundary of meanings among words “scenery”, “landscape” and “nature” in the modern world, that scenery and landscape are interchangeable and project nature. As Tuan said,

To speak of nature today is to speak of the countryside and the wilderness; and wilderness, as we have already noted, is a word that has ceded almost all its power to evoke awe. Nature has lost the dimensions of height and depth; it gained the less austere qualities of charm and picturesqueness. In this diminutive sense, nature evokes images similar to those of countryside, landscape, and scenery. (Tuan, 1974, p. 133)

How can representation make landscape, scenery and nature interchangeable visually and phenomenally in national parks? So that representation becomes in many ways a practical procedure, used for processing communication and imagination, to enable the communication of the imagined (Treib, 2008).

Apart from displaying pictorial pictures artistically and aesthetically, representation of place is a manner of flowing idealisations in sensory and perceptual transformation. Representation displays phenomenal images of self and the world. Heidegger exhibited a philosophical way of representation in being with the world which “is always a representation in something”, in other words, there are possibilities of representing oneself within the environment in everyday life (Heidegger, 1967, p. 283). Representation of phenomenal images in self is about its communication within a narration and information exchange, while phenomenal representation of world is about various lenses for viewing pictorial scenery and visual likenesses of place.
The lie in digital
Photography frames a rendered vision of space, place, and landscape (Image 4.2.1). Photography provides a permanent representation of humans and landscape, which visually carries a certain weight in illustrating the narratives about people and place. It captures ephemeral moments of the presence of place where temporal existence in photography has been extended timewise. However, the world of images from the camera can be deceitful. Overemphasizing rendered images aesthetically in design presentations can produce inauthentic and exaggerated impressions. For example, the wide-angle lens of a camera distorts human perspectives and gives illusions of actual space enlarged in photographs. A wide angled lens is much wider than humans’ vision so that the camera can present impossible views of landscapes that humans cannot perceive by eye. It is perhaps a good thing to experience this lie, as it helps to make a clear distinction between experiencing a real space and seeing a landscape through “digital eyes”. The “lie” can then be addressed.

Problem of perfection
Such lies can also easily lead designers to have a false perspective on visual perfection within digital media. Graphics are powerful communication tools that also bring responsibilities
to those who produce the images (Meeda et al, 2007). Representation is synthesised as a spatial and experiential catalyst in landscape architectural designs. The main uses of representation are for communication and expression (Meeda et al, 2007). However, pursuing artistic effects in landscape architecture may suppress the intent of experiencing and acknowledging landscape in its formation, temporality and materiality. As Pallasmaa addressed it,

Strong image is obliged to simplify and reduce the multiplicity of problems and practicalities to condense the shapeless diversity of the task into a powerful singular image. Strong image is often reached by means of severe censoring and suppression; the clarity of image frequently contains hidden repression. (Pallasmaa, 2000, p. 83)

Designers using graphics have a responsibility to convey honest and accurate information and not simply make artistic images (Meeda et al, 2007). Therefore, in how to mitigate the visual dominance in design to bring manifestations on form and narratives, aesthetics becomes significant in landscape architecture.

Landscape architectural projects often require site-based designing which highly relates to “place”. The relationships
among phenomena and representations of place may also shape design outcomes in landscape architecture, especially on how design expressions and communications are conveyed through images.

However, this does not mean a designer’s imaginations should be limited or that graphical images are useless. Alessandro Scafi (in Cosgrove, 1999) brought the idea of making paradise visible, and this has been specifically explored in mappae mundi from the Middle Ages. Chapter 3.2 introduced how symbols have graphically influenced the whole story shown in the Ebstorf Map. The earth was spatially and graphically drawn into mappae mundi as a narrative within time in internal and external ways. So stories and imagination can be presented in an artistic way with a clear goals and strong narratives. Instead of perusing perfection in digital images, landscape designers are encouraged to appreciate sensory motifs in representation (Treib, 2008, p. 197).

Photography and Topophilia/ love of place
Photography and drawing have different performances (Treib, 2008). It only takes two seconds for a photo to capture a scene generally, however, these photographs are not able to captive all the personal senses and emotions in place. On the contrary, drawing makes up this missing part. Drawing situates people in
the position of being in the place beyond the spatial dimension. “To draw, we must look carefully, more fully immersing ourselves in the dimensions and life of the place.” (Treib, 2008a, p. IX)

Using Photoshop in a photographic way enables landscape designers to explore the potential wonders and human emotions in the landscapes of national parks. Furthermore, creating an ‘imaginary’ drawing through photo making, using computer programs like Photoshop, allows landscape architects to embody intangible ideations into visible expressions.

Using photography and drawing in Photoshop at the same time, merges visions, emotions and place into one (Images 4.2.2 & 4.2.3). In Image 4.2.3, I combined the nature of photography with Photoshop in a way that empowers the image with surreal expressions to express a strong love of landscape. The image embodies the love of landscape in many dimensions, of its vegetation, its light, its occupants, and the important relationship between the residents and their donkeys. Pallasmaa (2000) noted that haptic architecture strengthens sensory engagements. Digital drawing is also related to the haptic sense of touching. The materiality of digital drawing boards and the movement of hands enable digital pens to produce different atmospheres through a wide range of colours, for instance, pink represents romantic, black leans toward darkness, and yellow brings out hope. The light or dark spectra in portions reinforce
general atmospheres in the image which invoke certain feelings or emotions.

Emotion is a response to capture the sense of place. The concept of topophilia depicts loving the place in which man’s perception, sense, experience, value and affection interact with one another in nature (Tuan, 1974). Viewing national parks through the emotional lens of Yi-Fu Tuan shows a strong feeling of affection from humans. The bridge crossing between the gorges not only shows the contrast of scale (the magnificence of nature and the tininess of the humans), but also connects a type of love between human and nature in a geographical dimension. The partly hidden and partly visible worship flags speak a sense of belonging for the Tibetans. The figures’ activities in the image tell how giant nature embraces humans, that people love to be relaxed and be free on the bridge despite the precipitous geographical location in the image. The overall intention of Image 4.2.1 is to express freedom in both spirit and materially. The emptiness of the second image also redefines space and boundary in an artistic perspective. The portion between darkness and blackness (2:1) creates an atmosphere of freedom, joy and lightness and the same proportion 2:1 could also apply to photography to structure visual effects.

Although reading or viewing an image is not a physical experience, the story within the photographic image prompts emotional responses which lead to experiential imaginations. Design itself in this image becomes less important, but the design work evokes more invisible aspects about the love of place or other different atmospheres by colour, proportion and layout. This gives designers alternative options to adjust what kind of impressions need to be rendered so that humans’ affections and emotions can be genuinely and authentically presented in design representations.
Image 3: Vision the Sense of Place

Today’s eye-dominant culture leads to the deprivation of sensory experiences, and the detachment of self from place (Bowring, 2007; Pallasmaa, 2012). Pallasmaa highlighted how the visual tends to dominate the senses, leading to an instant satisfaction with artistic form, and dismissing the existential world being (Pallasmaa, 2000). Geographers, artists, landscape architects, architects and philosophers have explored how vision has gradually dominated the sensory consciousness of modern culture (Bowring, 2007; Hawkinson in Treib, 2008; Pallasmaa, 2000; Tuan, 1974). The danger of living in a visual world is that it overtakes other senses, and disables the richness of multi-sensory experiences.

It is undeniable that eyes have always been the key to knowing
and perceiving the world. Time and experience are formed in this three-dimensional world through vision (Tuan, 1974). Knowing, understanding, and remembering the national parks take place simultaneously while scenes are projected onto the eyes.

To understand a person’s environmental preference, we may need to examine his biological heritage, upbringing, education, job, and physical surroundings. At the level of group attitudes and preferences it is necessary to know a group’s cultural history and experiences in the context of its physical setting. (Tuan, 1974, p. 59)

As Tuan pointed out, it is important to know the context of the place through physical substances visually and experientially. Photoshop has the potential to bring all of the necessary components into one image in real or surreal ways.

Even creative activity calls for an unfocused and undifferentiated subconscious mode of vision, which is fused with integrating tactile experience. The object of a creative act is not only enfolded by the eye and the touch, it has to be introjected, identified with one’s own body and existential experience. In deep thought, focused vision is blocked; thoughts travel with an absent-minded gaze. (Pallasmaa, 2000, p. 83)

Phenomenal lenses in images
Many scholars have argued that both technology and the picturesque have contributed to the loss of multi-sensory experiences (Bowring, 2007; Treib, 2008b). Pallasmaa argued that the digital invasion brings sensory deprivation by systematising the environment (Pallasmaa, 2000). The challenge in the third image is to explore how design can phenomenologically be an icebreaker in terms of this boundary between the senses and technology. How can the phenomenon of light give human eyes great richness in colour, shade and clarity to read landscape in different ways? How can this visual domination in representation envision and activate other sensory experiences through reading images in Photoshop?
Image 4.3.2 was made using methods of Photomontage, drawing, and photography together. The spirit of this image builds up mysteries and imaginations through intensity, which allows time, shadow, structure and human acts to be in ‘one body of place’. In order to feel the presence through reading the image, the image was drawn, photographed and rendered to be felt by colour, to be revealed through the story, and to be affected by the eye. Weaving the Tibetan figures into the front of the sphere structure in Photoshop creates a story in an ephemeral moment, where we can see the devotion of the Tibetan women to their families through the loving eyes of the women and children. The exquisite love from human eyes warms up the general coldness in this image.

The third image (Image 4.3.2) investigated the role of phenomenal light in its invisible state. It explores such fleeting moments as sunlight at the particular angle of the sunset.
penetrating the cold surface of the sphere, where the sunlight spreads out over the space. The story of phenomena is foretold within hours of alternating light and darkness, the cold hard surface and the warm gentle sunlight.

The images allow imagined ideas to become embodied and embedded in meanings and stories. “Representation (publications / exhibitions / screen shows) should be coherent narratives built out of series of visual images that describe the project vision.” (Meeda et al, 2007, p. 6)

Conclusion

“Photo making” in a digital approach confronts the challenges of multi-sensory deprivations, design disengagements and emotional deficiency. “Photo making” produces more stories and layers visually and phenomenally through the methods of drawing, photographing, photomontaging and manipulating in software. Even though representational effects in photo making vary, depending on personal rendering techniques and styles, some ramifications of design and representation on this matter are that there needs to be more awareness about authenticity about place itself, in terms of culture and landscapes.
Chapter 5
Introduction

Chapter 1 and Chapter 2 introduced the concept of “sense of place” relating to design for national parks. Chapter 3 and Chapter 4 exhibited polarity in model making and Photoshop making physically and virtually. Representation and design have been read in and through place from the preceding stages-site visits, drawing, model making, and Photoshopping. The process of the explorations portrays other dimensions in revealing the sense of place through designing.

For designers it can be easy to design something that meets human needs and desires, but this is often detached from sensory and emotional moments. To test design ideas for futility or possibility, we need theoretical supports and practices to add or subtract ideas (Calvino, 1988; Picon & Bates, 2000). These themes underpin this research in a theoretical perspective of design, representation and place.

This chapter discusses the shared character of design and

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representation, and why these overlapping facets are important for landscape architectural design. Using insights from four theorists - Pallasmaa, Treib, Corner and Tuan (Table 5.0.1), I explore the models and images in more depth, developing seven tenets for designing in a phenomenal world. Through analyzing the models (in Chapter 3) and the images (in Chapter 4) from the different theorists’ positions, I annotated each model and each image to emphasize a particular moment, a nuance of atmosphere and a silent spirit to unfold the relationship between place and design through the diagram (Image 5.0.2). Bringing together the theoretical positions and my images and models illustrated a vision of national parks, and their layers of culture, nature, and landscape.

There are seven insights arose from the design advocation of the four theorists and the methods of this research (Diagram 1.2.2 and Table 5.0.1). I will now discuss each of these seven insights in turn.

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5.1 Place and Placeless in design

The first insight, place and placeless, is emphasized more on the position of designers in a state of being in the place. Heidegger (1967) addressed the meaning of being in Being and Time, and pointed out that although contemporary culture feels it fully understands the meaning of being, it underestimates the values of being. The concept of being cannot be precisely defined, and as he explained further, the traditional ontological approach of defining “entities” is not applicable to the idea of being (Heidegger, 1967). Heidegger clarified that “the indefinability of Being does not eliminate the question of its meaning; it demands that we look at that question in the face.” (1967, p. 4)

Given this vast territory of the exploration of being, landscape may be read and remembered by the act of being (Image 5.1.1). This act of being leads phenomena to be felt in the place and fully attaches the self in the landscape rather than on the landscape. To respond to the tenet of place and placeless, what is the new angle to look at place through being-as-designers? The question will be answered through dwelling in and loving place, to submerge and understand what place is for landscape architects. These ways of experiencing being also outline a phenomenal picture about spirit and sentiment in design and representation.

As Falk et al. explained,

The concept of the phenomenal body, for example, was a way of indicating the immediacy and non-inductive nature of our most basic involvement with the world; the contrast between its anonymity and its creativity, a way of indicating the complex, layered structure of that involvement. And all this was brought out with a marvellous directness of detail and image. (1970, p. 279)

The presence of place addresses the essential state of “being” which means showing itself (Heidegger, 1967, p. 53). The
continuous awareness of being in the presence of place draws the hearts of people closer to the landscape.

Not only gaining a sense of belonging to place for humans, the action of “being” along with sensory experiences establishes cultural identities in the place (Strang, 2006; Heidegger, 1967; p. 133). In the book, Sensory Design, Malnar and Vodvarka argued that “sensation” and “perception” are both needed to understand place better; one requires experiencing while the other is needed for transmitting (Malnar, 2004; p. 21). Carme Pinós explains how she perceived place as landscape dominated by human culture. She described this in the project of Igualada Cemetery,

We immersed ourselves in the place, bathed in it, and felt its presence. The emphasis of this presence is our project; we descended more into the presence of the place. For this we sought silence; the material uniformity blurred the limits of our actions; diluting them in the earth helped us find it. (Vienna Architecture, 1993, p. 73)

Meyer emphasized that design knowledge is related to knowing specific sites and engaging with particular atmosphere, meaning, form and structure in places (Deming, 2011, p. 33). Human experiences have become the primary concern in phenomenological explorations (Strang, 2006).
Place is known, understood, and remembered by people (Bowring, 2007). As Pallasmaa described it, “perception, memory and imagination are in constant interaction; the domain of presence fuses into images of memory and fantasy.” (Pallasmaa, 2012, p. 67) Moments are imprinted in minds through actions along with memory. Through engaging and interacting with places, many invisible relationships have been revealed and developed, for instance, the love of place, the presence of place and the sense of place as the expressions of human-formed connections to place (Image 5.1.1).

The method of visiting the two national parks embraces this position of being-in-the-site. Camping, shacking, lodging, resting and abiding are some actions to gain the sense of belonging in the national parks. I visited both Meili Snow Mountain National Park and Aoraki/ Mt Cook National Park twice within three years. The visits were across the cycle of the seasons and allowed me to immerse myself in place, with dynamic seasonal changes through time and space. More specifically, walking, drawing, photographing, leaving and returning to sites again were constituted as a series of moments involving bodies with sensory experiences in times.

Therefore, fusing ourselves in place draws absence to presence. These moments dynamically and effectively merged human bodies into the presence of place in kinetic, tactile, olfactory and many other ways (Image5.1.1).
Place in representation

The possibility of being with one another makes this phenomenal world one of representability. “Whenever we go anywhere or have anything to contribute, we can be represented by someone within the range of that ‘environment’ with which we are most closely concerned.” (Heidegger, 1967, p283-285)

The first phenomenal representation on such matter is to be ‘in’ oneself first (Heidegger, 1967, p283-285). Being-in-the-world is representing a “unitary phenomenon” which indicates “the relationship of Being which two entities extended ‘in’ space have to each other with regard to their location in that space” (Heidegger, 1967, p. 79).

To grasp the essence of place needs flesh living in place, more precisely, dwelling in place. Dwelling means to live or to stay in a place, and it is further understood as to rest in the spirit. As John Wylie explained: “In this moving and imagining, culture and landscape are together pictured as ‘dreams of presence’.” (2009, p278) In other words, we dwell in this world, and we represent its entity in the presence of place. Dwelling also means to rest in the place. Through dwelling, flesh encounters and rests in the spirit of the place.

The idea of dwelling in national parks is to treasure the entity of nature as well as the spirits of nature and their tangible and intangible dimensions. Having explored the sense of belonging and immersion in nature during my research, camping, shacking, hutting, lodging, resting, and abiding, the series of actions enables me to dwell in the national parks. Because of these being and sensing experiences, the ephemeral moments about these two national parks are imprinted in memory within a multi-sensory performance.
Representation is a phenomenal realm of the genius loci in and from the place. Not only do spirits dwell in the place itself, but also in pictures and drawings. The spirit of the place, is revealed, told and presented through artistic pictures, paintings and images.

Photoshop images at the final representation are the outcomes or the personal “emotions” through being and dwelling in the national parks (Image 5.1.2). The emphatic spheres symbolically state the sense of belonging and dwelling in body and spirit, and the unwillingness to depart from nature for the city. For example, the waka on the golden dry lands expresses the desire for knowing the sacred place as a human (Image 5.1.2). To allow stories to flow in the ocean of tussock lands in Aoraki, minimal art expression is represented in the Photoshop image. The process of being, sensing, making and drawing transformed my design experiences to embodied representations from a sense of belonging (which is highly related to physically experiencing the place itself) to the spirit of the place (which is spiritually imagined in place through representing).

However, Tim Ingold argued, “the landscape, I hold, is not a picture in the imagination, surveyed by the mind’s eye.” (Ingold, 1993, p. 154) Landscape is not an image in imagination, we live in this world as we dwell in the place where the representation in our mind emerges in the living space (Ingold, 1993). Place needs humans’ body, mind and soul to orchestrate the stories of history.
5.2 Liberated and Restricted in Design: yielding design to place

The second insight on liberal design versus restricted design is to explore a way of fusing design into place. Freedom is associated with dwelling in the place, or being in the place. Christian Norberg-Schulz explained that dwelling indicates a relationship between humans and place, “Today we start to realise that true freedom presupposes belonging, and that ‘dwelling’ means belonging to a concrete place.” (1979, p. 370) There is a sense of freedom in nature yielding humans into national parks. The easy and free atmosphere inspired me to reset my design perspective, mindset, and skills. Tenet two provides some possibilities to expand the territories of design and representation.

Free materials
Designing in, for and with nature can be overlooked in contemporary landscape architecture, which is often oriented towards humans. In the city, hard materials, such as glass, steel and wire dominate, building up grey infrastructures where materials become fixed components of design projects. Although designers explore the textures or the colours of materials, design outcomes are visually stunning but can be spiritually empty. Because materials have been treated as physical objects to meet
certain design needs, the qualities of the materials can become restrained rather than expressive.

The goal in exploring the making of phenomenal models is that by using natural resources, meanings and emotions can be embedded and narrated into materials which allow soft paper and rattan to freely behave as themselves, as discussed in Chapter 4.3. Plaster, soft paper and rattan echoed the natural setting of the national parks and became the main materials for making models in the research.

Free process
To avoid becoming formulaic during design explorations, I tried to avoid conventional ways of producing design inspirations. For example, I made models without precise scales, and I made images in Photoshop without scenographic methods. All of these trials helped me to break the constraints of traditional ways of understanding design. Instead of constraints I used unfamiliar ways or even opposite methods to respond to design and engage with design (Image 5.2.1).

James Corner challenged designers to liberate the map as a generative catalyst to enrich both knowledge and imagination in
planning and design (Corner, 1999, p. 213). He said that to avoid tracing or reproducing old knowledge and information, “open-ended forms of creativity” are fundamental to “make a map” (Corner, 1999, p. 213). Corner referred to arguments from Gilles Deleuze and Felix Guattari in philosophy to further emphasize the distinction between mapping and tracing (Corner, 1999, p. 213). This generative view of design recognizes that design is based on experiential performance with the world, which means that design is a dynamic experience which corresponds to substances, environment and humans in the world. Design, in a way, is free from previous designing and does not need to follow, copy, nor imitate old achievements.

Whether using “free” methods in materials or in processes, this open-ended, creative approach was liberated from singular theory. Liberty in design encourages designers to free their mindsets from the old cages of tradition, and to step into a new level of pursuing what design is from a creative perspective.
5.3 Phenomenal and Material in Design: cultivating imaginations

In the third insight about substances and phenomena in design, materials become alive when phenomenology is taken into consideration. As discussed in terms of the language of materials in Chapter 3, there is an interrelationship between the phenomenal world and the material world. Tenet three about phenomenal and material in the design process helps designers to cultivate imaginations. Material explorations in model making evoke sensory qualities of materiality. The internal and external exploration of materiality in design connects with humans’ minds, senses and imaginations in a phenomenological way. Bachelard illustrated how place and imagination intermingle together, so that we breathe the air, and we taste its atmosphere of imaginary sorrow and joy, awe and contempt, life and death (Bachelard, 2011, p. 105).

Substances matter not only to humans but also to place itself. Tangible materials are substitutes for place, whereas matter defines space and separates space into the formation of place (Tuan, 1974, p. 204). Materiality in an urban context is a primary instrument that links us intimately through time and space in human dimensions (Pallasmaa, 2012, p. 17). Architecture, as well as art, emphasizes human existence and veracity in the space and time, expressing self-being in this world. The meaning of buildings is more than just architecture but a solution to fuse ourselves into this material world with spiritual and emotional understandings and engagements (Pallasmaa, 2012). Space and substances, as well as thoughts, are embodied in the shape of buildings’ structure mentally and physically. However, in a wider context of national parks, how could this method of materiality be possibly revealed, applied and transformed into developing the connections between humans and nature, humans with nature and humans in nature? How could we expand beyond the expectation of a spectacular experience in national parks? How
could the dimensions of space and time of materials maximize the emotional engagement and the sense of being?

Landslapes are constituted by nature and the activities of people from place (Ingold, 1993). Ingold argued that there is a certain connection between substance and experience in the meaning of landscape (Ingold, 1993). To perceive national parks through Ingold’s eyes, landscape must be associated with humans, where landscape is embedded within people, and people are submerged within the landscape.

Landscape in national parks is more than a picture of a natural environment. Instead, it is a recollection of remembrance in place (Ingold, 1993). Picture and remembrance are both formed by the eye, where seeing and being seen occur simultaneously. The processes of human lives and activities constitute the making of the landscape (Ingold, 1993). To read national parks through landscape, Ingold suggests that we perceptually engage environment with activities (Ingold, 1993). In the context of this research, experiential activities in national parks mould landscapes into a dynamic state.

The motion of landscape is a manifestation of how materials
respond to the phenomenal world. Whether it is made of rocks, worship flags, or twigs, they have been relocated and placed in the landscape rhythmically (Image 5.3.1).

Motion brings in energy through moving materials, and also brings impacts on place. The presence of litter is challenging the government in managing Meili National Park. Trash constantly shows up along visitors’ journey and results in a voice of great apathy towards nature. Eco-incineration (Image 5.3.1) is an imaginary design about consuming trash in a spherical core. It encourages humans to pick up trash on site and put it into the eco-incinerator. Using the motion of landscape through human movements, a certain amount of rubbish can be collected into the incineration cores and sensory devices within the structure will activate ignition to consume waste and transform energy and heat into condensation to release an aromatic scent.

The phenomenal movement of motion gives humans hope that the tumour of litter may be shrunk in Meili Snow Mountain National Park by transforming humans’ movements and behaviours from environmental pollution into positive protection. However, how this imagined design can be put into practice still remains unknown.
Pallasmaa introduced the concept of “weak” or “fragile” architecture.

In accordance with Vattimo’s notions, we can speak of a ‘weak’ or ‘fragile’ architecture, or perhaps, more precisely, of an ‘architecture of weak structure and image’, as opposed to an architecture of strong structure and image’. Whereas the latter desires to impress through an outstanding singular image and consistent articulation of form, the architecture of weak image is contextual and responsive. It is concerned with real sensory interaction instead of idealized and conceptual manifestations. (2000, P. 81)

Pallasmaa stated that the power of being weak is indicating a humble heart toward designing with place. “Perhaps, we should also conceive architecture through a listening eye. Geometry and formal reduction serve the heroic and utopian line of architecture that rejects time, whereas materiality and fragile form evoke a sense of humility and duration.” (Pallasmaa, 2000, p. 82).

The fragile design is to embrace “weakness” as a design principle to bring experiential engagements with place, time and image. This will be further discussed in the next insight about sense and senseless in design.
5.4 Sense and Senseless in Design: designing toward thermal, acoustic, haptic, and olfactory

The fourth insight on sensory design is dynamic and tactile. The senses are significant in allowing humans to more deeply understand the world (Pallasmaa, 2012). When we touch a material, the material touches us back. This synergy produces thoughts in the mind and perceptions that prompt imagination. Constantly interacting with the environment empowers a sensory experience within the human body (Pallasmaa, 2012). Senses collaborate with each other and they are all associated with tactility (Pallasmaa, 2000). As Yi-Fu Tuan describes it, “touch is the direct experience of resistance, the direct experience of the world as a system of resistances and pressures that persuade us of the existence of a reality independent of our imaginings” (Tuan, 1974, p. 8). Tactile engagement provides substantial information about the world which enables humans to feel a sense of being in the world or existing in the world. Tenet four, sense and senseless in design, encourages designers to design in a multi engagement with skin, eye, nose, ear and mouth.

The sense of self while in a national park acknowledges the presence of substantial objects on earth and at the same time speaks to humans’ imagination and dreams. Unfortunately, sensory experiences can be dismissed and are dying off in humans’ awareness of contemporary life (Pallasmaa, 2012). This is not only happening in cities but also in national parks. Pallasmaa challenged landscape designers to mitigate such degradation of awareness by reconnecting the sensory interactions between humans and the environment (Pallasmaa, 2012). To achieve this ambition in national parks, designers need to maximize the use of colour, form, texture, materials and so on to stimulate each nerve and activate humans’ minds, bodies, hearts and souls.
I challenged myself to engage with the five senses digitally in design and representation. To reimagine the essence of wild landscapes in national parks, a series of fragile designs testifies to a sense of presence that national parks carry through humans’ sensory experiences. Images made by photo making are expressed as a fragile design to amplify the significance of invoking wellbeing and imagination for both humans and nature (Image 5.4.1).

Eye
The Piercing Tunnel (Image 5.6.1) in New Zealand resonates with the name Aoraki, the Cloud Piercer. Porous structures installed along the track connect the round form with the act of piercing. Light showering through the structure encourages people to leap over the beams, connecting them with the ancient legends of the Cloud Piercer. Furthermore, the time spent walking the track may be extended as visitors digest the experience in the tunnels. The Piercing Tunnel with a 1.5-metre radius, is inserted into the Hooker Valley track, and is made of the same materials as the walking track. Slowing down the pace of one’s journey can enrich a visitor’s experience of a sense of place (Bowring, 2007).

Nose
Viewing landscape through the eyes of Pallasmaa, I sought to express the intense sensory engagement between human and
nature within Meili National Park. Owing to the high-altitude conditions and lack of oxygen in Meili, the proposed O2 Hotspot (Image 5.4.1) is a human scale structure for anoxic (oxygen-depleted) people. It is a place of natural therapy, absorbing oxygen from around the outer space into the tank and emitting oxygen into the inner space. In this way, an individual intensifies their self-experience of nature by breathing the air in the space of the O2 Hotspot. The contrast between the spherical form and the rigid square buildings in Yubeng Village highlights the conflict arising from humans’ aggression towards nature. The O2 Hotspot represents a human desire to be in harmony with nature and performs as a fragile landscape against the landscape in futility.

Ear

Millions of Tibetans visit Meili during the pilgrimage. The purity of the water melting from the glacier is threatened due to the lack of education among most Tibetan people. The Acoustic Shell (Image 5.6.1) in Meili is designed to protect water at the site. Streams identified as significant are intersected by acoustic shell voids to prevent human invasion of the water. By amplifying the energy of the stream in the centre of the structure, air and water hit the inner surface of the shell to produce magnificent volumes of sounds. This natural sound manipulates the environment and puts people in awe of the sacred water.
There is also a demand for designers to emphasize sensory experiences. Pallasmaa (2009) explained that understanding the body as a sensing organism allows designers to connect more deeply with culture and placing the self in architecture. Sensing the places in action becomes crucial in this research. As a landscape designer, activating multi-sensory engagements with sites helps to form the sensational imagination. Sensory engagements actively generate inspiration in landscape architecture. Within sensory experiences, the content of representation is to declare how we are feeling and being, instead of what we are viewing. Through being attentive to the “how” we can avoid replicating images from mind to paper.

The idea of sensory experiences contributes to the concept of being in the site (Pallasmaa, 2012). This being-in-the-site may give more opportunities to rethink how design can integrate tourists into national parks with multi-sensory experiences, enhancing their body, perception and memory. On the one hand, the action of seeing draws attention to landscape in “a way of seeing the world” and “a way of seeing-with the word”, a strong cooperation between self being-in-the-world and landscape being-in-the-world (Wylie, 2009). On the other hand, the eye dominates our overall senses and we yield to perceiving this world through producing instant images without a glimpse of our true feelings and reasonable perceptions (Pallasmaa, 2000). To break through the constraints of a visually-dominated experience of landscape, this thesis is overarched by engaging tactile, olfactory, and kinetic experiences.
5.5 Hand Drawing and Digital Drawing in Design

The fifth insight about drawing explores how hand drawing and digital drawing perform in design. Drawing embodies the work of designers in function and in metaphor (Treib, 2008). “This immediacy allows the mind to race, to build, to draw excitement from the process of creation with an exhilaration that increases with each moment, as one tests sketch after sketch in rapid succession.” (Treib, 2008, p. 16) During the period of collecting and gathering all the thoughts and impressions on the journeys in national parks, drawing on paper traced the memories of the places, including feelings on site, where the significant sounds were from, what remained in the mind and imagination, and what kinds of emotions were evoked on site.

Lines can be drawn to explore spatial imagination in landscape. The thickness of line weights and the darkness of lines represents many possibilities that could be read as shadows, a bird’s eye view of walls or stairs (Image 5.5.1). Lines constitute the surface, the configuration, or the linkage (Image 5.5.2). As a designer, the way of using lines is to produce either abstract or constructed ideas. For example, Carlo Scarpa’s works are “read as a palimpsest of the path of design, and a summation of the ideas reviewed, accepted, or rejected.” (Treib, 2008, p. 18) Pallasmaa described Scarpa’s architecture as an expression of the “weak” architecture, or fragile architecture that “creates a dialogue between concept and making, visuality and tactility, artistic invention and tradition. Although his projects often seem to lack an overall guiding idea, they project an impressive experience of architectural discovery and courtesy.” (2000, p. 82)

Hand

Drawing by hand is a personal representation of our imagination. Representation is comprehensive, especially in its phenomenal aspect. It incites humans’ feelings and emotions. Unfortunately, its voice is strong, but its figure is vulnerable. It is challenging for students and designers to depict and present the phenomenal
dimensions of each design project. How can representation through drawing influence both people and landscape visually, emotionally and phenomenally?

At the stage of developing concepts, sketches communicate self and design where ideas may be edited, rendered, retraced, or erased (Treib, 2008a). The sketches do not need to be “neat”, but can strongly reflect personal experience (Treib, 2008a, p. 18). Treib suggests that “a conceptual drawing needs to speak only to its creator.” (Treib, 2008a, p. 18) Therefore, conceptual drawing is to record and present the core from the experiences on site for the sake of designers (Image 5.5.3). What drawing provides more is that it produces wonders beyond what we already knew. As Marc Treib explains, “at some point- and this is one of the miracles of drawing- the image begins to tell us more than we have projected into it; new or unrecognised relationships or ideas emerge that stimulate further creativity.” (Treib, 2008, p. 15)

Computer
A significant goal for my digital drawings is to create the scene
with no trace of a single-vanishing point. This allows me to question the place of perspective in our imagining of place. Although perspective helps designers to show their ideas, it also constrains them (Treib, 2008). The way of combining drawing, photomontaging, photographing as one in software, such as Photoshop, enables me to emerge the two national parks with not only digital “eyes” and “hands”, but also with personal emotions, memories and understandings through the ways of perceiving place from the virtual world.

The critique of computer drawing being related to sensory deficiency is widespread; However, I sought to challenge this and explore further on how designers can adopt humans’ senses in the computer emotionally and spiritually rather than physically.

It is seldom straightforward or explicit to select the most suitable medium by using hand-drawn, digital-drawn or a combination (Meeda et al, 2007, p. 12). I explored several procedures to present site plans at different scales as well as various approaches- hand drawing, stenographical mapping,
digital drawing and hand-digital drawing (Image 5.5.3). I found that Photoshop drawing provided a way of embedding feelings in images (as discussed in Chapter 4, Photoshop can operate general atmospheres through colour, tone and affections).

Theories of design and representation are as critical as finding the right positions for designers as well as landscape architectural students. A representation that is carried out with correct information or “garnishes”, real outcomes or surrealist visions, by hand or by computer should be theoretically checked and supported to fulfil its initial purpose in design projects.
5.6 Invisible and Visible in Design

The sixth insight “invisible and visible in design” is to address both the physical eyes and the phenomenal “eyes” to be used and developed for design processes. Bachelard says love, fear and hatred are in the infinite space that awaits the eyes and soul to fulfil spiritual illumination (2011). This infinite space is an analogy of the human expressions and affections towards national parks. Such emotions could encourage designers to listen to and care for the environment spiritually and physically. Tenet six unfolds how sound as an invisible being influences this visible world phenomenally.

Phenomenal eyes
Humans are more emotionally affected by hearing than by seeing (Tuan, 1974). For example, most people have stronger emotional responses when listening to music than seeing images (Tuan, 1974). Sound traverses around the space that generates auditory senses through the air. As such, sentient experiences come from the landscape where there is audible representation and manifestation of wild nature.
Every place generates its own echo consisting of size, materials and patterns (Pallasmaa, 2012). Sound is a multi-directional receiver that measures up space, shows interiority and scales surroundings (Pallasmaa, 2012). Nature has its own sounds as well. Spiritual voices among dreams, thoughts and imagination come from humans and nature (Bachelard, 2011). Water, air and dreams are strong elements that build up the spiritual layers of national parks (Bachelard, 2011). Bachelard stated this philosophy to indicate that life is beyond a three-dimensional definition. Sound is more than a physical property, as Walter Ong described that the centring action of sound affects humans’ “sense of cosmos” (in Pallasmaa, 2011, p. 53), shaping our experience and understanding of place (Image 5.6.1).

In landscape design, sound is so intangible that designers often dismiss it. However, hearing is an important sensory engagement. The task from Bachelard was more than just emphasising the phenomenal sound in designing; rather, he urged designers to invoke spiritual encounters while experiencing sound (Image 5.6.2).

To become immersed within national parks, the two representations of Image 5.6.1 and Image 5.6.2 in this part illustrate how humans can be the audience for the performance
of nature, physically and spiritually. This involves magnifying the voice of nature by reflecting, regenerating and receiving. The design inspiration is to invite rain, air, light and wood to resonate into the tonal world.

Physical eyes
The contemporary context of architecture and urban settings means we gradually lose the connection to nature, including how to engage with natural settings through emotions and responses (Pallasmaa, 2012). Pallasmaa points out that we are in a generation that often sees buildings as the designers’ self-expressions, at the same time, the experiential qualities of art and architecture are disappearing due to the dominance of the visual over other senses (Pallasmaa, 2012). Strategies and attitudes towards designing are focusing on emphasizing the self and substances to address materials and beings, so that design outcomes share more stories and emotions within place to understand landscapes aside from the emotional responses to a scene (Tolia-Kelly, 2007).

The combination of both physical and phenomenal engagements with design, place and representation brings more possibilities of understanding and imagination (Image 5.6.3). Invisible and visible in design of place remind us to see beyond the seen.
5.7 Ambiguity and Specification in Design

The seventh insight of ambiguity and specification in design is inspired by Italo Calvino and Mart Treib. Marc Treib raised the concept of ambiguity in the context of model making, taking it beyond topographical representations. As Treib stated, “This lack of cognitive closure may actually enhance the richness of the work, because it thwarts our ability to exhaust the number of possible observations and insights.” (Treib, 2016, p. 54) In the book of Six Memos for the Next Millennium, Calvino brought six principles to imagine future literature- lightness, quickness, exactitude, visibility, multiplicity and consistency. Although these values are more imaginative of languages, I was still inspired by how design can be interpreted as one of the languages. Tenet seven “ambiguity and specification in design” draws design to be many possibilities such as tools, languages and representations.

A process of ambiguity toward specification
As I visited the two national parks, I was overwhelmed by stunning nature in its magnitude and altitude. When I wanted to capture and amplify the vocal sound of streams, I drew a sound wall on paper to emphasize its sonic quality in rivers. As I developed through different stages, from modelling, Photoshop
to Vectoworks, the sound wall became more defined and contextualized (Image 5.7.1). The three dimension modelling in the computer draws this initial idea into a buildable structure. Ambiguity gives designers more open space to imagine, while specification draws a clear outline and provides an undone solution. Here I will discuss more about how ambiguity can be embedded into design.

Ways to approach ambiguity in design
Ambiguity helps to expand the territory of imaginations, understandings, and perspectives in design. In my discussion of model making in Chapter 3, I explored how design motivations were adjusted, from the very specific construction of a pavilion to the abstract expression on the presence of place. This spectrum from the specific to the abstract provoked further research, to explore how design and representation can bring ambiguity in model making back to a clear and specific image in Photoshop making.

The Praying Hut (Image 5.7.2) in Meili Snow Mountain National
Image 5.7.2
The Praying Hut: photo making for Meili Snow Mountain National Park

Image 5.7.3
Outward of the Praying Hut: the layer of ambiguity in photo making.

Image 5.7.4
Inward of the Praying Hut: the layer of ambiguity in photo making.
Park is designed for Tibetan pilgrims. The phenomenal aspects of religion are amplified through its design. The inner structure of the hut provides a temporal shelter, while its uneven surface is designed acoustically to create an auditory hallucination of the sound of worshipping. The function and meaning of the Praying Hut expresses the wish to love more and impact less, through emphasising an atmosphere of worship within one place and defining an overarching zone of religious activities (Image 5.7.3).

Overlaying a dark shadowed circle to outline a designated activity area in the sphere, activates humans’ eyes and minds to wonder what is inside the dark cave and what it looks like (Image 5.7.4).

In the Photoshop images, some of the effects are produced by the method of blurring, which merges design works into the atmosphere to evoke a strong cultural connection to the environment in national parks. A reason for blurring the boundary is to explore how the sense of place can be brought in through merging design into its surrounding place (Image 5.7.3). The uncertainty of the blending areas enables humans to perceive this image by analyzing, guessing and pondering. So ambiguity brings openness, in contrast to in a highly constructed and defined space.
Conclusion

The seven insights in this chapter are designated to give a better understanding and a complete interpretation on place, design and representation from designers’ perspectives. Although these seven cannot cover all the aspects, they indicate a method of how to maximize and process design insights, skills and technics with aspirations and inspirations phenomenologically.
Chapter 6

CONCLUSION


6.1 Design or Representation?

Places and their representations are deeply embedded in our designing and imagination. My research has focussed on Protected Areas and the phenomenological dimensions of place and its inhabitants. Rather than developing organisational strategies, the focus is on extending the imaginative scope of place. Through this I seek to encourage landscape designers to critique and expand the possibilities of representation and design.

What does it mean to protect national parks? And what is a national park? My research frames these questions as a poetic reverie about imagining place. Realising these phenomenal moments, in association with perception, understanding and remembrance, shifts humans’ concerns from caring for the wellbeing of ecology to a more emotional and spiritual awareness of place, mediating with humans’ life, natural ecology and world ideology.

My research was motivated by curiosity about how we can respond to place in richer ways as designers. This raised many questions, about the nature of place, experience, and phenomena, as well as the practice of designing and representing. By means of concluding I will both draw together these threads, and speculate on other possible directions to continue this investigation.

Design is a tool to interact with the self and the world. No matter if it is a digital world or reality, it is important to be aware of the designer’s position. Landscape design draws on the interactions of humans, materially, physically and spiritually. The sense of love in landscapes and nature holds the potential to embrace places phenomenally. And the idea of dwelling is the starting point where bodies and consciousness become wholly submerged in place. Topophilia overtakes the feeling of fear and anxiety from landscapes and enables love in interpreting everything in and from nature. National parks envisioned through humans’ being and dwelling mean taking off the “tourism-only tag”, and representing place beyond merely visual satisfaction.
Implications for landscape architecture students or designers are that digital tendencies are not the excuse for sensory impoverishment nor to design detached from place. As Pallasmaa stated,

"Experience, memory and imagination are qualitatively equal in our consciousness; we may be equally moved by something evoked by our memory or imagination as by an actual experience...the duty of education is to cultivate and support the human abilities of imagination and empathy, but the prevailing values of culture tend to discourage fantasy, suppress the sense, and petrify the boundary between the world and the self. The idea of sensory training is nowadays connected solely with artistic education proper, but the refinement of sensory literacy and sensory thinking has an irreplaceable value in all areas of human activity. (Pallasmaa, 2009, p. 132-134)"

To fully connect sensory experiences to design for nature, design with nature, and design in nature, three ways of mitigating are suggested: unity in design and place; liberty in design and representation; and dwelling in place and representation. Returning to the Diagram 1 at the very beginning of this thesis, the interrelationships of place, design and representation are phenomenal and sensational, which creates a overlaid realm to be explored and imagined.

**Unity in design and place**

Representation is a mirror of places, a reflection of design, and a pictorial vision of imaginative unities. We are sitting in a state of being-in-this-world which is associated with this phenomenal world (Heidegger, 1967). Phenomenological design not only guides humans’ actions over a superficial awareness but also transforms tourism actions with environmental influences. The unity of design and place places designers in a role of designing, embracing and interacting with nature, land and people. My findings suggest addressing a new vision to embrace nature in a healthy way physically and spiritually, as well as environmental wellbeing, for this generation as well as for future generations.
The awareness of caring for national parks will not be in a superficial representation, but in a feast of integrations and manifestations with senses, emotions and substances through time and space.

Liberty in design and representation
Parks for landscape designers can be widely defined and interpreted according to humans’ demands and understanding. Landscape architecture is challenged with understanding parks in an urban context and Olmsted planted a “wilderness” in the city which inspired landscape designers to reconfigure humans and nature in a harmonious dialogue. Central Park, inspired by Birkenhead Park in England, opens a new realm of urban utopia. With the desire of pursuing liberation and naturalism, Olmsted structured the concept of utopia into a radical idea of caring for public health as well as environmental health in parks. While the action of building parks leads landscape architects into the ideology of being place makers in modern landscapes, the entity of place making places landscape architecture into the role of a profession connecting “human needs and social functions” (Lange, 1900, p. 135).

Parks not only provide aesthetic services but also have a great power of transforming, healing, and renewing flesh and soul. What is more, Olmsted brought a sense of liberty in landscape that embraces all classes, cultures, and ages (Lange, 1900). Landscape architecture is more than creating scenic pictures for the eyes, but is intended to present a sense of freedom in the celebration of the creations on the Earth. No matter if it is to design for a park, or for a national park, freedom from the constructed and urbanised environment and the ability to design freely by using design and representation will bring more genuine expressions of place.

Dwelling in place and representation
Representation plays a role in communication, conveying the sequences of events, meanings and time (Potteiger, 1998). Through the experiments of being, sensing and making in Chapter 4, representation in place became haptic by using
sensory engagements to perceive this world. Model making in Chapter 4, as a phenomenal representation in form, texture, colour and size, communicates substances with water and light phenomenologically. The experience of the self and the world is therefore revealed through tactile sensations of touching and making.

The process of being, sensing, and making produces narratives. In the progress of forming narratives, readers and listeners are guided to make choices, to create their stories (Potteiger, 1998). For instance, Tibetans and Maori have different stories, beliefs and perceptions about the sacredness of water and the holiness of water. These stories have grown up in response to the being, sensing and making of these particular places.

Representation is visual and artistic which requires tangible figures and physical materials of places. Aesthetic conventions dictate how messages are conveyed through form, scale, portion, size and colour. At the same time, representation connotes words for meanings of the images of place (Tuan, 1974). For landscape architects, it is not merely about creating narratives in landscapes visually, but also designing and revealing narratives through representation (Potteiger, 1998). Dwelling in place and representation not only requires physical bodies’ presence at a place, but also encourages mind, soul and spirit to rest there and let imaginations hover within in the ways of representing place.

Future research:
Throughout my research I have been aware of the vastness of the fields of representation and design, particularly in terms of phenomenology, experience and place. There are a number of areas which would be useful to explore further:
• My research focused on two national settings, and it would be interesting to explore these ideas of place and representation in urban contexts;
• I have used the approaches as a generative aspect of the design process. There is also the potential to use these frames in design critique.
To conclude

The horizontal timeline of history indicates the evolution of design performance from the human hand to automation. The breakthrough of linking traditions and technologies needs the first step to embrace the conflicts between humans and science, the multi-sensory and the senseless, and the unseen and the seen phenomenal world, so that making design can progress. Today, the design richness in representation has become dynamic, but sensory engagements remain vague. The grey areas among place, representation and design present a new realm of the imagination on how humans embrace their wild landscapes. Design, theory and representation come together as one, to envision and to imagine.
References:


Abbott, M., & Bowring, J. (n.d.) Design as Laboratory: building value through design-directed research.


