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A Landscape of Paths: Seeing, Being, Moving, Making

Jessica Rae

A thesis submitted in partial fulfilment of the requirements
for the degree of Master of Landscape Architecture at
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Abstract: A thesis submitted in partial fulfilment of the requirements for the degree of Master of Landscape Architecture

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This thesis examines the relationship between walking, pathways and landscapes. It considers the use of walking as a tool for discovering landscape, the influence of pathways in engagement and questions the possibility that pathways, the tracks and walkways used, may act as an agent to enable a further, meaningful relationship with the landscape.

The research follows a structured series of investigations; each step is composed of practical walking explorations and reinforced by theoretical review. Four processes were used: seeing, being, moving, making.

A series of walking investigations were undertaken along the tracks of Banks Peninsula, east of the Canterbury Plains, NZ. These employ walking as a probing tool, an access point to observable interaction and as a method of generating information.

This research questions what is seen, how it is seen and what results from observation. It explores alternative ways of knowing the path and landscape through movement along and within the path. It questions how the walker comes to understand through the use of a range of senses and particular positions, before exploring the role of movement and making.

The studies reveal that there are limits to seeing; they reveal that how we know landscape and how we enter into it influences our responses – both in place and out, both now and after.

In opening possibilities for knowing and observing spaces through the path, this research finds enriched ideas of materiality and relationship that interrogate the relationship between walker and path.

Walking exploration reveals ways in which the landscape informs and alters perspectives, and opens up a designing that might be informed through experience within landscape.

The research shows how paths are more than static materials and lines on maps or ground. The nature of the walk and the variable forms of contact along a path determine experiences and direct knowing.

The research finds walking is a rich and diverse practice: its outcomes situate the walker, enable exploration and confirm particularities.

Walking can be used to clarify, to confirm and to provide a platform for discovery.

The research determines however a walk is undertaken, it is never passive or other. As articulated spaces, landscapes reveal rich and complex meanings that can be observed along the path or built into the path. This research utilises these ideas and proposes a way of conceptualising pathways and the relationship between walker and path.

The research provides a model which identifies how path trajectories and possible itineraries can be situated in an expanded field for paths and locates various path 'fields'.

The path, its exploration and design is relational: the path's place within landscape and design is an intersection, and not a binary 'this' or 'that'. A series of relational constructs is developed and expressed as a set of positional type diagrams which reveal path elements and conditions.

Four path characteristics are identified in this research which define paths: path is directional; path is negotiated and contingent; path is haptic, and path is immersive.

This research identifies many different ways of coming to know paths, formed as the walker-observer connects with things found both inside and outside the path, and suggests that there are a range of possibilities latent in the consideration of a different approach to seeing, knowing and moving along a path.

Keywords: walking as research; experiential pathways; observation; materiality; temporality; trajectory; itinerary; walking as design.

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Preface

As I walk what do I see and what do I experience?

This research began with a query: a moment when I found myself questioning what it is I truly observe and come to know of the landscapes within which I walk. This research is driven by an underlying desire to interrogate the ways in which landscape is seen and known by myself and by others, and how the form and methods used in landscape exploration influence the designing of places and sites.

Seeing and knowing matters: it matters to me, to my learning, to my designing, to my making of things and spaces. It matters to landscape architecture. As a discipline that designs space, that has a duty of care and an influence on others and their seeing, learning and thinking, determining how we see, explore and consequentially design, matters. Are there other ways of seeing, of coming to know landscape that can benefit how we interact and work within landscape? If site has a voice, how do we come to know it and find our place within it?

Landscape is not just a collection of things, it is physical and cultural, material and articulated. Complex in its substance and meaning, many things exist in the landscape that cannot be seen, that are intangible. A constructed view based on purely objective data is not complete. Objective methods of looking at landscape inform what is made known, but there are other ways of understanding spaces and these inform what we know of materials, process and meaning in new and enriched ways.

In her book, *The Language of Landscape*, Spirn critiques landscape literacy: describing how a person 'literate in landscape sees significance where an illiterate person sees nothing'. Most people read landscape shallowly, blind to connections among intimately related phenomena, oblivious to poetry, "they fail to act or act wrongly" (Spirn, 1998. p. 22). The crime is not in not-looking, rather it is not-seeing. Spirn is particularly critical of professionals who are specialists in their fields, who in "reading certain parts of landscape more deeply than other parts and shaping them more powerfully, often fail to understand landscape as a continuous whole" (Spirn, 1998. p. 23). Narrowness of knowledge, while providing depth in one area, leads to a fragmented view. In losing landscape literacy, whether by not seeing or seeing narrowly, we impoverish our understanding and weaken our interactions.

Spurr's words remind me acutely of the limitations found in relying on one viewpoint. As a trained field geologist and earth scientist I am aware of the values and particularities my past training can bring to my observations and research. Walking through site, exploring what is known and becomes known with visitation, is integral to my (past) investigative process. Site survey, material properties and process, morphology and landform change are familiar territory. The objective observation and recording of what is found, analysed and interpreted as product and process of research is ingrained in my thinking: my training has taught me to confirm and test rather than assume a matter as correct. To many this seems a direct contrast to the purposes and products of design but this is not so: my prior study has taught me to question the relationships between things and this is directly beneficial to design work. Design allows for exploration and experimentation with rigour equal to that of objective, scientific study. It is at once liberating and critical.

It is these elements of design that I seek to explore in my processes and interpretations, and so this research represents the carving of a new path for me as a researcher and observer. Like Wylie, I bring myself into the walk and "I am equally assembled and dispersed in this pathfinding process, I precipitate amid tones, topographies, and theoretical discourses" (Wylie, 2005, p. 245).

My walk notes reflect this precipitation of self upon landscape and landscape upon self. Part of that self that is expressed in this research: methods and processes which come naturally from my background training and work within the geosciences blend into the walks and therefore some walk descriptions and field notes used in this thesis contain tools and knowing borrowed and adapted from field ecology and geological survey.

The geosciences focus on understanding how physical landscapes are formed. Emphasis is placed on observing, describing and classifying the presence, properties and development of physical materials, including the formation and source origin of materials (genesis and provenance) and understanding change within the system (change over time, identifying process drivers of change). This way of understanding relationships is adapted and used to approach and describing experiential encounters where I, as walker-observer, am in relationship with landscape materials.

Research into the place of paths turns into a study of exploration process and reciprocal learning. Wylie's reasoning for undertaking his *Single Day's Walk* was "to activate a space and time within which (to)

engage with and explore issues of landscape, subjectivity and corporeality” (Wylie, 2005, p. 234). Taking a cue from Wylie, I decided to use walking as a tool to activate and explore my own avenues of seeing and knowing. To explore the line between definitive and objective surveying, and the latent possibility found in subjective exploring using design as research.

As an avid walker, walking is a natural vessel for exploration. It is something I do, we do, and which distinguishes us as human beings. Walking brings us to new places and experiences. Paths exist in all forms of landscape: every day I walk, I choose to take paths familiar and known and, occasionally, I venture out onto paths foreign and unknown. I walk to relax and to order my thoughts. I walk to obtain things and to explore that which I have not yet seen. Every day I am in the landscape, I walk within place, upon substrate, amongst things. I find myself asking whether my seeing and knowing is limited by my own situation. This questioning builds my research methods and helps me find my path along the path and within landscape.

The path becomes a tool for interrogating the line between objective and subjective, between the known and the unknown, between this and that. My movement along the path influences my interaction, my seeing and knowing, yet it is also informed by my own experience - this work is informed by both.

Contents

Abstract:	iii
Acknowledgments	v
Preface	vii
Contents	xi
List of Figures	xiii
List of Tables	xv
Introduction	1
1.1 Core Structure	2
1.2 Location of Research:	4
Seeing	5
2.1 The Practice of Seeing – Seeing along the Path	5
2.2 Sighting Walk Stage One – Seeing the Physical Material	7
2.3 Sighting Walk Stage Two – Seeing Thickly	12
2.4 Sighting Walk Stage Three – Plurality of Seeing	17
2.5 Combined Summary of Sighting Walks: An Evolving Process:	20
2.6 Outcomes and Implications – An Informed Theory of Seeing	22
Being	27
3.1 The Practice of Being – Other Senses in Observation	27
3.2 Sensing Walk Stage One - A Mind Map of the Walker	29
3.3 Sensing Walk Stage Two - Directed Walking	33
3.4 Sensing Walk Stage Three - Focussing In and Tuning Senses	36
3.5 Combined Summary of Sensing Walks:	40
3.6 Outcomes and Implications – An Informed Theory of Being	41
Moving	45
4.1 Moving as Knowing	45
4.2 Material Walk Stage One - Encountering Materials Along the Path	47
4.3 Material Walk Stage Two - An Itinerary of Materially Driven Pathways	52
4.4 Material Walk Stage Three - A Walkers' Interaction with Materials	58

4.5	Combined Summary of Material Walks	63
4.6	Outcomes and Implications – An Informed Theory of Moving	64
	Making	69
5.1	The Temporal as an Informant in Path Making	70
5.2	Temporal Walk Stage One – Deriving an Experiential Path	72
5.3	Temporal Walk Stage Two - Time found in Landscape	78
5.4	Temporal Walk Stage Three - Applying Score as a Conceptual Driver	83
5.5	Combined Summary of Temporal Walks	87
5.6	Outcomes and Implications – An Informed Theory of Making	89
	Discussion of Findings	95
6.1	A Thesis of Walking - A Subjective Process	95
6.2	The Subjective as Tangible and Material	97
6.3	Reviewing the Subjective: Role of Critical Review	98
6.4	A Critical Review of Outcomes	100
	Conclusions:	109
7.1	An Implied Theory of Paths	109
7.2	The Path as a Diagram/ Diagrams as Paths	110
7.3	An Expanded Field – Four Pathways	113
7.4	Four Proposed Path Types based on an Expanded Field	117
7.5	The Onward Journey(ing)	121
	References	124
	Appendices	131
	Appendix A	132
	A1: Schedule of walks	133
	A2: Map of Walking Exercises – A Lattice of Paths	134
	Appendix B	135
	B1: Field Survey – Example of Survey Outputs	136
	B2: Sensing Walk Two – Seeing Thickly	139
	B3: Sensing Walk Three – Sustained Seeing	139
	B4: Material Walk Two – Sustained Seeing	139
	Appendix C	155
	C1: Review - Walk Outcomes & Queries	156
	C2: Review – A Critical Walk	156

List of Figures

Figure 1: Map of key locations	p4
Figure 2: Location map - Sighting Walk One	p7
Figure 3: An exploratory pre-walk map	p8
Figure 4: Surface form and texture	p8
Figure 5: Existing track conditions	p9
Figure 6: Observed relationships	p10
Figure 7: Lines of processes and altered surface	p10
Figure 8: Location map - Sighting Walk Two	p12
Figure 9: Seeing thickly - Thick Sections	p14
Figure 10: Location map - Sighting Walk Three	p17
Figure 11: Same scene - Many surfaces	p18
Figure 12: Surface and surface contact	p23
Figure 13: Location map – Sensing Walk One	p29
Figure 14: Filters and lenses	p30
Figure 15: Location map - Sensing Walk Two	p33
Figure 16: Purposed walking & guided walks	p34
Figure 17: Location Map - Sensing Walk Three	p35
Figure 18: One sense opening observations	p37
Figure 19: Location map - Material Walk One	p46
Figure 20: A typology for a track across an exposed ridge	p50
Figure 21: Location Map - Material Walk Two	p53
Figure 22: Typological Operations	p54
Figure 23: Material Typing - Kennedy's Bush Track Reworked Line	p55
Figure 24: Location map - Material Walk Three	p59
Figure 25: Monument Line 1	p60
Figure 26: Experiential recording	p73
Figure 27: A stitch and fold in time	p74
Figure 28: Experiential folding - an altered spatial field	p75

Figure 29: The temporal in motion	p79
Figure 30: Traces of time seen when walking	p80
Figure 31: Landscape gives rhythm	p81
Figure 32: Placement and position into a sequence	p82
Figure 33: External rhythm gives score	p84
Figure 34: An abstracted image turned into itinerary	p85
Figure 35: Lessons from a fledgling bird – a moment in time	p90
Figure 36: The path viewed as a series of knots and threads	p112
Figure 37: An Expanded Field for Pathways	p115
Figure 38: A Networked Field for Pathways	p117
Figure 39: A Potential type of relating to pathways – On	p118
Figure 40: A Potential type of relating to pathways – And	p118
Figure 41: A Potential type of relating to pathways – In	p119
Figure 42: A Potential type of relating to pathways - With	p119

List of Tables

Table 1: Summary of Sighting walk stages and process	p21
Table 2: Summary of Sensing Walk stages and process	p40
Table 3: Track Materiality - Building typologies	p49
Table 4: Summary of Material Walk stages and process	p63
Table 5: Summary of Temporal Walk stages and process	p88
Table 6: A Series of questions and responses raised during review	p107

Chapter One:

Introduction

What is a path? Is it a line on a plan directing space, a series of movements shaping space, a progression of scenes, a restrictive boundary or something further?

The viewing and conceptualisation of landscape has implications for both the understanding of landscape and our interactions within it, just as the negotiation of space has influence on how that space is seen, considered, used and made (Meyer, 1994; Spirn, 1997). Paths are part of the vernacular landscape: used to pass through places and access spaces. What can a path become and what is made known through its study?

As a landscape architecture theorist, Elizabeth Meyer is principally concerned with the continued advancement and relevance of landscape architecture both in theory and practice. Meyer proposes methods and strategies for both the critical review of design practice and the theory which frames and refines the discipline. Her work is based on a two-fold, joint approach: a structure formed from study of site itself (through site visit and interpretation) and critique of the design discourse (theories, histories in motion in landscape design) (Meyer, 1997). Meyer's approach claims to open an expanded field for landscape architecture (Meyer, 1994) and her work forms the foundational frame for this research.

Meyer (1997) states that the scope and nature of research in the design fields is never pure, abstract, or objective—rather, as with theory, it is historical, situated, pragmatic, evolving, and cumulative. In this vein the idea of a path and its study is not to be approached from a place of isolation but with awareness of site condition and relationship with an other, echoing Meyer's view that site is specific, it is not bound or confined, rather it is contingent, ad hoc, responsive, and layered (Meyer, 1994, 1997).

Site specificity, according to the landscape architects Ellen Braae and Lisa Diedrich, is a “dynamic relational construct”: the existing is influenced by two agents in conversation with each other (Braae & Diedrich, 2012, p. 23). In the context of this research those agents are the walker and the path. This can be framed through Meyer's approach,

first in terms of the interrogation of a walker's interactions with and through a particular space and the resultant grounded knowing that is found through and around the path (Meyer, 2009). And second, through the possibilities inherent when observations and encounters are altered and intensified through movement and sense of displacement within the journey (Meyer, 1996).

Meyer (1991) describes how 'landscape architecture as critical inquiry can be an investigation through the formal language of design into the meaning of work relative to its situation and context (physical, intellectual, social, political, economic etc.). This thesis uses design as research to explore and critically consider the path, its location and its potential meaning and use.

This research asks how the path might be understood in the field of landscape architecture. It takes a discursive approach as it alternates between grounded studies and the negotiation of relevant theoretical positions. The next step in the investigation explores methodology.

1.1 Core Structure

With an interwoven nature, the research is structured around a sequence of observations and reviews that unfolds over time. The process begins with the most fundamental form of observation, that which is seen. The research then progresses from seeing to systematically explore alternate ways of coming to know: through being, moving and making. It concludes with a discussion of outcomes and implications for design theory.

The four stages of observation and interpretation are:

1. Seeing: Observing site through visual reading(s) of the tangible and physical-material.
2. Being: Exploring beyond the purely visual and observing site through embodied senses.
3. Moving: Strengthening knowing of site through physical negotiation of the path.
4. Making: Developing connections through situating and structuring the path.

These stages are shown in a timeline within Appendices (Appendix A1) and a collation of exercises explored in this research shown in a diagrammatic map (Appendix A2).

Landscape architecture is shaped by its ability to observe and respond to landscape and walking forms a strategy for interrogation. Walking is adopted as an investigative tool with data derived from walking

explorations. Landscape is observed and recorded as both a subject and an agent of response. The records obtained from exercises are used to highlight and frame interaction between the walker and landscape and form a rich inventory for future design exploration.

Establishing a Method for Walking and Data Collection:

The following describes a standardised process for obtaining and recording data during the walks explored in this thesis. Each walking exercise begins with a founding question and/or objective. The first step asks what is first found when walking. The second then returns for a second consideration, asking what else can be known. The final step seeks a deeper investigation that encourages a plurality of observation.

In undertaking visual survey the track is treated like a transect line with base survey data being collected at equidistant points along the track. Survey focusses on description of key features, experiences and a grounded examination of topographical data.

Key features or areas/items of potential interest such as prominent natural features, look out points, or other material features were identified from initial base mapping prior to undertaking the walk. Data was recorded using standard visual survey methods (looking, noting, image collection/development, walk notes/journaling). A sample of visual survey notes are found in the Appendices (Appendix B).

Notes were taken throughout the duration of the walk, with additional notes collected at specific features or points of interest or interaction. 'Post-walk' notes were compiled during a review of walking records. After the completion of the walk, the exercise and resulting records were reviewed and explored further in various studio exercises.

For seeing exercises these activities centre on further visual explorations of the path through mapping, sketching etc. Being exercises utilise other forms of sensing to explore and record, in addition to the information gained through the use visual tools. Material walks build on observation methods through the development of a more haptic approach to observing, and the exploration of movement. The final set of exercises investigate how paths might be made through a study of the temporal and explore how paths are formed using designerly methods.

While there was an overall attention to consistency, individual walks often required some unique records.

1.2 Location of Research:

All walking exercises are undertaken on the tracks of Banks Peninsula, located just east of the South Island's Canterbury Plains, New Zealand. Figure 1 provides a map of key locations.

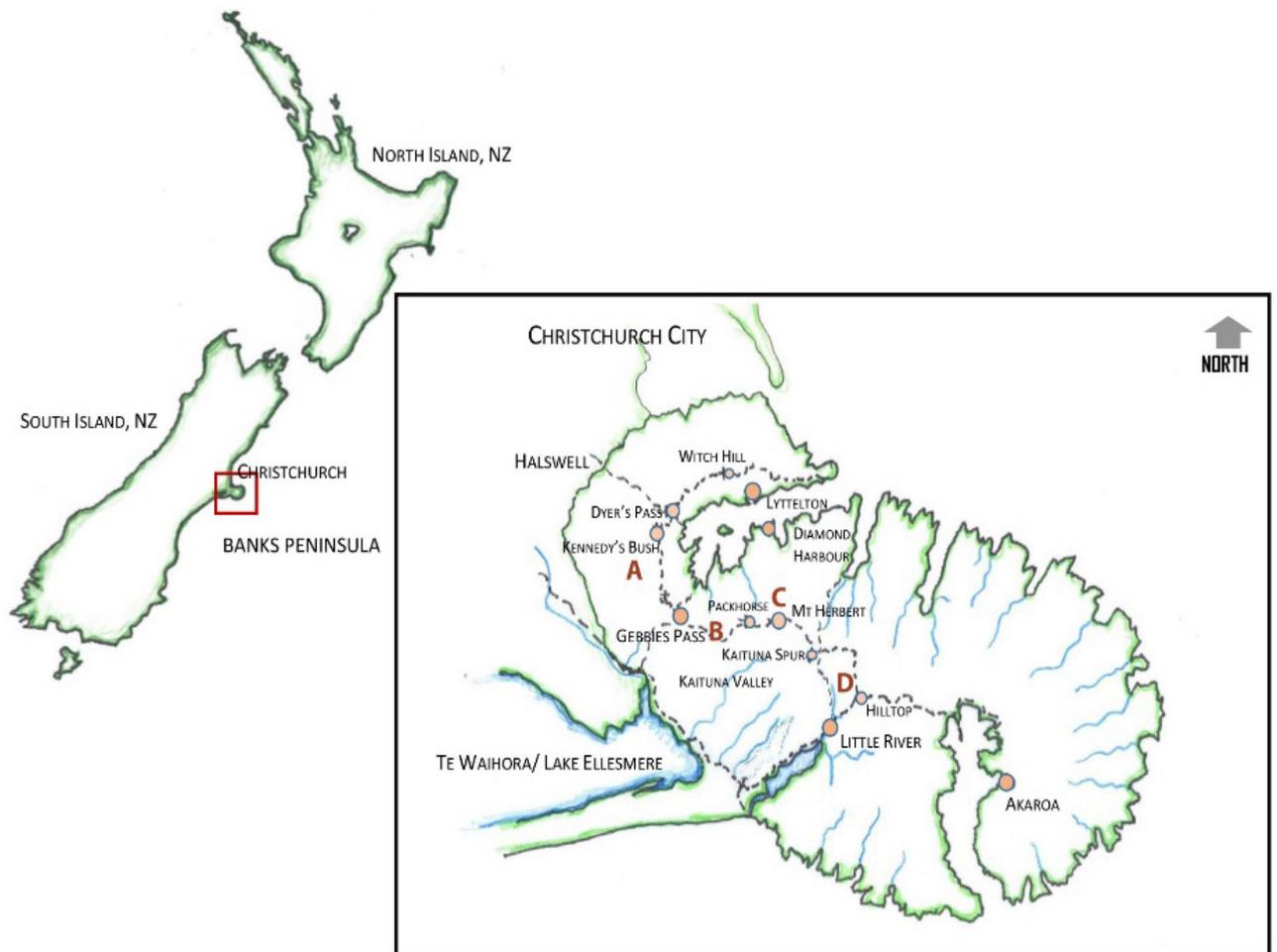


Figure 1: Map showing key locations. Walking exercises are undertaken across a range of tracks, centred on four broad regions of Banks Peninsula: the southern extent of the Port Hills in the vicinity of the Crater Rim Track and adjacent routes (A); the valleys and ridges around Kaituna Pass west of Mt Bradley (B); the tracks giving access to Mt Herbert, the highest point of the Peninsula (C); and the reserves east of Hilltop adjacent to the main Akaroa Road (D).

[IMAGE AUTHOR'S OWN: STUDY LOCATION MAP]

Walking exercises were completed in a successive process, as a series of alternating steps that mirror in written form Anthropologist Tim Ingold's directive for finding one's way where "we know as we go not before we go" (Ingold, 2000, p. 230).

This research therefore begins with a first single step.

Chapter Two

Seeing

According to Meyer, landscape's evaluative mechanisms should be contingent, situated and particular (Meyer, 1997). A true reading of site must rely not only on knowledge of the historical context of design and designer, but also on a grounded, primary experience (Meyer, 1994). No two spaces or places are the same, nor is one site the same over time. The actual materials and making must be sighted and design situated in the real and particular. A site and its prior forms (natural and designed) can be researched in studio through plans and maps and written histories but, to truly know what it is that is being studied, the landscape must be seen and experienced. Knowledge needs to be grounded in place. It is this immediate experience of site that unifies theoretical knowing and specifics of site (Meyer, 1994) and where the first step is placed.

2.1 The Practice of Seeing – Seeing along the Path

The journey begins with 'sighting walks', where the focus of study is seeing: what is seen when walking a path, what is seen from the path and how the path itself might be viewed. Landscape Architect Ben Jacks describes 'sighting' as a way of seeing landscape with all its layers, both material and temporal (Jacks, 2004). In sighting walks, walking is explored as a way of seeing and accessing the full extent of landscape in its contextual and situational positioning. The walks aim to examine the materiality of the path, as it is seen and as it might be made known through visual exploration; seeing what the site was and what it is at present.

The walks seek to explore what the walker sees when approaching and using the path, how the walker's seeing might inform knowledge of the path and question what products and outcomes result from seeing. Are there alternative ways of seeing and knowing? How might tools and methods for seeing be explored to enrich the walker's observation and experience?

Seeing begins with a study of the immediate: Sighting Walk One which explores the physical and the tangible, before progressing into richer, more interpretive and analytical ways of observing. The first stage

investigates what might be termed visual inventory: what is recorded, how each material item might be seen to relate to others, and explores the idea of surfaces and horizons – situating materials within descriptive and relational layers. The first stage observes the present surface.

The second stage, Sighting Walk Two, explores these ideas further in questioning the context of what is seen and whether what is seen comprises a full inventory of the physical/material. What is not seen? Is the visual record only seen in part? The second stage seeks to recognise the role of change over time and to look for places and spaces where marks and materials accumulate revealing a sedimentation of process and relationship. This deeper looking uses the principle of ‘thickness’ of place.

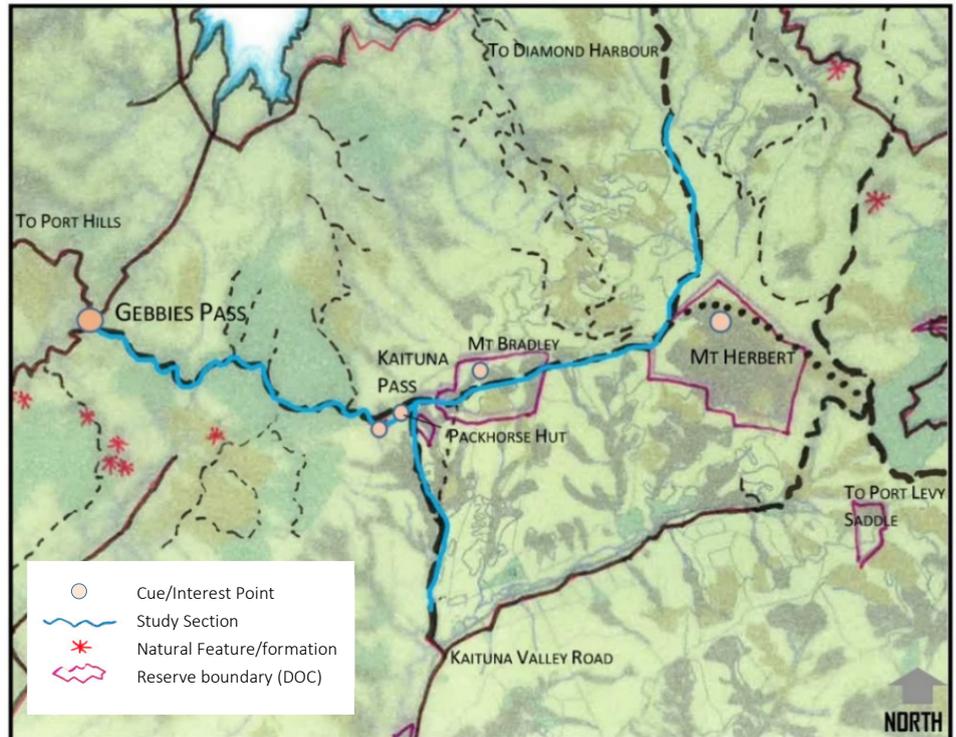
The third and final stage of sighting walks (Sighting Walk Three) aims to review what is seen when the scene is revisited. How is visual inventory altered or added to when the same thing is seen more than once? Can the walker see more, or see differently when looking again and again? This stage is about the sustained view.

2.2 Sighting Walk Stage One – Seeing the Physical Material

What is seen when walking? The first sighting walk began primarily as a visual survey undertaken to create a catalogue of things as seen when walking. Walking and surveying activity as visual inventory was undertaken along tracks between Gebbies Pass and the north western upper Kaituna Valley (Figure 2).

Figure 2: Location map - Sighting Walk One.
This walking exercise provides an exemplar of visual survey and sighting techniques. Key activities described within this study occurred on tracks in the vicinity of the Kaituna Pass. Blue line indicates walk route.

[IMAGE AUTHOR'S OWN: GEBBIES PASS – KAITUNA PASS LOCATION MAP]



In addition to a general survey of things seen from the path, the first sighting walk also identified and observed relationships between things (signs of physical processes e.g. forms/structures from erosion or disposition or other factors i.e. seed dispersal) and clues to the relationship of the walker with the landscape (markers, footprints, track wear etc.). Relationships were identified according to interpretation of origins, influence and physical descriptors (form, process, extent, related layers/surfaces in association with observed materials).

Recorded Observations

Sighting grounds the walker in real materials, confirming what is physically present in landscape. Many of the features seen and recorded when walking the track were not identified in pre-walk mapping and imaging (Figure 3, over page), being too fine in scale to appear on existing maps or remaining unclear in aerial imagery.



Figure 3: An exploratory pre-walk map. An array of existing data is available which covers the study area including aerial photos, geological maps, topographical maps, NZLRI land use data. From this varied range of sources key features and locations are mapped as a set of individual layers (vegetation, hydrological features, roads and paths, land use types, geological features, outlooks). These are then compiled into a single map (pictured).

[IMAGE AUTHOR'S OWN: GEBBIES PASS ANALYTICAL MAP – PACKHORSE HUT LAYERS VS. THICKNESSES. ORIGINAL SCALE 1:5000 @A3]

Walking reveals textures, materials and surfaces not evident at the scale of previewed maps or images. The path positions the walker, providing orientation and perspective at a range of scales and it places the viewer at the interface of materials. Forms and features become evident, surface roughness tangible, relics and fragments encountered as the walker progresses (Figure 4).



Figure 4: Surface form and texture. Photos are used in all survey work as a visual record/catalogue of forms, features, surfaces, and track sections. For the first sighting walk particular interest was given to the identification of landforms and material interfaces. As the track progresses and new views are opened a quick assessment reveals much about track form and surrounding materials not seen in a plan view. In the top picture the ridgeline reveals steepness, the track winds up a rough slope, skirting fallen blocks of volcanic rock originating from a fractured mass. The second photo shows the rough texture of insitu rock; the path edges past. The final photo shows a tree wrapped in barbed wire – invisible until nearby and giving evidence of human intervention.

[ALL PHOTOS AUTHOR'S OWN: TAKEN ON MT BRADLEY/PACK HORSE SECTION OF BANKS PENINSULA SUMMIT TRACK IN VICINITY OF PACKHORSE HUT]

Walking also exposes the walker to current conditions of the path and the surrounding landscape: fresh marks from slips are seen, rain scour and gullies traversed, rock falls negotiated and vegetation changes observed. Such changes reveal how materials alter over time, transforming the tracks' appearance and character (Figure 5).

Figure 5: Existing track conditions.
Weather systems, land use activities and natural events over time alter track form and conditions. While these may be estimated from initial reconnaissance and aerial techniques they are easily identified and made tangible when walking the track.

[ALL PHOTOS AUTHOR'S OWN. IMAGES LEFT TO RIGHT: MT BRADLEY TRACK SOUTH OF PACK HORSE HUT, FARMLAND CROSSED EN ROUTE FROM KAITUNA VALLEY TO THE PACKHORSE HUT, ROCK FALL AT THE REMARKABLES, ON THE PACKHORSE HUT TRACK TO GEBBIES PASS.]



Variable conditions draw the walker's attention to the path, eyes once fixed on far views being forced to refocus on the immediate surface.

A close examination of physical materials revealed relationships between objects and provided clues to formation processes and potential change. Time and change are evident as an apple core discarded becomes a tree and old stockyards now abandoned lie overgrown.

The walk revealed a complex layering of interwoven materials and processes. Seen from a distance, these physical features form masses and unified collections. Forest blankets the land surface, the form of individual trees blended into solid mass.

Coming nearer, observations reveal materials within materials (plants find niches in which to sprout and grow) or materials appear to overlap and merge as a thin veneer spreading over another surface like moss emerging in the shade.

Figure 6 (over page) reveals different surfaces and associations as observed along the path.

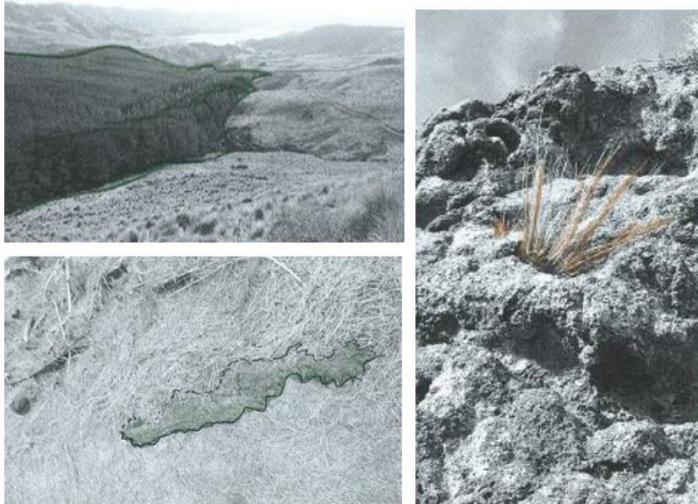


Figure 6: Observed relationships. Scale influences what is seen and how those elements appear. What appears as a single surface or mass may be formed of many individual elements which when seen en masse form a single group (e.g. a forest front). Other materials and surfaces form within or in association with other elements. Photos provide a record of site (seeing surface skin), however drawing and diagramming can help us look deeper, beyond the surface. Drawing is used as a tool for extraction, exploration and for highlighting material changes, increasing awareness of depth, and signalling cues of process.

IMAGES AUTHOR'S OWN: CLOCKWISE FROM TOP LEFT – MCQUEEN FOREST; TUSOCK GROWING IN A CLEFT; MOSS GROWS IN A DAMP PATH WITHIN THE PINE FOREST, FIELD WALKS 1/ GEBBIES PASS -PACKHORSE HUT TRACK)

With a critical eye, past surfaces are interpreted. As the path progresses, careful observation of surfaces and adjacencies reveal hidden layers and features; products and marks provide traces and hint at conditions of landscape both past and present.

Movement and action create visible lines across surfaces. A cut slope in the path reveals a buried horizon – a former surface now intersected and exposed. This thin trace is a line of burnt soil and reveals a past forest fire. Once burnt vegetation and topsoil are now buried; the only evidence a small fragment of a past surface.

On the present surface of the path other lines were observed. Hard layers impede drainage, wet earth and constant foot falls wear out a trough in which water accumulates, in avoiding the mire a new path is formed as vegetation wears away.

The path angles across a slope, walkers follow this line and the slope slowly erodes leaving a pocked line along the trail (Figure 7).

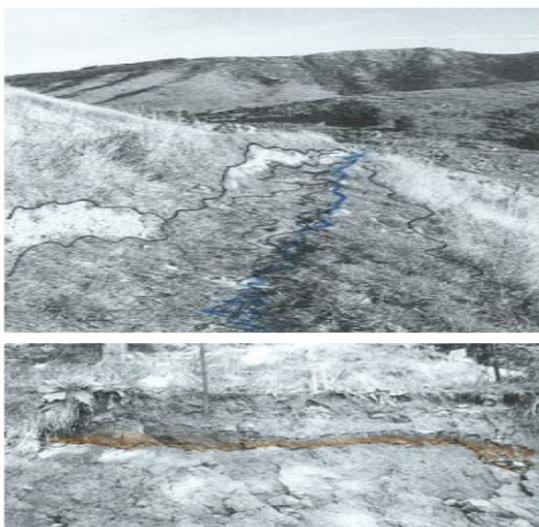


Figure 7: Lines of processes and altered surface. The surface is always changing. Human interactions, natural processes alter surfaces and leave traces of change. Change is seen along the path and because of the path. The current surface adapts to use and environmental conditions evident in erosions and compaction, constant wear forms a hardened line (top image). Path formation also reveals the past. A burnt layer of soil is seen where the path cuts through a steep slope and the bank is viewed adjacent to the path (bottom image).

IMAGES AUTHOR'S OWN: TOP – IMPEDED DRAINAGE AND WEAR ALONG THE TRACK; BOTTOM – A REMNANT OF PAST BURNING AS SEEN IN A TRACKSIDE CUTTING, PACKHORSE TRACK. PHOTOS, DIAGRAMS AND SKETCHES PRODUCED DURING FIELD WORK AND AS PART OF SITE EXPLORATION (FIELD WALKS 1/ GEBBIES PASS -PACKHORSE HUT TRACK)

Insights Gained:

Viewing and recording physical features can allow a dynamic reading of landscape. Layered plans may provide an idea of surface material and distribution but the richest and most valuable information comes from field visit and section representations. The walker is exposed to unique spatial forms and material histories which offer a narrative of emplacement and reconfiguration.

Visual survey enables the observer to find and identify various landforms and structures: volumes and collections made by distinctive processes (deposition, erosion, transformation). The active layer seen as an exposed surface in constant flux. Processes may bury or uncover, penetrate or separate: materials are constantly changing and the relationship between them is complex. The chronological and physical/material layering of materials is more fluently communicated through viewing sections and cut through (in field or as drawn up sections). Past surfaces can be seen in layering, and form horizon lines of time seen in solid materials.

Layers are seen as interfaces: they are not static, not finite and not isolated in space. The presence of materials in one place may prove existence but cannot confirm extent. The walker might need multiple views, across a wide area and across multiple time scales to observe distribution. A surface or material may also vary in its thickness and spread. If edge conditions vary compared to internal/core conditions how is this observed from the path? The second stage of sighting walks seeks to provide insight into how layers and thickness might be observed and made tangible.

2.3 Sighting Walk Stage Two – Seeing Thickly

This second stage of walking questions what else can be seen. It seeks to open up the small hints of occupation and change that are observed when walking and to explore how these might be further understood. What does such a layered and complex landscape truly look like on the ground, is it a series of surfaces and individual layers or something else – a blended compilation? How do we represent this in field records, design process and communication to others?

The first walk stage explores the landscape of the upper Kaituna Valley, this second stage continues in an adjacent area with track observations and records sourced from walking the upper reaches of the Kaituna Valley and over the ridgeline down toward the Lyttelton Harbour adjacent to Mt Herbert (Figure 8).

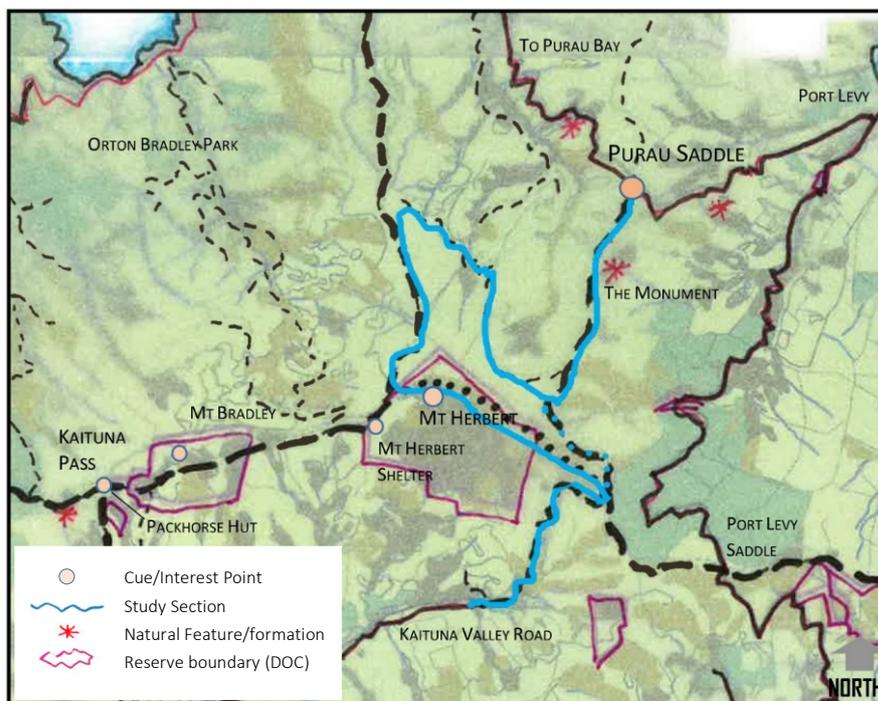


Figure 8: Location map - Sighting Walk Two. Observations were recorded along a series of tracks providing a transect of the upper Kaituna Valley/Mt Herbert ridgeline. Blue line indicates walk route.

[IMAGE AUTHOR'S OWN: GEBBIES PASS – KAITUNA PASS LOCATION MAP]

Observations extend beyond the boundaries of the track line and the view shed, as the walker looks deeper past immediate surfaces.

Walking notes and sketches are interpretive; informed by awareness of materials, visualisation of hidden processes, and the linking of recorded cues and traces. As connections are established between points of view the landscape becomes more than a series of lines, refined colours and sharp divisions. It is seen as a truly messy aesthetic, a network of interrelated, overlapped and interconnected materials. This thickened view of the path with its materials and surfaces results in a

sedimentation of materials, translated into layers and applied as a deepened ink wash is applied and reapplied onto paper.

A Precedent Methodology for Thick Seeing:

The idea of seeing thickly, of looking and seeing the material and immaterial, is influenced by the work of architects Lawrence Halprin and Richard Haag. Halprin provides an expansive conceptual seeing, while the terminology and structure is adapted from Haag.

Halprin saw landscape architecture as more than ecology or spatial arrangement and art, but as social activation. Design of place was seen as both physical and cultural (Howett, 1998). In his process, Halprin saw materials and process as organic, iterative, embodying, and attempted to “trace the natural and cultural evolution of the site from its beginnings, in order to establish context within which new design decisions were part of a dynamic change occurring over eons of time” (Howett, 1998, p. 89).

Landscape is a social construct with a reworked interface, evolving materials and structure. In looking at site or in approaching design the immaterial cannot be separated from the material as they develop together over time as a complex and contemporaneous series.

Site development might be seen to leave traces – marks, memories or hidden histories. Haag describes and terms such histories in thick and thin descriptions (Way, 2013). Rather than remove or hide the past, it is opened and liberated through exploration and design. Site is read beyond its immediate, visual surface; the recorder of site prompted to move deeper, beyond a purely physical layering and shifting into the subsurface and the unseen.

This stage of sighting walks seeks to see and map thickly. Thick sections follow Haag's methods of reading materials and history as an active layer of site (Way, 2013). They seek to reinterpret materials and process as thickened layers and show these in section rather than a bird's eye view. Historical layers are presented contemporaneously with current materials. The viewer looks beneath and through landscape's skin. Observations and descriptions are extended from sections across the landscape and translated into a transect of the path.

Thick descriptions explore the sedimentation of site. Using tools and methods inherited from geomorphology and stratigraphy, the observer is able to explore structures, to read and communicate complex layering. Maps, sections and conventional notation all combine to give a full story: revealing the relative thicknesses of site as layers (material, social, ecological) sketched out as observed and mapped occurrences

seen from the field. Localities and their descriptions form a series of maps and sections based on field sketches and notes.

Recorded Observations

As the walker follows the path inventory is recorded (as in the first stage). Each observation results in more than a visual record as the walker seeks to interpret each material layer in relation to its context and potential origin (Figure 9).

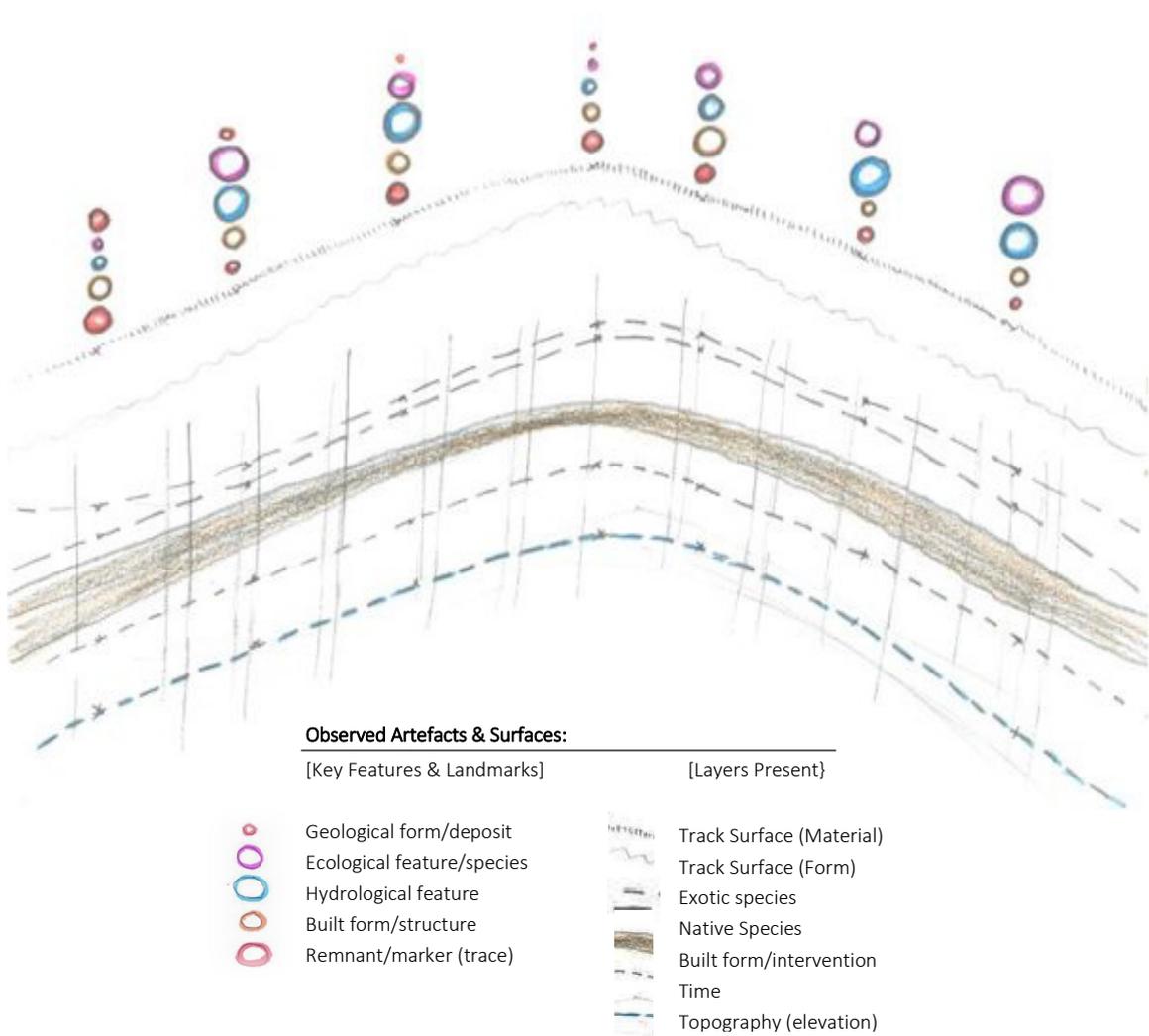


Figure 9: Seeing thickly - Thick Sections. Landscape exploration and the recording of layers results in a series of thickening surfaces. Things are portrayed based on their relationship with other things (the track surface and other layers or features). As items are observed the occurrence is marked upon the map and a relative volume assigned based on apparent presence (impact of experience, dominance compared to other features, continuance along track).

[IMAGES AUTHOR'S OWN: THICK SECTIONS UPPER KAITUNA TRACK. FIELD BOOK AND STUDIO EXERCISES -TRACK SECTIONS AND MAP]

Each material observation and its locality is recorded in a graphic section, with multiple sections located along a track length. Appendix B2 outlines the notation and other tools used in this exercise. At each observation point a range of variables are observed and recorded providing a representation of material history, its temporal position and its relationship with surrounding materials (younger materials/newer processes above older). Each section provides an alternative way of representing history and materials: materials are viewed within a temporal context as well as a spatial setting.

Found materials and process cues are able to be placed on a running inventory line, placed according to location found along the track and thickness (layering of physical/social traces). Sections and sketches reveal weighting and hierarchies – volumes and occurrences of materials interpreted as thickened lines based on time and contextual relationship. Materials are weighted according to observed presence. Increasing visibility appears as thicker marks and lines.

In collecting this type of data over the entirety of a walk, an image of material coverage is produced for the site. The walker is able to form a picture of how a material might continue or abate, and how each locality relates to other localities seen across the wider landscape.

Insights gained:

When viewing maps and looking at one particular geographic point, the upper most surface or the top horizon may dominate the visual frame. Transparencies can reveal other layering but it is difficult to read hierarchies or see how layers relate to each other. When mapping paths, the surface layer of the track, being the most obvious threatens to dominate the material ecology. Subsurface layers, or adjacent materials may however be more prevalent across a site or offer more potential for design. In many viewed surfaces – the track itself is artificial, a skin which covers real landscape. To focus on track surface or similar altered form represents a false view of landscape and its materials. Sections reveal depth and allow the viewer to see beneath the surface skin in an imaginative or subjective interpretation of possibilities. The surface is one story, a part of a greater whole. A richer history is waiting to be revealed.

The production of thick sections involves several stages and layers of site reading and analysis and relies upon both interpretative skills and an extensive pre-existing knowledge base. The ability to see the path as a layered complex or to interpret and expand fragments of materials into a wider integrated whole requires awareness of materials (where and how they might be sourced and how they might behave), and the ability

to conceptualise how layers might be placed across wide spaces and time frames. This exercise showed the value of establishing a broad foundation of knowledge (both historical and theoretical) and the necessity of a thorough grounding in physical space (beyond convention limits of the view shed).

The walker-observer's record and site knowledge is more clearly informed with multiple views and approaches, where walking records overlap and the path is revisited. A once-off view may provide one particular view or knowledge of site but re-looking and re-exploring site confirmed and extended knowledge further. In one visit, in looking at one scene and from one observational exercise a certain perspective results. This may be informed or altered with subsequent looking. This implies not only is the walkers knowing and familiarity of the path subject to change with experience but it also questions whether the same object can be viewed in multiple ways. The third sighting walk seeks to explore whether one image or scene can tell many stories if looked at in different ways and if so what becomes known?

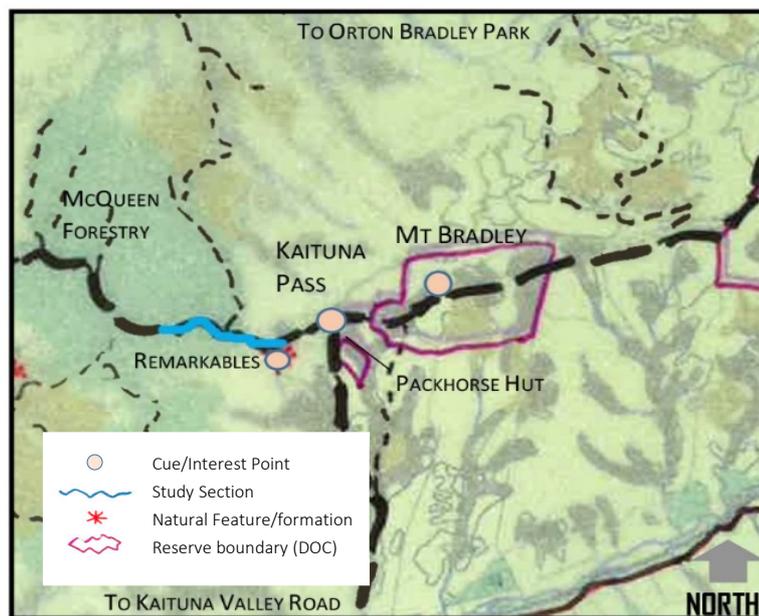
2.4 Sighting Walk Stage Three – Plurality of Seeing

Removal, erosion, attrition: What do we see on first observing? What do we see when looking again? For sighting walk three, the objective is to observe landscape with an aim of re-looking at surface and the immediate, and expanding that which is first seen.

The exercise proposes to explore plurality through multiple observations: the observer sees and records what is observed (a first viewing), then repeats the process. This stage of sighting exercises follows on from its predecessors. As with the first walking stage, data is recorded along the track between Gebbies Pass and Mt Bradley, in the vicinity of the Packhorse Hut (Figure 10) and follows a similar process.

Figure 10: Location map - Sighting Walk Three. A single location was selected for the third and final sighting walk, as site for sustained seeing. Blue line indicates walk route.

[IMAGE AUTHOR'S OWN: PACKHORSE TRACK & THE REMARKABLES LOCATION MAP]



Survey exercises are repeated in an attempt to see if looking more than once altered the field of view. Data collected in the first stage of sighting walks is used to review and frame observations. The same localities and observations are recorded; however, in this instance the observer is armed with a rich back catalogue of information and provided the freedom to indulge in more detailed, timely observations. This sustained seeing allowed the observation of things 'other-than'. For example those things that may not normally be thought about or looked for by the walker unfamiliar with site or restricted by time (surprise events or discovery of materials or local species).

Recorded Observations:

The process of seeing and re-seeing utilises 'plural looking', where observations are recorded at different moments in time: the walker returns to observe and record from a fixed position (viewing the scene from the same geographic position in a repeat visit or in a repeated action). The process aims to reveal comparative changes in track conditions which might be associated with physical process and ageing, or changes in cultural use. In revisiting a site new evidence of others' uses might appear which may have been hidden in a previous visit.

In revisiting the same section of track, numerous changes were noticed, ranging from seasonal changes in flora and fauna through to track diversions based on adjacent land use (where the track traverses an active forestry block). The most prominent source of change in records was however not seen in the physical landscape itself, but in the interpretive understanding of what was seen.

In approaching various localities, previous knowledge and insights gained as part of prior studies had a strong influence on looking and observing. This alternative looking utilised what is termed here as 'plural seeing'. Using this tool or mode of seeing, the observer attempts to look at a scene or site through a new lens. Theoretical or historical knowledge can form a lens and result in new seeing. With each lens, a new record results and a series of undertakings builds up a set of records (Figure 11).



Figure 11: Same scene - Many surfaces. The same scene is viewed but six different layers are recorded. The first look involved photographing and describing the scene (standard field survey as part of the first stage of sighting walks). This second look was undertaken with a specific focus and a sketch of various surfaces created: (clockwise from top left) Felt temperate changes in materials; Native vs. Exotic species or elements (warm colours insitu/native vs. cool colours exotic or foreign elements); textural changes; structural lines seen in topology and form); removal of cultural features ('erasing' man-made elements); lines and mass (material volume and form creates linear patterns of process and movement).

[IMAGE AUTHOR'S OWN: SKETCH – POINT, LINE, SURFACE, LANDSCAPE & THE HIDDEN? GEBBIES PASS TO PACKHORSE HUT]

When looking at a scene it is easy to see whole pictures and lose sight of smaller details. In walking through landscape, in sketching images and analysing photographs back in studio, cues were sought that allowed a deeper look at landscape – uncovering the subsurface and revealing the unseen or overlooked. The same scene offers different interpretations and layers of seeing depending on the focus. Detailed observation, the recording of seemingly insignificant items (a checklist provides a list of potential items/processes to look for), an awareness of site history and time (dwelt on site and used to observe) all aid seeing. Using field tools and a kit of parts checklist – (point line surface landscape process) enhanced observation potential and enabled detailed recording. This walk is described in Appendix B3 (Sustained Seeing).

Insights gained:

Change over time (seen in climate, lighting, materials etc.) is captured when returning and observing again. Re-looking under new conditions also results in seeing new things. A prolonged view may also result in exposure to new observations. With time things begin to look different, active processes and living entities may shift in or out of the picture.

Sustained looking extends knowledge of materials, relationships and constructs, and informs learning and observational ability. In this exercise walking was informed by prior knowledge and experience gained on previous walks. This enabled attention to be focussed on alternative ways of looking and the seeing of differences in landscape.

Repetition and sustained seeing also increased the familiarity of walker with site and process with various consequences (i.e. strengthened existing knowledge, increased security in knowing routes and materials, increased assumptions about conditions, decrease in anticipation). Does this familiarity add to or detract from observational practice? The role of familiarity and its influence on observational practice is explored in subsequent studies (see Chapter 3 Being).

Re-looking and focusing on alternative ways of seeing are learnt behaviours rather than habitual actions. Specific prompts might be used to engage the observer and enable plural seeing: a list of questions or a checklist of objectives might be used to stimulate different types of visual inquiry, alter perceptions or re-orient view resulting in new directives for seeing. Objectives might include the identification and recording of particular surfaces and materials or finding processes of change (observing what is seen at present and probing what could be seen in the future).

The visual record references a particular point in time, the site as it was found at the time of recording. To look at a scene along the track and see what currently exists and how it could be positioned involves careful observation and a measure of scenario building. Design query enables an abstracted image to be built which examines the existing, explores the seen and the potentially seen (if this, then this, or this, and this). Questions are used to probe perspectives, relationships and relevance informing seeing (e.g. what is there, what may have been here, what is the link between A & B?).

2.5 Combined Summary of Sighting Walks: An Evolving Process:

Walking allows the walker to gain first-hand knowledge of site materials and processes. Sighting enables confirmation and clarification of what has been found in previous accounts (past maps, written histories and guides) and allows for a responsive engagement with the path. Walking is a subjective and adaptive tool. Like the landscape itself, the path and the walker are subject to local conditions. The ways in which the walker moves along the path alters with interaction and this informs observations. While an initial methodology for walking was proposed for these walking exercises, the process was adapted in accordance with the needs of the exercise, the encounters and experience of the walker-observer and the interaction with the path. The following table (Table 1 over page) summarises the steps undertaken during these sighting walks and collates the products, processes and tools (identified inventory) that were established during the walking stages.

Sighting Walks					
Step	Survey Activities		Inventory		
	Aim	Inventory Goals	Task	Resource	
Stage 1: Physical and Tangible - Surfaces					
Observe and catalogue physical materials viewed along the path					
What can the walker see?	Step 1.	Prepare a field guide/map: Identify materials and structures	Field guide and base map, update commentary and gather existing information	Base Mapping Literature review Desk survey	Existing maps, literature review, historic accounts used to form field guide
	Step 2.	Describe what is seen (notes/sketches)	Compile comprehensive track notes and detailed observations	Field mapping & survey Sighting, Drawing Writing	Base map, guide/notes
	Step 3.	Analyse observations – what is seen? What is not seen?	Compile a catalogue of materials and form types (material inventory)	In field/Studio: Interpretation & Review Identify processes and relationships	Format inventory, walk records and maps
Stage 2: Looking Deeper - Thicknesses					
Observe materials and adjacencies - link to formation processes and spread					
What is seen when looking thickly?	Step 4.	Undertake a visual survey (multiple sites along the path)	Establish base maps and material inventory	Field Mapping & Survey Inventory recording	Field guide and pre-walk notes
	Step 5.	Review inventory and identify trends and commonalities: Identify relationships.	Informed inventory: Identify links across space/time, Changes over time	Analyse observed materials and processes. Consider formation processes and change over time.	Field maps, material inventory, historical accounts and records.
	Step 6.	Outline possible scenarios and potentials for site change and material development	Diagrams of time & relationship, exploratory sketches and sections	Analyse and explore relationships – what is revealed? Hidden?	Field sketches, notes, maps and material inventory
Stage 3: Plural Looking – Sustained Seeing					
Look again and confirm what is known and what becomes known after first seeing					
What is seen when looking more than once?	Step 7.	Identify a site and undertake a visual survey	Establish material inventory	Record observations – what materials are seen? Compile walk notes and maps	Field notes, base map
	Step 8.	Re-visit site: re-look and re-describe what is seen	Establish a new material inventory	Record observations, pay attention to what has changed on site and in observations	Field notes, base map
	Step 9.	Analyse observations and identify new information, new insights or changes in process	Annotated sketches, maps and walk notes.	Compare and contrast two surveys and identify differences. Identify why differences occur.	Walk notes, maps/sketches taken from prior field surveys.

Table 1: Summary of Sighting Walk stages and process. This table outlines a process for seeing the path. It collates sighting exercises and presents a succession of steps as a collective process.

2.6 Outcomes and Implications – An Informed Theory of Seeing

Site walking and theoretical framing are bound together in a reciprocal relationship. Primary experience is mediated by observation and by knowledge of historical situation, past experience and theoretical learning. Theory is respectively fortified by grounded practice and observation. This follows Meyer's approach where "theoretical work should be contingent, particular and situated... Landscape theory must rely on the specific, not the general" (Meyer, 1997, p. 167). Sighting walks seek to reveal particularities of site. Meaning and form are first found in site as it is seen.

In looking at landscape, a vast collection of materials and processes is quickly seen. A rich variety of observed things. A constantly changing scene where materials are seen with time and process. Geographer Doreen Massey writes of this landscape and its provenance: landscape formed of materials which do not exist in a single time and place, where materials are emigrant. What is seen is a small piece of nature, "endlessly, geographically mobile" (Massey, 2006, p. 35). In this context how does the walker see the specific, if what they see is in a process of change, if they only see in part?

How materials might be seen to be

Landscape Architect Bernard Lassus describes seeing as an encounter with site that moves "beyond first ignorance, with its feeling of absence". As the observer spends time within site, they "become impregnated with site" (Jacobs, 2000, p. 325). Slow time, deep observation, long visits through different hours and weathers; living even a few moments with site allows for expansion, not just of inventory but also the observers' relationship with site and their understanding of its possibilities.

To look thickly or deeply requires intent: the intention to see new things and to look differently. Alternative seeing is enabled by a new frame of knowing, an active change of lenses and the use of interpretive skills. The result is an enriched understanding what is being seen not just at face value or at one scale but across scales, time periods and material forms. To see in new ways requires a conscious shift.

To Ingold, an exploration of seeing begins with understanding how we see 'things', and expands to include seeing how things relate to other things. This is a way of seeing that looks more fundamentally at materials and considers how those things themselves are conceptualised. Ingold's concept of materiality help to frame seeing and

challenges the viewer to consider materials not as passive individual objects but as intertwined things in constant dynamic contact. Materials are the source of objects, in partnership with process in a meeting of surfaces, an interface which connects material and material (Ingold, 2008b).

In looking at materials this way, it is understood that nothing is empty: there is no void, no dominant thing; rather there is substance and materials, the things which exist in their “thinging” (Heidegger, 1971; Ingold, 2008b, p. 8). Materials have value, not as objects and non-objects, but as the foundation of all things. The world is seen as a place of things physical and non-physical or ‘other’; where materiality is ‘the stuff of materials’, the ‘flow of matter’, the tangible and intangible (Deleuze & Guattari, 2004; Ingold, 2008b).

Ingold’s world is one where materials are the substance from which everything comes, where air is a physical material; where the boundary between surface and air is a shift, not a thing and nothing. Ingold uses the analogy of a stone sitting on a surface: the contact between air and stone is as tangible and real as that between two solid materials. Figure 12 contains a sketch of simple pumice pebbles and explains this analogy further.

Figure 12: Surface and surface contact. A fragment sits on a fragment, both surrounded and within a matrix of air. No vacuum exists and no entity is detached or isolated, rather stone and air are inseparable. Ingold discusses how material culture focuses on consumption not production: it is a culture where things, objects are used, the ‘stuff of materials’ is obliterated by objects (Ingold, 2011a). The object is seen only as it relates to how it can be used, not that from which it is formed or where it has come from. Materials cease to exist in a pure form, they become commodities. Air and water are seen as media. As media, other things may be immersed or situated within – one material forms a matrix, the other located within. But both have substance and mass, they are things. A matrix is as much a record of process as the objects contained within. If either material was to move or change, a trace or scar would remain. Likewise, humans do not exist on the other side of materiality - they are ‘part of’, found within a wider matrix (landscape). As people move and change, people leave markings and people shape site – leaving traces, memory and new forms of material.

[IMAGE AUTHOR’S OWN: SKETCH – ROTOITI PUMICE, MAKETU FIELD NOTES.]



Our ideas of materiality inform our observations and interactions. This research grounds Ingold’s thinking of ‘things’ in landscape, and applies this thinking to everyday walking activity and pathways. Such theory encourages a seeing of materials, not as objects but as active things

situated in time and process. It also prompts consideration of how the walker is positioned within landscape.

When looking at a particular landscape, at a feature or thing in the physical space, it is recognised as being connected, not separated from the other things around it. Landscape is not a series of separate objects, but a system of materials in constant relationship with the other surrounding materials. The walker and the path are not 'other' but part of a complex whole.

Sighting walks offer tools for looking within a complex frame: a structure of surfaces, scales and horizons. Critical looking expands observation tools further by requiring that the viewer also question the origin and relevance of what is observed.

Beyond Surface Limits:

Sighting walks show there is a limit to seeing. The first stage of sighting walks exposes potential omissions and gaps when viewing a path or landscape from a limited physical position. Examination reveals a complex structure, observations give hints and clues of what might be seen and how seeing might be further informed.

The mode of looking and exploring is important: different details are seen with different ways of approaching track viewing (i.e. walking or map reading). The style and form of walking (speed, timing and intent) also controls capacity to see: taking time to look carefully, to look to the side, to look up and beyond, to look down, to stop and touch, to confirm what is seen – each action reveals different items and perspectives.

Author Rebecca Solnit writes of how physically walking step by step and repeating or retracing steps (even as a purely mental journey) can aid the walker to see, to know, and to create a memory from physical action (Solnit, 2000). The pathway becomes a mnemonic. With time, each step creates a richer connection; the act of walking replicates reading and each step informs. Step by step the path and walker are altered, time adds and time removes. The walkers seeing and comprehending changes over time with experience and contact.

This observation is added by connection and engagement, an extension of site exploration beyond a purely visual form of knowing.

Not Just the Visual:

The visual provides a baseline for coming to know but seeing is only one form of potential observation. Landscape Architect Samuel Dennis describes a framework for seeing which begins with the visible and extends into other. To Dennis, landscape is 'site and sight' (Dennis,

2003), landscape is known through observation of seen and unseen, of visible and invisible. It is also known through interpretive meaning. Landscape is more than a collection of materials, it is not just things but it is also seen and known and considered by people. Observational records are formed of things that are seen and ways that things are seen.

Knowing site involves moving beyond the visual. It requires exploration of what we see and how we see – the things we look at and the frame of view. Observation is further grounded with embodied knowing, of being present in landscape and of extending the senses, the next step in seeking to explore the path.

Chapter Three

Being

In walking we do more than see: Solnit states how

“walking, ideally, is a state in which the mind, body and the world are aligned, as though they are three characters finally in conversation together, three notes suddenly making a chord. Walking allows us to be in our bodies and in the world... free to think without wholly being lost in our thoughts” (Solnit, 2000, p. 5).

Walking involves observing and negotiating an external environment, but is also connected and dependent on internalised and subjective ways of seeing and knowing unique to the walker.

Landscape is made of human constructs: a record of human action, mediated by ongoing activity. It is a network of things in relationship, where self and 'other' interact and the walker is found 'being-in-landscape'. In the context of this thesis, here the term other refers to those things that are outside of ourselves: made by other people, by processes and things external to us and our accepted norms. Through active engagement with the materials and processes experienced along the path, the walker is brought into a new realisation and made part of a wider whole.

This next step of the research is principally concerned with exploring this relational view and learning what may become known when observations consider what is sensed and what is perceived through the use of 'sensing walks'.

3.1 The Practice of Being – Other Senses in Observation

Sensing walks explore a world enriched by process (natural and cultural) and the world experienced through human senses and perceptions. The walks aim to explore the interface between walker and the landscape and how we might 'know' from an internalised perspective. How much does the walker's internal position and conditioning influence observing and knowing? Sensing walks study the walker's relationship with landscape and review the walker as an agent of observation. The walks seek to gain insight into how the walker/landscape relationship might be

mediated along the path and explore possibilities found in this relationship.

Sensing walks begin with a study of walker engagement and attention. The first sensing walk explores how the walker might 'be' when walking the path. Records are used to principally assess the walker, in addition to the external landscape walked upon. How much does the walker engage with the spaces around them? What programme does the walk take and what is subsequently made known? What stimulates and focusses attention?

The second sensing walk acts as a counter reaction to the previous exercise. The walk seeks to review the role of external guidance and purposed observation. If the walker is presented with a set of prompts or a schedule of activities what outcome results? What is the influence of restrictions or limitations when walking?

The final sensing walk looks at what is possible and what might be recorded if the walkers sensing is focussed and refined. What can be observed and what is omitted if we bypass sight and focus on tuning in interactions and observations through other specified senses?

3.2 Sensing Walk Stage One - A Mind Map of the Walker

Sighting walks revealed how the physical position of the walker and their approach to site influences the type and particularity of things seen. Sensing walks explore the influence of the walker in closer detail. My observations reflect me: my ability to see, my history, my training, my culture and my current condition. What is the influence of my culture and positioning?

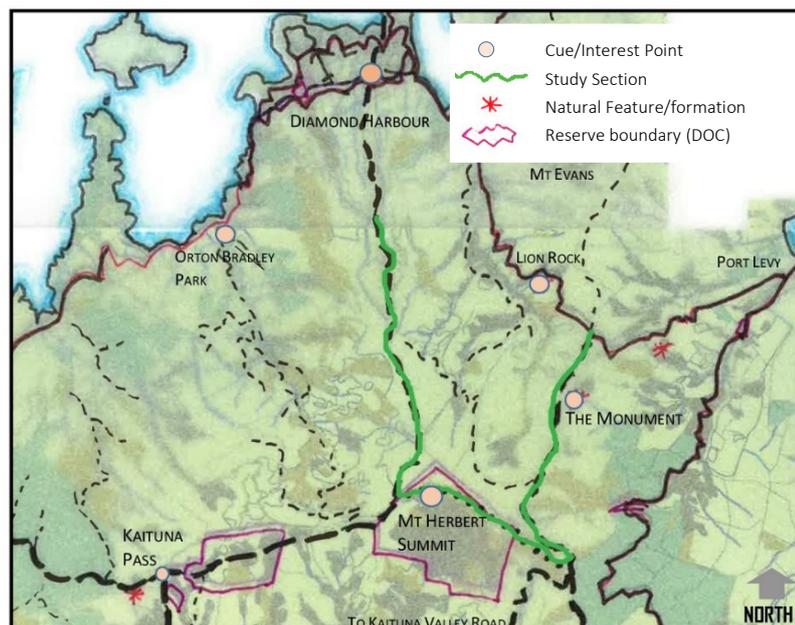
Philosopher Susan Bordo states how “if the body is a metaphor for our locatedness in space and time and thus for the finitude of human perception and knowledge, then the post-modern body is no body at all” (Jacks, 2004, p. 5). The walker, while having a physical body, walks as if out of the body. Jacks describes this post-modern condition as empty, as absent, as a frame which questions the role and position of the body (Jacks, 2004). In this frame, we exist as body-less beings, objects moving in space with no contact, not truly seeing or touching.

This first study reflects on what is actually being observed along the path, and enquires as to the focus point of the observer and questions how I contact and connect with the path. Am I a body-less observer, a voyeur of landscape or does my walking align and connect me? Do I walk and record automatically?

The first sensing walk seeks to explore the walker’s connection to the path in a study of the walker’s actions and thinking. As with sighting walks, field notes and a walk journal were used to record inventory and observations taken during a day’s walk along the Monument Track from Purau Bay to the summit of Mt Herbert (Figure 13).

Figure 13: Location map - Sensing Walk One. Activities for the first sensing walk were undertaken at a series of sites while on a journey from Purau Bay to Mt Herbert Summit. Green line indicates walk route.

[IMAGE AUTHOR’S OWN: PURAU BAY TO MT HERBERT MAP]



A series of self-reviews were undertaken at regular intervals. Using set time intervals, a short writing and diagramming exercise was undertaken in order to capture thoughts and focus points. This questioning process was directly focussed on recording and examining the walker's thinking and response. What was seen? What was thought? The journaling exercise questions actions and norms and reveals distractions.

Recorded Observations:

The walk record becomes a series of moments observed in walking where the attention of the walker is elsewhere, away from the immediate path or focussed intently on specific objects. The exercise made me, as observer, critically aware of the multiple angles and trajectories my thinking was capable of taking, and of the potential for my focus to be pulled away by elements found on the track or occurring elsewhere in another space and time.

I am able to recognise my distractions and my thoughts are revealed and contained as I am forced to stop at regular stages. Can I recall the last 15 minutes of the path? What did I really see in the last two minutes of walking? Was my mind focussed on the path or elsewhere? This stopping interrupts, recalls and refocuses. It forces me to ask and engage with the present situation: what am I looking at (right now), what am I thinking (right now), and do these two elements correlate?

Sketches articulate think patterns and responses: the ebb and flow of thoughts and influences is expressed. Barriers and filters which alter interactions and engagement are revealed. Figure 14 contains three diagrams which represent and interpret observed thought patterns.



Figure 14: Filters and lenses. Words and thoughts surround me as I walk. They act as a filter, a barrier, a wall between me and the physical-material space that I walk in. Words, thoughts, impressions pave my path, they frame and orientate. The left image depicts how scenes and substance come to me from outside my frame. When centred in place my outlook is permeable, my senses bring awareness of materials and understanding and I project and receive information. The central image is a response to my awareness of words and conceptual positioning. I am separated from landscape by a particular worldview made of lessons, theories and experiences. The final image depicts a stronger barrier. Landscape is seen and experienced through narrowed viewpoints and specific channels. My seeing and knowing is filtered, screened and obscured by projections or emotions.

[IMAGE AUTHOR'S OWN: DESIGN JOURNAL & FIELD BOOK NOTES]

The exercise reveals the drift of thoughts and focus that occurs when walking. Images capture responses and reveal the influence of thought and feeling. Walking up a track in the heat, all I want is shade, a cool drink... My skin is hot, the water in my drink bottle is luke-warm, and I become more irritated and more focussed on my own condition. I have little regard for the surrounding landscape. My thoughts drift of the cool water encountered elsewhere. The path is dusty, the only present thing I have been looking for is shade, all else is seems irrelevant.

In stopping to record my thoughts I am critically aware of this strong frame of view. How I react against the path and its current conditions, how I do not stop to notice details, rather I am focussed solely on this present condition. I recall walking this same path in winter. Tramping with the threat of worsening weather. Snow and ice on the ground making terrain uneven; the roughened terrain and impending southerly gale makes me alert for changes. Every gust of wind, every slippery step is noted. Walking up Mt Herbert in the summer heat I am oblivious to all. The track is broad, the heat seems relentless and consumes my thinking.

Occasionally my thoughts are interrupted by events or features along the track. A sharp high-pitched sound off to the side, a walker approaching from the other direction, rough and rusty fencing wire encountered when crossing over a stile. Such elements cut through my thinking and pull me back into the present moment. At such moments I may turn aside and wander off my original course, a pause point or a deviation to explore a particular place or discover.

Insights Gained:

This first sensing exercise shows how the walker's mind may be full of things, of words, and thoughts of far off places. Elements are observed in the landscape along the path and subject to responses. The walker is conditioned by features and effects: the surrounding environment, physical capabilities and present situation. The walker's conscious awareness is caught up in activities both on and off the path.

Images and impressions crowd out thoughts of the immediate, they block out seeing. In walking things are looked at and the mind wanders. At times thoughts are intensely focused on the path, at other times they are nowhere near. The walker drifts along the track with their thoughts and distractions, only to be pulled back to present time by events or encounters.

The small things, the usual things, can be overlooked and the tapestry of life and landscape can go unnoticed. Internal conditions influence the

walker's particular frame of mind and emotions. What is noticed is the unusual: things seemingly out of place, imposed or contrary to their surrounds. Juxtaposition and contrast in what is sensed and discovered – the sharp change of colour or texture snaps the focus back to the path and its present materiality. Variability and surprise make the walker pay attention.

The walk establishes a clear picture of what can happen when the walker gains awareness of prior prejudices and thinking. The walker can adopt a more conscientious form of walking: walking self-consciously, aware of paying attention and paying attention to paying attention (Dennis, 2003). This awareness of the body and its responses holds valuable information for walking. The physical condition of the path, the local environment and walker's situation influence more than comfort levels but also influence the level of engagement and attention given to the path. Awareness of cultural influences and behaviours also informs understanding of how paths can be used.

The dependence on technology is a part of post-modern culture. In a culture that values portability, instant gratuity and convenience it is tempting to seek out easy options or to escape present conditions through the use of technology. If the path is hard and the walking seems difficult or tedious, music can motivate. A play-list on a tiny device ever-ready to distract. If in a crowded space sights and sounds might be drowned out by the simple plugging in of headphones, a quick swipe of a screen. In this state of voluntary separation and distance focus is held elsewhere. Senses and responses are mediated (headphones in, music on, phone in hand), the listener is physically in space but not present in place. A barrier exists between self and the outside world. Reactions are habitual, subconscious, automatic, acted upon without real cognition, without any real comprehending of place and situation. A simple moving through with a distal and passive body-less view.

Moments found along the path, or in a disruption to itinerary, aid the recognition of distraction and automatic, body-less reaction. To drift, to change encounters, to be free to become absorbed in moments, can provoke a depth of insight and understanding. In walking the experience of other worlds and constructs can be prompted by moments or cues. The second stage of sensing walks explores how the walker might be prompted and exposed to such cues from outside themselves.

3.3 Sensing Walk Stage Two - Directed Walking

Can an itinerary take the walker along a set route, introduce new narrative, expose the presence of others through experiences and give the opportunity to learn of other perspectives? A score or itinerary can be used to construct a view and promote new ways of observing.

The second sensing walk explores what happens when the walker follows a set itinerary. As a counterpoint to drifting, the walker is orientated by an externally sourced guide and directed in their method of walking and observation.

The walking itinerary takes its cues from Halprin's workshop process (Hester, Halprin, & Mullen, 1999). Halprin recognised the value of walking as a tool for exploration and experimenting within various modes of intent and behaviour. In Halprin's walks the workshop participants followed a list of instructions while recording their movements and experiences. Time was used as a control and certain activities had to be performed before a set time. These records were used to explore participant habits, social experiences and inform design making decisions (Hester et al., 1999).

The goal of this itinerary-based exercise is to explore how prompts and guidance may inform walker decisions. In this exercise an open route is followed across an extended area (south of Dyer's Pass). The walk begins at a predetermined position (the Sign of the Kiwi) and ends at the conclusion of the time-assigned frame. Figure 15 provides a map of walk location.

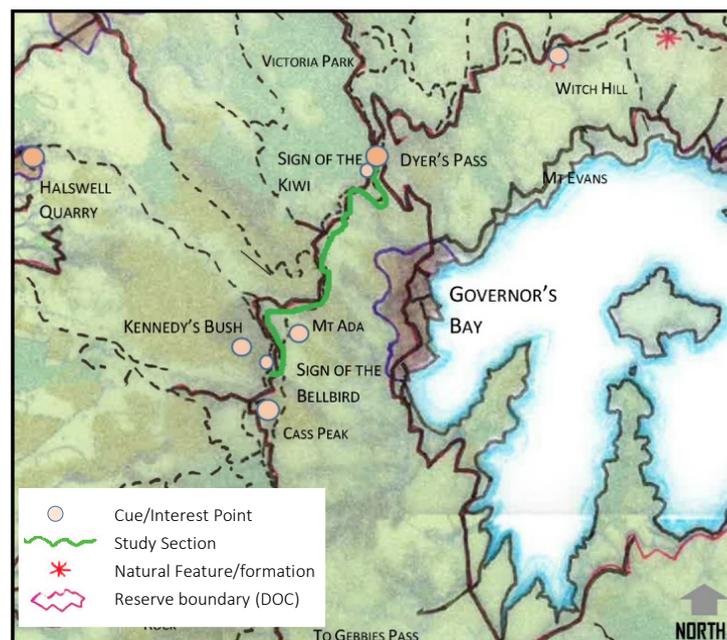


Figure 15: Location map - Sensing Walk Two. A walk prompted by previously determined cues, undertaken in the area between Dyer's Pass and Cass Peak. Green line indicates walk route.

[IMAGE AUTHOR'S OWN: SOUTHERN CRATER RIM TRACK LOCATION MAP]

Prompts and cues are given in the form of a set of cue cards (Figure 16).

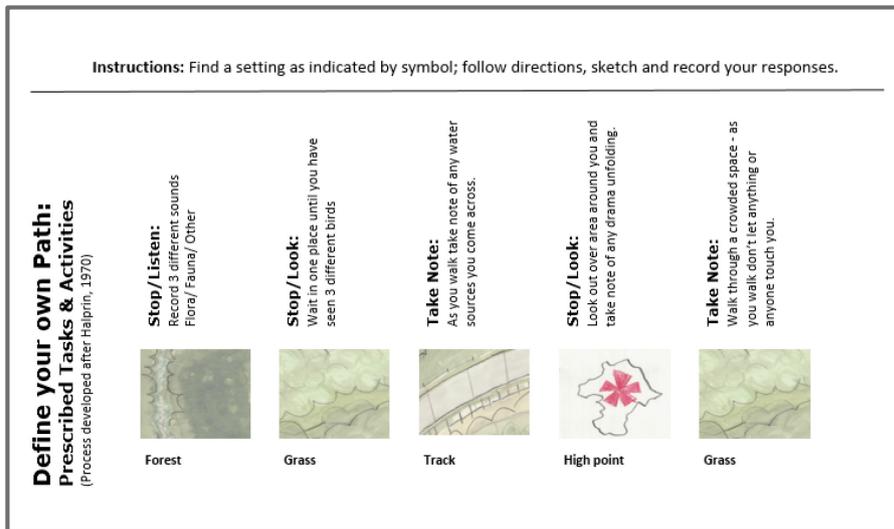


Figure 16: Purposed walking & guided walks. Cue cards are used to prompt itinerary and stimulate activities. Directed walks may utilise specified itineraries that anticipate certain actions and target certain inventory types and modes.

[IMAGE AUTHOR'S WORK: STUDIO NOTES/ FIELD GUIDE TOOLS. PROCESS BASED ON HALPRIN'S WORKSHOP TECHNIQUES (HALPRIN, 1970)]

Tasks provide a broad goal for observations (type of subject/material) and provide guidance for performance of activities.

Each activity is based on recording experiential qualities and does not specifically direct the walker to use particular tracks. The activities were to be performed in no particular order but were prompted when the walker encountered certain features or types of spaces. In this way the walk route remained open but observations are purposeful.

Recorded Observations:

Sensing Walk One allowed me to walk freely, to follow instincts, habits and resulted in the recording of things seen and my own ways of seeing, my constructs and thought patterns. This second walk prompted the exploration of other possible ways of looking and sensing and focussed my attention on finding certain elements.

In reviewing the objectives and tasks assigned, I had to choose a walk route which might allow the discovery of given features/elements and allow the undertaking of required activities. My route was first considered (if I go here I may find this...) but in commencing the walk soon deviated as potential options opened up.

My viewing and interaction became focussed as I searched for certain cues. Rather than observe broadly, my focus was targeted. Using walking and observational activities based on predetermined goals and

triggers required the use of multiple senses. Stopping, listening, touching.

While this walking felt artificial and restricted it required that I pay attention and look close to find certain elements. The walk gained a specific purpose and my style of walking and observing had to shift to accommodate the itinerary.

Insights Gained:

There are potential learning experiences found in following an itinerary. The ability to find realities outside the usual and to stimulate attention is extended by provoking curiosity and non-habitual action. Even when following a set route the mind remains free to explore and imagine. The itinerary becomes a frame, guiding but not strictly controlling. Narratives can open up which might otherwise remain unseen.

Purposed walking, directed walking, is walking which focuses on the path, on the walk, and not just an end point. Such walking engages the mind, the body of the walker and reconnects to territory, to place, to being in place and time, beyond simply moving on through. Purposed walking is an act that inhabits the abstract, where the body exists “beyond its physicality” and where the “body is the means by which one experiences the world, objects in the world, time and space. However, the body does not merely collide with these objects and move on unaffected” (Rhee, 2005, p. 110). Purposed walking enables ways of seeing beyond present limits. The walker adopts new habits and explores through the use of previously unconsidered senses.

Following an itinerary can allow the walker to explore new ideas, find new narratives and follow another’s footsteps. A previous account, a historical narrative, a theory grounded in practice or the tracing of another’s account can guide walking. This action creates a platform of coalescence – creating shared tracks and traces as the walker follows cues. Jacks (2006) terms this ‘quotation’: reading and acknowledging the presence and contributions which others bring to the path (past and present). In walking “we are quoting walkers who have come before us” (Jacks, 2006, p. 75). Quotation acknowledges that no space is truly private or untouched, no place is wholly natural or untouched by precedent. Walking is a cultural act that extends beyond ourselves.

3.4 Sensing Walk Stage Three - Focussing In and Tuning Senses

The third stage of sensing explores what is found when sensing activities are refined and focussed. Sensing walks connect, guide and inform observations by drawing the walker's attention in and raising awareness of present circumstance. Varied experiences and interactions offer new insights and new ways to observe. What is gained from using other senses? What value is gained compared to the use of visual survey and observation?

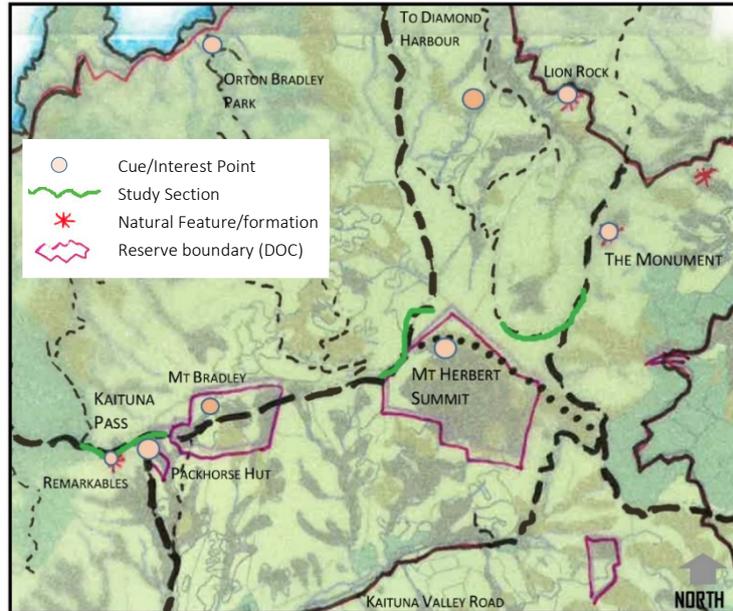
Walking involves more than simply viewing a scene. Jacks (2004) writes of how walking is aesthetic – it provides a vision of the world, and it is also aisthetic – centred around perception or sensation, a literal “breathing in of the world” (Jacks, 2004, p. 8). The practice of observation extends beyond the use of a singular sense (that of eyesight). It infers paying attention, searching and seeking out, and can involve any or all of the senses. Landscape observations are commonly heavily reliant on the visual, but what happens when the walker-recorder focusses on sensations other than visual, if the walker concentrates on an aisthetic approach?

Landscape is a transmitter and what is received by the walker depends on how the receptor is tuned in. When the white noise of the visual is silenced, and the senses are finely tuned other forms of contact, of knowing become animated. Sensing exercises question whether experiences and knowledge of inventory are enriched through a more focussed enquiry. Does limiting the visual reveal the hidden and the subtle or does the world suddenly become too unfamiliar?

Sensing exercises were undertaken at a range of sites including Mt Ada (top of Kennedy's Track), Kaituna Pass, Mt Herbert Summit, the upper Monument Track and Kaituna Spur. The principal activities described in Sensing Walk Three are located along Summit track between Kaituna Pass and Kaituna Spur (Figure 17 over page).

Figure 17: Location map - Sensing Walk Three.
 Sites for sensing activities. Green line indicates walk route.

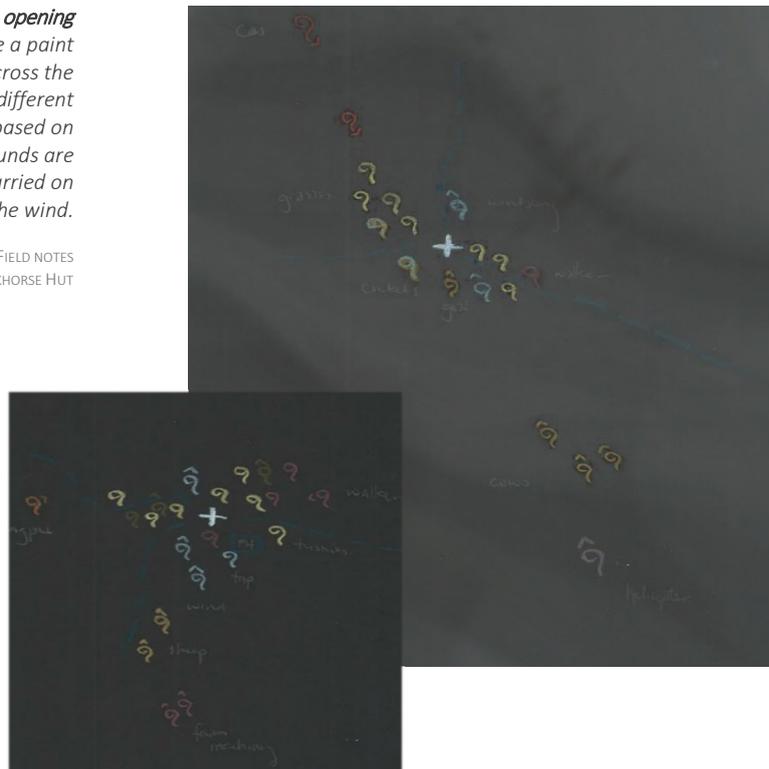
[IMAGE AUTHOR'S OWN: KAITUNA PASS TO KAITUNA SPUR SENSING WALK THREE LOCATION MAP]



Sensing walk three offers a glimpse into what results from fine tuning the senses and focussing intently on a particular sense. It is a study of the non-visual. Landscape may be observed audibly or through the use of tactile or olfactory senses. In this exercise sight is limited as the walker pauses and spends time in landscape absorbing what is sensed with eyes closed. Sound becomes a primary source of information. Each sound is mapped by marking out a rough position in relation to the walker (Figure 18).

Figure 18: One sense opening observations. Colours like a paint palette trace sounds across the landscape. Each colour a different sound, each mark based on perceived location. Some sounds are proximal, others distal, carried on the wind.

[IMAGE AUTHOR'S OWN: PENINSULA FIELD NOTES SENSING WALKS— KAITUNA PASS — PACKHORSE HUT]



Recorded Observations:

When the visual is subdued, other senses are heightened and imagination is opened. As I focus on listening I become aware of many other elements. In closing my eyes and listening, I hear the sounds of grass moving in the wind, the buzz of insects very nearby. If I was to look I would not see a road; the Christchurch Akaroa Road is over three kilometres down the valley yet the sound of busy vehicles is carried to me on the wind. Nearby I hear sheep on the ridgeline over from me, closer still the chirp of crickets hidden in grass.

I am acutely aware of other things not noticed. Away from visual distractions, other things are given heightened attention. In standing still, in honing in, I become aware of details I would otherwise miss and I sense new things in greater detail of which I was previously unaware. The tactile gains prominence: I notice the way the ground gently slopes beneath my boots and warmth radiates up from the warm soil. A subtle breeze pushes up the valley carrying with it the scent of pollen. I feel the air temperature shift: the path becomes a composite of rich textural changes.

Insights Gained:

I am more alive, more sensitive to changes when I cannot see. Ingold writes of how “the perception of the blind person, dependent as it is on touch and hearing, is fundamentally suspended in the current of time” (Ingold, 2000, p. 271). As I sit blind, time seems to still; if I attempt to move while my eyes are closed and step out along the path I become hypersensitive and insecure in my footsteps. My judgment is thrown off and I am acutely aware of my body within space. I become vulnerable in this strange condition, desperate to orientate myself and feel out space. My mind seeks to form a picture of the space around me, to see my place and my way forward. Sound swirls around making directional orientation difficult.

My senses articulate space working together to perceive, interpret, and situate. I think in present tense. If I were to open my eyes I would seek out the way forward. My eyes scanning ahead, projecting my path in future tense. Without sight I rely on other ways of knowing. I sense the wind is shifting direction, turning southerly, I know rain will come soon even though I cannot see the building clouds. When I open my eyes and look around me I see the track ahead. Already I am plotting ahead, guessing where I will be and how far I will get before the clouds cover the hill. And my thoughts have drifted away from the material into charting progress, way finding and route planning.

I rely on visual images to orientate and direct. It takes willpower to trust my other senses without sight yet in doing so the landscape comes sharply into focus. Materials and textures become more real, as if in seeing them I rely on assumptions and past knowledge. In using other senses I am forced to reorient, to relearn what each item is made of. To categorise each element based on its sounds, its scents, and its feel. I must imagine and remake each element in my memory not as an image built on colour and shape but as a thing of mass and movement. I am grounded in place, my knowing and comprehending other things is bound to my location and situates awareness.

3.5 Combined Summary of Sensing Walks:

Seeing Self and Landscape:

Sensing walks reveal a landscape seen through culture and habits. Observations coloured by lenses of perspective and opinion, experiences and present conditions and which influence responses and reactions. The world is seen as a constructed reality, a world of the walker’s own making. The walks question and review what is seen and made known through walking in landscape. Table (2) shows a summary of the process undertaken throughout each stage beginning with a review of the walker’s observations through to a refining of sensing tools.

Sensing Walks					
Step	Survey Activities			Inventory	
	Aim	Inventory Goals	Task	Resource	
Stage 1: Filters and Distractions					
Record walker responses to path conditions and sensory experiences.					
What does the walker pay attention to?	Step 1.	Plan a route and observe materials and interactions. Focus on a length of track, not a particular site	Establish material inventory	Survey landscape materials while walking, keep notes of what is observed.	Track map.
	Step 2.	Interrupt walk periodically and identify active focus points.	Mind map and walking journal, focus on personal responses, drivers and cues for walking.	Pause/Filter thought patterns: Capture and record responses, impulses and thought patterns	Walk journal (record of responses and sensory inputs)
	Step 3.	Compare itineraries – what was assumed/proposed vs. what actual occurred	Route map – marked trail, focal points and descriptions of experiential elements.	Map/diagram findings, compare track information with experiential data. Compare outcomes with standard survey results.	Sensory records, track map (walked path), walk journal.
Stage 2: Directed Walking					
Explore what is found when observations are restricted or deliberately focused.					
How does a directed itinerary fix attention?	Step 4.	Undertaken a visual survey (multiple sites along the path)	Establish base maps and material inventory	Field Mapping & Survey Inventory recording	Field guide and pre-walk notes
	Step 5.	Review inventory and identify trends and commonalities: Identity relationships.	Informed inventory: Identify links across space/time, Changes over time	Analyse observed materials and processes. Consider formation processes and change over time.	Field maps, material inventory, historical accounts and records.
	Step 6.	Outline possible scenarios and potentials for site change and material development	Diagrams of time & relationship, exploratory sketches and sections	Analyse and explore relationships – what is revealed? Hidden?	Field sketches, notes, maps and material inventory
Stage 3: Focussing In					
Investigate what is recorded and made known when isolating/focussing on particular sensory inputs (remove visual stimulus).					
What is made known with acute focus?	Step 7.	Identify a site and undertake a visual survey	Establish material inventory	Record observations – what materials are seen? Compile inventory	Field notes, base map
	Step 8.	Stop and isolate senses – focus on one particular sensory cue (i.e. close eyes and listen)	Sensory sketches, records Walk journal – detailing experiential data	Take detailed notes/records. Maintain focus while recording. What is noticed?	Sketch book, walk journal
	Step 9.	Analyse and compare different forms of recording.	Comparative notes, reflective responses	Review differences: consider materials and scales. Where are materials located? How is the path experienced?	Walk journal and notes. Field maps and sketches.

Table 2: Summary of Sensing Walk stages and process. This table outlines a succession of steps for engaging in sensing exercises and for experiencing the path as ‘being-in-landscape’.

3.6 Outcomes and Implications – An Informed Theory of Being

Anthropologist Christopher Tilley describes how “experience of the world always extends from the body and expands beyond the particularities of place” (Tilley, 2004, p.24). Our knowing landscape is mediated by a range of influences outside of site itself. This is observed in both sighting and sensing walks. The ability to see and know the path depends on the practices used in observing and the condition of the walker. The walker’s physical and mental fitness, preparedness to walk and ability to engage, influences to where and what their attention is applied. Every walker is unique; their observations bound by their own capabilities and quirks. Every interaction between walker and path is also made distinct according to particularities of situation.

Even the most basic form of sensory engagement, the description of a single sensory input, cannot be replicated between participants. Writer and Natural Navigator Tristan Gooley writes of how no one observes or sees uniformly (Gooley & Gower, 2013). While primarily focussed on the physical state of the human eye and its blind spots and variable lens conditions, Gooley's writing also highlights the subjectivity of the viewer and the values associated with human seeing. The walker is a subjective observer: each viewer has their own unique capacities and personal histories; characteristics and qualities that allow the viewer to look with different eyes, leading to variety in not only in what is seen, but in what is sensed and responded to.

Landscape historian John Dixon Hunt explores how our knowing landscape is framed by natures and expectations: an understanding of landscape defined by human interaction and perception (Hunt, 2000). The observer approaches site with existing ideas of what the site is and could contain. Their experience of site is tempered by anticipation and formulated ideas: the world known through human eyes. Landscape is what we make of it: in part, what exists physically; and in part, what we envision. This imaging extends beyond the visual pictorial scene, into an internally filtered perspective – a product of culture as much as a physical product.

Dennis (2003) frames how we look at landscape as originating from a position, describing how looking is instinctive and habitual. Simply looking without connection or engagement can create a sense of being an “active tourist” or a “passive other”; it is an activity that is at once “totalising and distancing”, and makes judgements of space based on

that which, as philosopher and cultural theorist Michel de Certeau describes, is a “fiction of knowledge” (Dennis, 2003, p. 26).

Sensing walks help us to “perceive ourselves perceiving” (Jacks, 2004, p. 8). In becoming aware of our own qualities we are conscious of how those qualities influence us. Tools and prompts can realign attention and focus observations, grounding experience in site actuality and confirming or reforming how site might be framed. In reviewing how and what is observed, potentially limiting filters, habits and behaviours may also be identified which can then be countered through new approaches.

The Role of the Familiar and the Unfamiliar

Sensing walks suggest that familiarity can detract from observations. Yet as seen in sighting walks, repeat viewing and familiarising with site also benefits the walker’s observations. What is the role of familiarity in seeing and knowing?

Linguist and ethnographer Stephen Muecke discusses how the familiar becomes invisible and unseen (Muecke, 1994, p. 72). The common place and familiar are taken for granted and over-looked. Muecke states ‘there is no landscape without otherness’, detailing how the viewer needs to be transported to another place where unfamiliarity, disorientation, disruption, and newness allow the viewer to see. Can we be tourists in our own landscape, can we not experience it as richly as those who are unfamiliar?

To Human geographer and sociologist Janet Stephenson, the opposite is true: it is the local or insider view that is inherently more complex and knowledgeable than that of the outsider or tourist. It is the insider that truly sees detail (Stephenson, 2010). We are not separate from but part of space; whole beings-in-place. An exploration of landscape, as seen from the path allows in-depth, first-hand knowledge. In knowing site we recognise changes to that site, we know and understand the culture and customs of a particular place.

Sensing walks allow the exploration of both positions. The walker is presented with the opportunity to not only explore the physical landscape and become familiar, but to test the perspectives and narratives recorded. Sighting walks reinforce the need to look closer and deeper and sensing walks challenge the viewer to move beyond the habitual and the overly familiar while doing so. Sensing tools and operations allow for disruptions and new discoveries, enabling the wonder and surprise which can come with first seeing and new

experiences. This may come from a simple change in physical view point or through a narrowing of the senses.

In disrupting the familiar, complex issues and problems can be seen in a new light. Solnit (2000) explains walking as a stimulus for thought. Walking is a tool in itself that grounds and focusses the walker, and act which “penetrates the territories of chaos, constructing order” (Careri, 2002, p. 20). “In walking we breathe, we encounter persons and things other than self” (Jacks, 2004, p. 9). Each step connects us and fixes us, not just physically on the ground, but contextually, given us insight of others and a view outside of ourselves. Our knowing is framed by all our senses and we establish a real cognitive connection. Latta (2001) writes how “I make sense of things based on my knowing. Knowledge for me, then, is personal and temporal. Such interpretations are an existential process — the interaction and exchange of self with the infinite complexities of the situation” (p. 49). In walking, our identity is linked and relinked to a space and we claim a new attachment, a new knowing. My physical presence announces and makes obvious my physical being in place, leaving marks upon the ground’s surface and within my consciousness.

This is a position in which landscape has influence and utility, where landscape is known as “perceived and embodied sets of relationships between places, a structure of human feeling, emotion, dwelling, movement and practical activity” (Tilley, 2004, p. 25). Walking the path gives both context and setting for this experience. The walker and the path walked upon are not opposites: Philosopher Félix Guattari talks of how the “subjective is conditioned in a particular situation and develops specific habits and competencies” (in Boris, 2012, p. 25). This implies a situated state of being, conditioning brought on in response to a specific location and time (a present state): the pathway situates, recording and influencing the walker’s responses. I sense this world, I understand it based on my standing, my worldview. By living and breathing landscape with all my faculties (physical senses, self-awareness) I know where I am and I articulate my part of the world.

Psychologist James Hillman (in Jacks, 2004) uses the term *anima mundi*, literally “the animation of the world as a way of thinking” (p. 6). The animated landscape is a space we can feel and interact with; it is neither static nor placid and our engagement is alive. Walking animates and enlivens our world, the landscape becomes a place which has weight, which we know, and remember: this is the road of Bachelard (1994), where physical space has strength, its surface and form can flex its muscles and leave a tangible impression upon its user.

The action of moving itself changes the walker and can provide a base line. The wayfarer “signs his presence... as the ever growing sum of his trails” (Ingold, 2011c, p.151). As we walk we interact, we appropriate, and we are altered. As the walker moves through, within and in-between, the path brings the walker in contact with the ground and with self.

Movement can change the walker’s physical state and mental condition. Landscape Architect Stefan Darlan Boris explains how “when a thing really moves it becomes other than itself”, movement makes a qualitative change and affects “both space and the bodies moving through” (Boris, 2012, p.57). The body becomes “the hidden ground of history” (Berman in Latta, 2001, p.47). Walking creates more than a cognitive connection or a set of observations, it is an act that marks. In walking a history of thinking is “made concrete – for the motions of the mind cannot be traced but those of the feet can” (Solnit, 2000, p. 6). Following Ingold, we see the wayfarer’s passage and duration as a long moment, lived out in a series of encounters and experiences. The wayfarer becomes part of place, across seasons and time. The path becomes a pilgrimage, the walker is not just an observer witnessing time acting on place but participating and part of an organic being.

Walking is where movement actualises space (Deleuze, 1993). Walking and movement through space “turns our attention and imagination to the things of the world with some sense of equality” (Jacks, 2004, p. 6). The study of movement is the next step in this research.

Chapter Four

Moving

“Walking strikes a delicate balance between working and idling, being and doing” (Solnit, 2000, p. 5). It is an act that liberates the thinker and positions the observer. As sensing walks show, the act of walking situates and connects the walker within themselves and the landscape around them. Whether short or long distance, walking engages body and mind.

Solnit (2000, p. 6) writes of how “walking travels both near and far” and expands on the role of bodily motion in the transportation of the walker. She describes that while travel can infer a body immobilised on a seat, walking is movement, it is active, “the body itself in motion”. It is this movement “as well as the sights going by that seems to make things happen in the mind, and this makes walking ambiguous and fertile”. The changing of perspectives and variable contact with materials provides the participant with a means of physical and cognitive connection. This chapter explores the influence of movement and the relationship between the walker and material made known through moving.

4.1 Moving as Knowing

Jacks (2004) states how walking provides a tool for knowing and positioning ourselves. Walking is a tool for discovery, it promotes an internal and external geometry that aligns and orientates the walker with the world that surrounds them. ‘Material walks’ question the walker’s engagement with landscape in relation to knowing materials, and explores the role of the path and its processes in conditioning the walker.

The walks explore movement as an origin of material engagement and knowing, and use walking to uncover and plot the relationship of walker and materials. The path becomes an active map: an interactive diagram where materials might guide the walker’s movement and an interface of material and walker which marks out a route. Material walks explore the use and influence of movement on the walker’s knowing the path and the potential use of material representation and operations in aiding understanding.

The first stage seeks to observe the material and experiential qualities of the various spaces encountered in walking. This stage explores a

collective materiality, it extends beyond identifying what materials are found and recorded, situating these within a typological framework.

The second stage of material walks questions how the rhythm and structure of materials might influence the path and the walker's route. Can material typologies be used to build itineraries and map out potential experiential paths?

Material walks conclude with a study of the walker's engagement and agency. Walking exercises explore how the landscape and the path actively alter and inform the walker and how the walker in turn also impacts the path through their actions and decision making. This final stage surveys the walker's encounter with the path and explores how this can be used to produce a continuum of material reaction and response. What can be discovered through tracing the footsteps of a walker across landscape materials and time?

4.2 Material Walk Stage One - Encountering Materials Along the Path

Movement gives experience; it creates a unique and personal viewpoint, an intimate knowing of space and surface. Through movement we dwell in space, as a shift of emphasis transforms landscape from that which is seen as pure image to that which is dwelt in. Landscape is touched, felt, close at hand rather than abstract or distal. It is in this moment that landscape becomes place.

To Phenomenological philosopher Maurice Merleau-Ponty space is situated. Space becomes known as it is moved through and its materials are explored (Merleau-Ponty, 1974)). Context and meaning is perceived or assigned as the walker interacts with elements of the path. Space is no longer isolated, it is not empty or disconnected from the walker, but framed through experience. Knowledge of and relationship with the path grows as the walker spends time within a space and it gains particularity.

Landscape moved in, is landscape lived in. In walking along a path the walker comes into contact with materials outside themselves. Walking produces an active narration of space as the walker encounters a progression of material things. Actions and elements intersect and allow a unique reading of place. The walker comes to know a particular story built through their active reading and experiential learning (Ingold, 2007). How is this narrative of encountered materiality captured?

Sighting and sensing walks are used to observe and identify materials found in landscape and begin to explore the relationship between the walker and landscape. Material walks seek to enrich this knowing, and signify a shift in exploration. The exercises utilise observational tools and insights gained in the first two cohorts of exploration and turn these towards the development of a dynamic, narrative-based inventory.

Walk records build a body of drawings, diagrams and scores which reflect materials from within a context of movement and time. This first stage of material walks begins by observing materials, form and interactive elements across a range of pathways and spaces and endeavours to establish a typology of tracks – a storyboard of experienced materials and spaces.

Material typing begins with the collecting and classifying of a variety of spatial and environmental information (pre-walk mapping using existing maps, accounts and records).

A networked series of survey walks was then undertaken within the study area across an extensive network of tracks from the Port Hills South through to Mt Herbert (Figure 19).

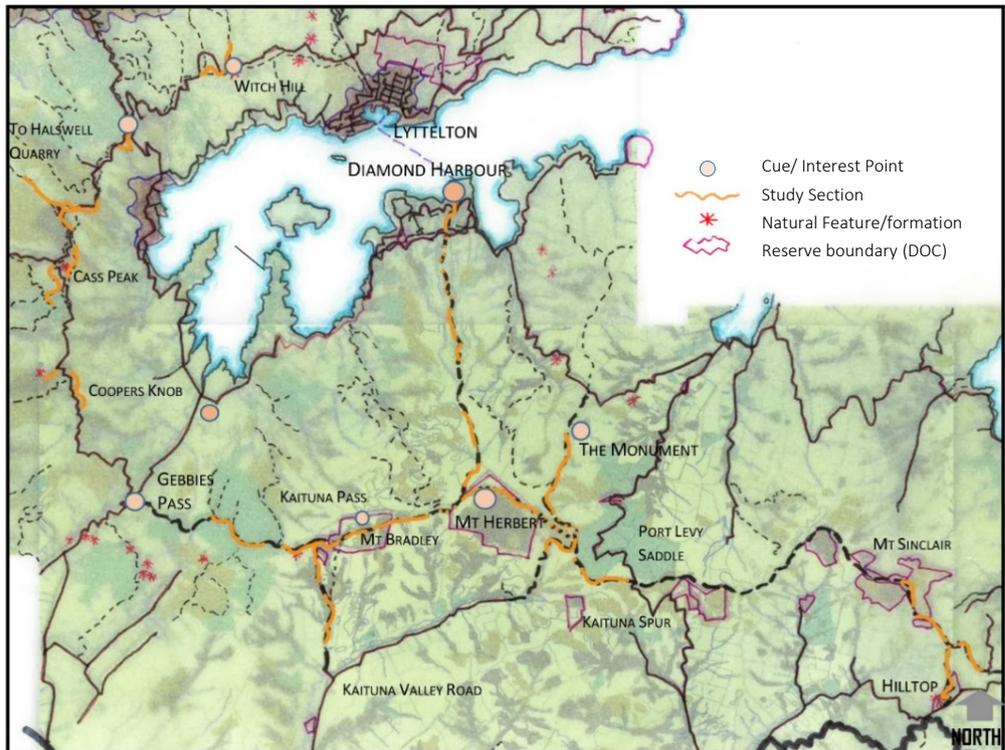


Figure 19: Location map – Material Walk One.
 A range of sites were studied during the development of typologies. Observational walks were undertaken across a wide variety of spaces, along an extensive network of tracks throughout the study area. Orange line indicates walk route.

[IMAGE AUTHOR'S OWN: SITES FOR TYPOLOGIES – AREA WIDE MAP]

The range of data accumulated during these observational journeys offers broad scope for interpretation. Data collection includes mapping of landscape forms and features, recording of track surface conditions, and description of material properties and evidence of active processes (water courses, rock falls, erosion, vegetation growth). A typology of materials was created through compiling maps and information, comparing notes and contrasting records.

Recorded Observations:

Survey, analysis and exploration allowed for a thorough interpretation of track form and materiality and a set of sixteen types was developed.

Each type relates to a core morphological landform as identified during walks. Each landform was characterised by its key topographic and morphologic features. Other experiential qualities were also mapped. Table 3 (over page) summarise the steps used to determine typologies. Appendix B4 contains a more detailed example of each typology and includes example of notation, field notes and cue cards used in this walking exercise.

Material Walks

Survey (Walk)	
Record features: [Map, journal, sketch] Material Palettes Spatial qualities Material properties Sources of change	Landmarks [Natural and Cultural] Vegetation/Colour/Substances Boundaries Structures Surfaces
Analyse (Review Walk notes/outcomes)	
Compare and contrast observations Sketch and explore Overlay	Look for clusters/similarities Typical elements (physical site/spatial qualities) Similar experiences
Summarise & Collate	
Write up summary notes Key elements/features Spatial layout/forms Processes/Flows	Key words/descriptive titles (landform/topographic feature etc.) List of typical features Sketch/map (interpretive/concept of potential type sites) Diagram movement/channels/thresholds/edges

Types

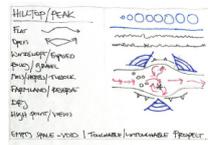
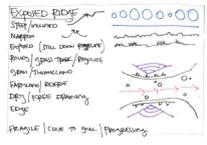
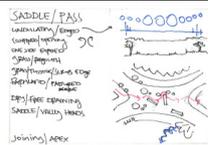
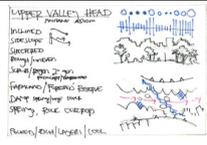
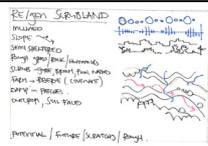
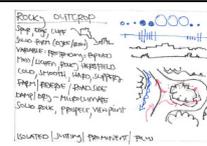
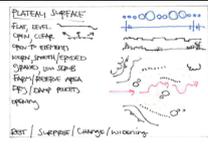
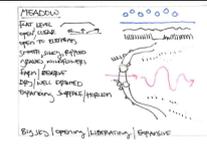
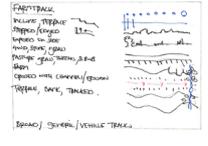
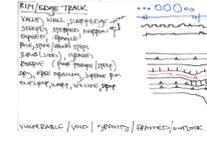
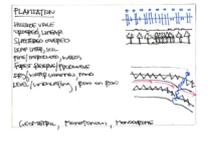
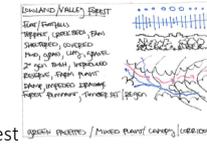
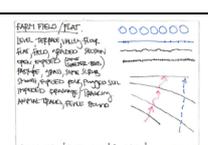
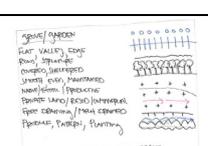
1	Hilltop/Peak 	2	Exposed Ridge 
3	Saddle/Pass 	4	Upper Valley Head 
5	Re-Gen Scrubland 	6	Rocky Outcrop 
8	Plateau Surface 	10	Meadow 
10	Farm Track 	12	Rim/Edge Track 
11	Plantation 	14	Lowland/ Valley Forest 
13	Farm Field/ Flat 	15	Park trail 
15	Grove 	16	Bog/ Wetland 

Table 3: Track Materiality – Building typologies. This table outlines a succession of steps for formulating a typology of tracks walked.

Each type is represented in a diagrammatic vignette, named after a foundational landform (e.g. plateau, saddle etc.). Material qualities are represented by sketched track schematics (plan/perspective forms), description of properties (material-physical and temporal) and are supported by section sketches and notation indicating surface form/texture, vegetation, shade, wind. Figure 20 provides an example of a completed typology.

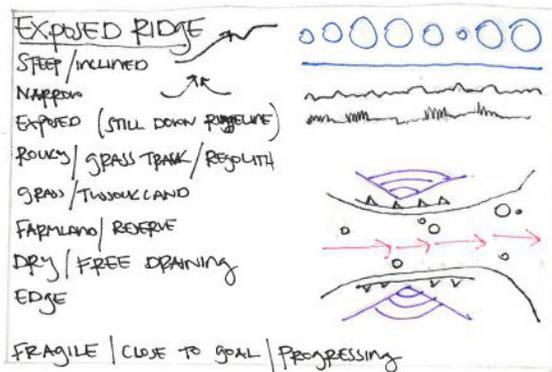
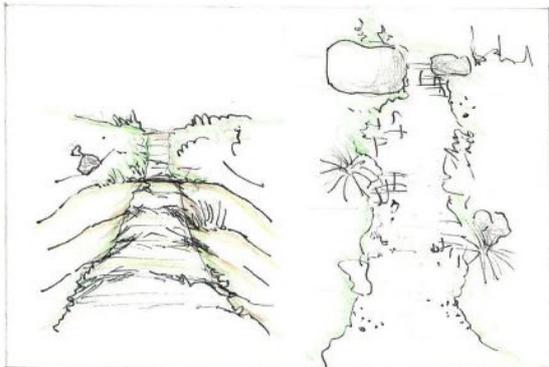


Figure 20: A typology for a track across an exposed ridge. Each typology includes a shorthand description of core physical elements (top left), a graphic representation of experiential qualities and spatial feel (top right), a quick sketch of track materials, core features and edge conditions (plan view, bottom right) and an interpretive sketch view of the path (bottom left)

[IMAGE AUTHOR'S OWN: TYPICAL SECTION OF TRACK – STUDIO WORKINGS/SKETCHES. TYPE SECTIONS AND COMMON GROUPINGS]



The images capture a particular type of material landscape as they are experienced by the walker. Each image gives an illustrative reading of landforms, not as they would appear in a real-to-life image such as a photo, but with a more embodied appearance, like a studied journal entry.

Both photos and drawings can be emotive and leading but drawing is deliberately chosen here to explore and represent type. Photos are used during walks to record a broad view of site and provide an instantaneous record of a scene. Sketching is however a preferred tool for type construction where the act of making a sketch allows time for focusing in and absorbing further.

The finding and labelling of types is experiential, a product of time in and contact with materials. Each type image is suggestive rather than absolute. In producing the image, elements are marked selectively. Each line is considered and deliberate. Hand rendering allows elements to be explored and defined through the creation of the image and produces an image which is fluid and partially ambiguous.

Physical descriptions are documented alongside records of experiential data and provide a general overview of type features. Descriptions are based on spatial form rather than temporal qualities. Experiential data is based on 'at-the-moment' records - perceived conditions, materials and surfaces according to the qualitative view of the walker at one particular time.

Insights Gained:

Creating typologies allows the observer to test and check observations. Maps and other survey data are reviewed as part of a critical process which questions the value and significance of materials observed. In a diverse and materially complex landscape, how many different types should be developed? In order to identify different types, the materials must be well understood with a clear set of recognisable features. Comparing and contrasting materials with a goal of communicating and assigning categories acts to crystallise what is observed and reveals where information is lacking.

The formulating of typologies relies on the walker's observational abilities and is subject to interpretation. Each walk captures a range of overlapping views which together form a composite type of an idealised geographic location. Like a story board, each image can be viewed alone or as part of a sequence in a frame by frame view of a pathway. Images might be read in conjunction with a map or as a stand-alone account. The images allow the reader to imagine a track in succession, to pause at one particular location and explore detail before moving on and encountering another.

4.3 Material Walk Stage Two - An Itinerary of Materially Driven Pathways

Landscape Architects Matthew Potteiger and Jamie Purinton detail how site and its substance forms an anthology, a record in pieces, or a collection that tells a tale (Potteiger & Purinton, 1998). Site narrative is built of materials and experiences. Narratives can be imaginative and one path can have many narratives generated through use and form, as each walker-reader interacts and interprets what is found.

A path can be authored and given a direct narrative. With time and use, new layers are made and new dialogue added to the existing story. Potteiger and Purinton write of the role of narrative and the ability of a story line to intersect with a site, to “accumulate as layers of history, organize sequences” and change a reader’s understanding (Potteiger & Purinton, 1998, p. 5). Such narratives may be shared in their telling and reading, others are able to gain awareness and understanding of the author’s meaning and a mutual sharing of knowledge exists. The path may be encountered through a set sequence, like the revealing of a tale, and reveal new discoveries in stages: the arrangement of materials, their layout and form, can be used to structure narrative, to tell a particular tale. An itinerary guides the walker through space along a particular trajectory.

As seen in the first material walk, the creation of a typology forms one kind of narrative, a set of images representing a path form. On a map I see marked out a ridgeline, the corresponding type narrates a picture of place, of what might possibly be experienced at a ridgeline. The type enables me to envision what materials might be present at that particular place. A succession of types might allow me to envision a journey in stages – the goal of the second material walk.

This next stage of material walks explores the narrative potential of material typologies in more depth. It questions how a set of images or story cards can be used to alter a path, construct new relationships and open up a new imagining of landscapes.

Typing operations draw influence from the idea of itineraries as a way of narrating site. Sensing Walk Two explored the directed walk: where a directed itinerary through a place opens and reveals. What happens if instead of constructing and ordering a passage through an existing space, if that very space itself is reordered? What happens if typologies themselves become parts in an itinerary? The second stage of material walks explores the possibilities presented when reordering materials

and using design operations to create new track concepts and itinerary - itinerary made from materials.

The aim of the walk is to create a new walking agenda inspired by material form and feature. The walk focuses on the development of a new access track to Kennedy's Bush (Figure 21), with a goal of replacing the existing access track with a path rich in encounter and rhythm. The exercise builds on existing field data and begins with a studio-based set of operations which explore relational structures.

Figure 21: Location map – Material Walk Two. In the second material walk typological operations are explored in terms of their path-making and ability to situate a path. Various sequences of typologies were probed during studio exercises and a 'type-line' applied to a known site – Kennedy's Bush, located along the Summit Road south of Dyer's Pass. Orange line indicates walk route.

[IMAGE AUTHOR'S OWN: KENNEDY'S BUSH TRACK AND RESERVE LOCATION MAP]



The exploratory walks undertaken and recorded offer a collection of experiences, along a particular route, within a particular time context. The typologies developed as part of stage one reflect a set of materials as seen from the existing path.

Design operations are used to take the assemblage of records gathered and expand their reach, exploring new relationships and possibilities inherent in typologies. The narrative considers both the experiences that may be found in material contact and the temporality of the path. Each operation acts like a mathematical equation or a preposition – taking a set of data or a form of knowing and altering the formula or the syntax through a stated action e.g. addition or joining (this + that), insertion or overlay of surface forms (this/that) etc.

Recorded Observations:

Material typologies are remixed and altered to form new interfaces and associations. This results in the development of new structures and surfaces which offer inspirations for track forms and aesthetics. The

walking itinerary is opened up, loosening in response to ambiguous space, and offering endless possibilities of experience and response.

The sequence of operations gives insight as to how a selection of sketches produced during a studio session might be used to develop a concept for path making. The design operations undertaken explore the relational potential of the various track typologies.

This exercise explored a range of potential connections and relationships from simple joins (Figure 22) through to complex intersections.

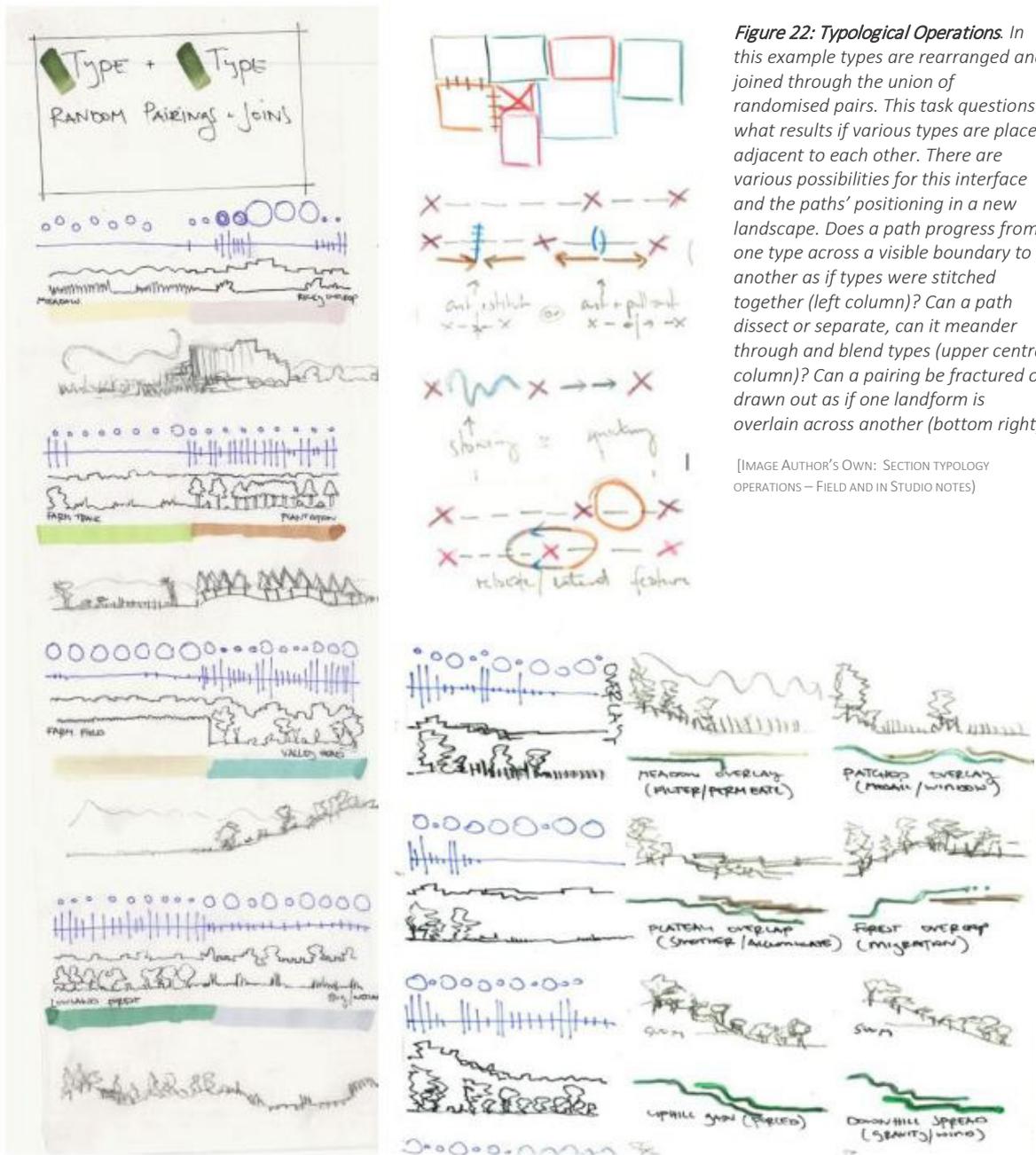


Figure 22: Typological Operations. In this example types are rearranged and joined through the union of randomised pairs. This task questions what results if various types are placed adjacent to each other. There are various possibilities for this interface and the paths' positioning in a new landscape. Does a path progress from one type across a visible boundary to another as if types were stitched together (left column)? Can a path dissect or separate, can it meander through and blend types (upper central column)? Can a pairing be fractured or drawn out as if one landform is overlain across another (bottom right)?

[IMAGE AUTHOR'S OWN: SECTION TYPOLOGY OPERATIONS – FIELD AND IN STUDIO NOTES]

Type forms were physically brought together (in paper form) and used to envision new track conditions and form.

Having explored a range of relationships these ideas were then brought together in a longer sequence and used as part of a wider track itinerary. The combinations formed paths that were figuratively stretched or contracted. Materials were brought together like an orchestrated score to form a new potential walkscape.

The operations show how material connections might guide how site is arranged. Sequenced operations can be used to structure a new path based on material experiences or a rhythm of materials. This rearranged typological line is overlain onto an existing topographical line and an interpretation of new track line is presented (Figure 23).

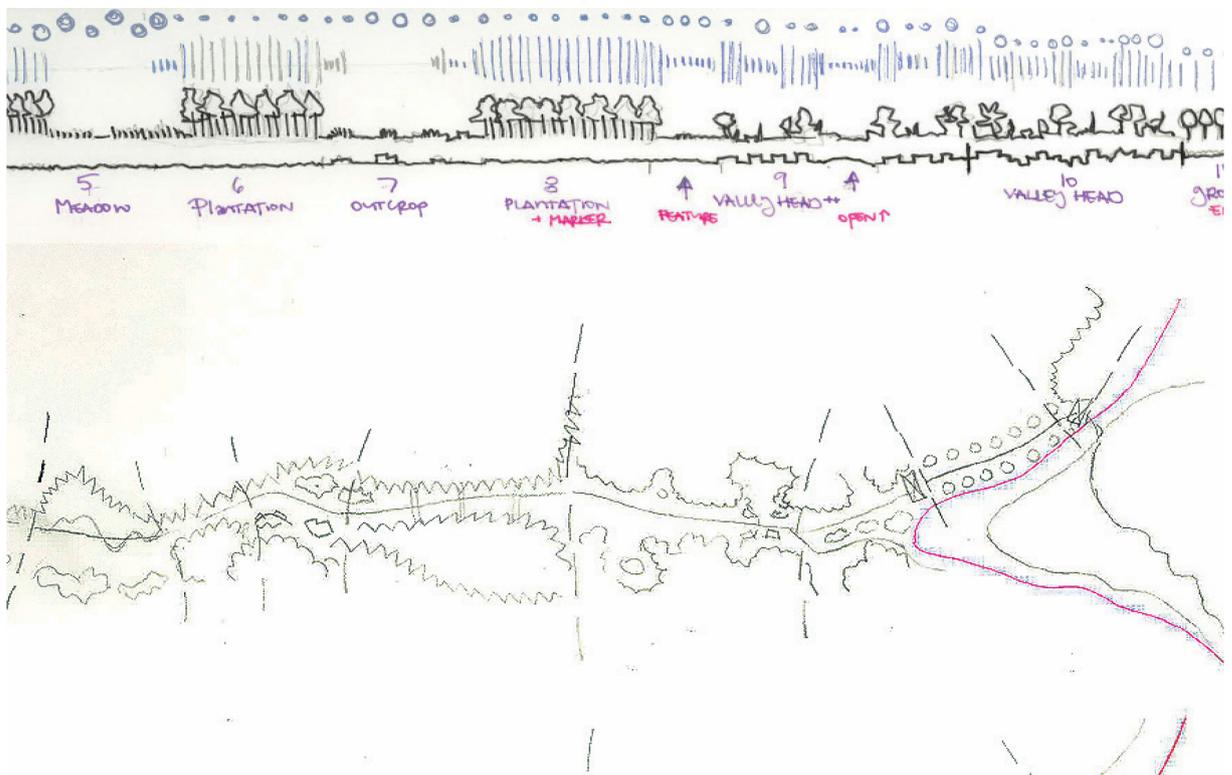


Figure 23: Material Typing – Kennedy's Bush Track Reworked Line. Operations are used to form a narrative of time and material. The material record is seen as a line, a track formation is based on a physical program. Here material form structures an ordered physical itinerary. Materials are encountered by the walker following a preconceived sequence and the materiality of the path (path surfaces, edges and adjacent materials) guide passage and duration. Time intervals are indicated by dashed lines.

[IMAGE AUTHOR'S OWN: KENNEDYS TRACK - NOTATION/FORM AND THRESHOLDS/EDGES. POTENTIAL/REINTERPRETED WALK LINE FOR THE KENNEDY'S BUSH TRACK: MATERIAL INTERPRETATION/SCORE AND SPATIAL MAPPING]

Insights Gained:

An itinerary frames moments in time, which promotes access to and contact with materials and textures. Type operations create new track patterns and structures: new walkscapes are formed by a relational itinerary rather than a generic methodology. Material structure and form is used to develop a conceptual track where the assemblage of materials has implications for creating experiences and altered styles of movement. The resulting types and lines are conceptualised, worked out in a drawn form and allow constructed imaginings of possible tracks. The drawings themselves do not suggest precise arrangements or specific materials and layout (colour palettes, plant species etc.); they remain open to the imagination. They allow the designer to question how structural lines and conceptual maps might translated into physical materials on the ground.

Rearranging typologies suggests possibility in the development of future lines of movement, scores and other forms of experiential design. The maps, lines and imagery might also be explored as a translation across scales. A reworked line might represent a short or long distance. Applying a distance or travel time gives context for the imaging of tactile and textural materials – a series of lines representing vegetation becomes a forest plantation rather than a bed of grasses or shrubs.

A myriad of possibilities for itinerary and experience are seen when exploring material constructs and relationships. Simple interfaces are expanded and altered by a reassigning of scale. From this exercise numerous possibilities arise for the positioning and development of path lines.

These two stages (Material Walk One and Two) have only considered the structure of materials themselves. In reality, the ordering and arrangement of paths is further complicated when an ambiguous context of use is considered. A site or a path may be found with a specific spatial layout and structure, it may have a clearly observable selection of materials and physical features. This however does not mean that everything is certain. User interaction and agency results in variability as the user chooses the particular track for a particular reason or activity and also determines their own specific action i.e. taking a slow stroll to take in scenery or observe elements (such as birdwatching), taking a speed walk for exercise, impaired walking due to injury or other condition etc.

The use of a space and its associated sense of identity appears as variable as local topography. In the observed study area, along one section of the Crater Rim Track (between the Sign of the Kiwi and The

Sign of the Bellbird), people were seen walking, running, cycling, climbing, painting, hang-gliding, sunbathing, and a conservation volunteer group were cutting scrub. This varied use spurs the formation of variable routes and connections which overlap and intertwine with the central pathway.

Along the urban fringe, there are multiple routes which allow the walker to climb up and gain access to the Crater Rim Track – winding valley tracks, short steep stepped rises, broad paths, roads and narrow gaps all give users broad access. Once up above the city fringe and away from the residential edges and confining valleys, in walking into reserve lands and conservation estate, the landscape opens up with less enclosure and more extensive views. While some tracks are bound by physical structures (fence lines, property boundaries, roads) and landforms (rock outcrops, cliff edges), many of the user made tracks spread across the grasslands, scrub areas and herb/rock fields. The spaces encountered here when walking are highly ambiguous - animal tracks, sparse fencing, multiple crossing points and breaks in vegetation allow for exploration off the 'official', formed path and many trails result.

The walker has free will and does not conform to one course, one rhythm or one track. Material operations prompt ideas about the potential relationship and rhythm found between a walker and material landscape but it is the walker's intents and desires that finalise the route taken.

A study of the walker has rich potential for informing research and track design. How does the walker interact with materials? How can they be seen to move along the path? The third and final stage of material walks explores this potential further.

4.4 Material Walk Stage Three - A Walkers' Interaction with Materials

Solnit (2000) describes walking as a form of measurement and the body as a tool for measuring space and time. As the walker moves through a space they discern distances, slopes, textures and materials. Jacks (2004) describes this type of measuring as “ordinary walking to determine the dimensions of land and the relative locations of objects” (p.6). Through establishing visual connections the walker “intuitively understands the relationship between physical things in the landscape” (Jacks, 2004, p. 6).

The walker is able to measure more than physical materials. Walking captures changes in wind, in material, in temperature, in light and these elements affect the walker and inspire material change. Architect Francesco Careri tells how “it was by walking that man began to construct” (Careri, 2002, p. 19). In exploring the landscape certain elements gained meaning and interpretive forms were assigned and positioned. The walker engages with temporal qualities, a relative measuring of materials as a product of time and temporal change. How might the walker’s sense of measuring be used to learn of the path and provide an itinerary?

The third stage of material walks explores how the walker moves along a path and interacts with materials. This final exercise explores the marking and making of a record of passage - a walk line, as an indicator of response and a potential source for itinerary making.

As the walker moves through space they measure and react to materials encountered. They use visual cues to orientate and catalogue, to move through space, and to negotiate landscape. In establishing visual connection, the walker becomes part of the landscape. Urban Planner Kevin Lynch describes this in terms of knowing and reading the familiar and unfamiliar; where prompts show us how to move through space and where to go (via paths, landmarks, edges, nodes, and districts) (Lynch, 1960).

Material features and surfaces guide movement. Walker engagement and condition also influences and directs movement. How can variable components be measured and captured when walking and sensing? If the walker is the tool and source of measurement how is this calibrated?

In order to record movement and calibrate what is measured, a datum or a common ground of relationship is required for context. Time is an accessible tool, commonly used to measure performance and types of

activity in many active pursuits. Time taken, or relative travel time, is used here as a reference point. Time is used to ground and orientate the record. The walk line is a record of walking set against a datum of time.

The walk record begins at a fixed geographic starting point and surveys landscape surface and system, time taken and walker response. The walker's relative geographic position is marked at routine intervals.

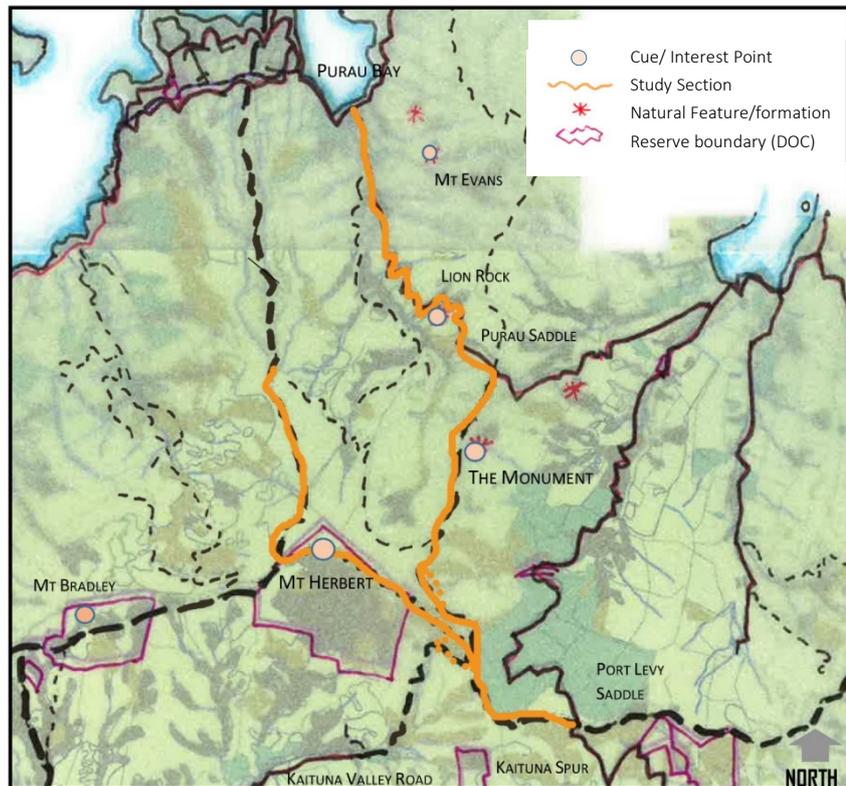
The walk is transcribed onto one long continual line, scaled according to distance travelled, and the length marked and divided into time sections (travel times). The record forms an assemblage of materials, produced by the recording of physical and cultural features (visual and sensory recordings). Observed elements include: location and description of key features (physical landforms, cultural features and points of interest), typological data (material properties such as surface roughness and textures), vegetation, and climatic variables (shade availability and felt wind speed).

While time provides a datum for the walk, the relative spatial position of encountered features is also marked on a topographic base map. This allow for distances and rates of travel to be calculated following the completion of the walk.

The walk record commences at the beginning of the Purau Valley Ascent (below Lion Rock and Purau Saddle) and progresses up towards the Kaituna Spur past the Monument (Figure 24).

Figure 24: Location map – Material Walk Three. Site of temporal observations. Orange line indicates walk route.

[IMAGE AUTHOR'S OWN: MONUMENT TRACK MAP]



Visual and sensory experiences were collected throughout the duration of field survey and compilation of inventory for the timeline was recorded while walker reactions and responses are noted in a walk journal. The concurrent describing of landscape materials, features and process along with sensory and experiential responses creates potential for examining the relationship between temporal, physical and more subjective reactions.

The resultant data record takes the form of series of joined material typologies, a score or a detailed log which marks a continuum through time and space as the walker moves along the path. In this manner time acquires a redefined linearity and orientation based on material experiences rather than a purely mechanical passing of time. Space is seen and known through a series of observable perceptions and motivations.

Figure 25 contains a small sample taken from the resulting 'Monument Line 1'.

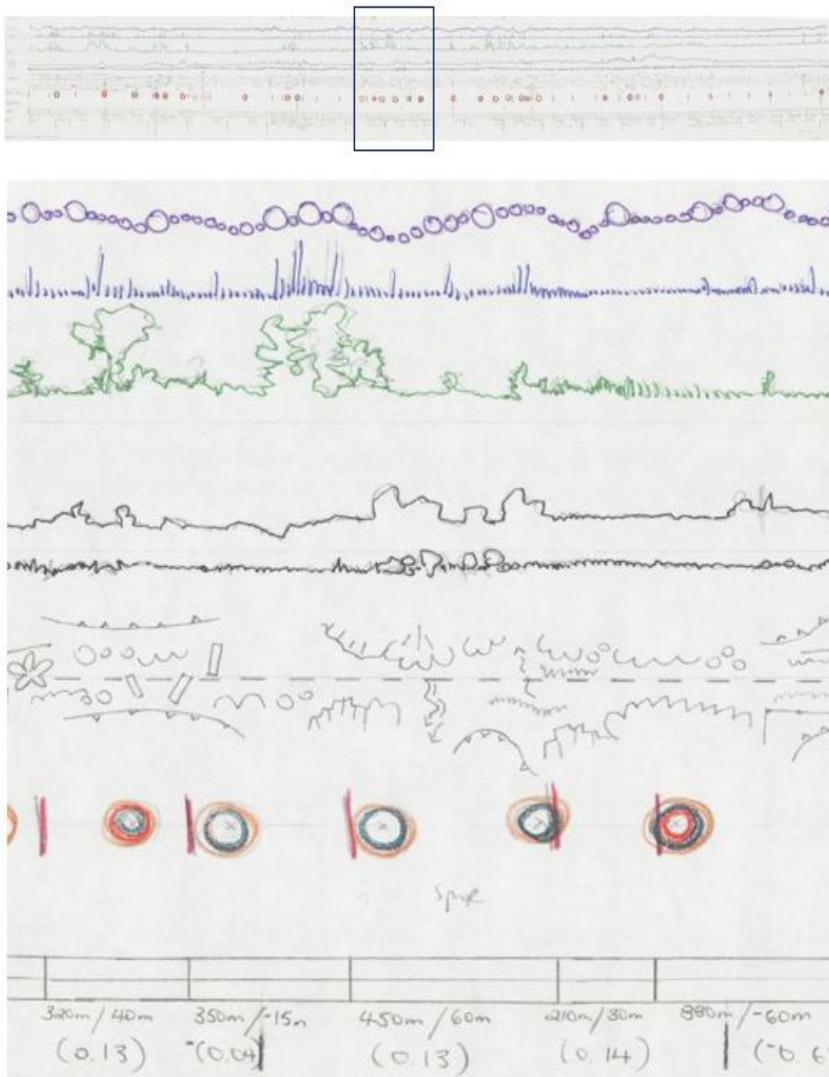


Figure 25: Monument Line 1.

Motivation, interest and intent drive route finding and marking. The total line length (original line) or full length of the record also represents total recorded travel time: In this image only a small portion of the total length is shown (the original walk took several hours), the relative position of the section is indicated by the blue box on the upper length)

The time line is a record of experiential and physical data. Seen here (from top to bottom) experiential data includes: perceived wind strength, track shade, vegetation (adjacent to path), path roughness (slope angles/fall), surface roughness (path material/texture). A path schematic is plotted below experiential notation. Physical features (objects, relative size and position), geomorphic features and natural structures are marked either side of the path line (walker moves left to right). Below these points of interest, unique features and viewpoints are noted. The final set of notes relates to relative topology and form (section lengths vs. elevation gains and relative slope angles).

[IMAGE AUTHOR'S OWN: MONUMENT LINE 1 - NOTATION]

Recorded Observations:

Variables are recorded in a walk journal and plotted on a route map throughout the walk using a form of short-hand notation. Notation follows a similar form to that developed as part of typology creation. This system of recording became favoured for use as it allowed for rapid recording compared to written or sketched alternatives, meaning it could be completed while walking.

Relative times, variable morphologies and path conditions and responses were noted in a walk journal and combined with descriptions of interactions and walker response to provide a thorough description of focus points, influences and items of attention. Temperatures, textures, edges and surface changes come together and create a narrative of movement centred on the walker.

The walk line is a direct record of different walk modes and intents: my relating to landscape, along with my intents, desires, and limits, stretch or restrict the path according to my speed and engagement with site. At a point of interest, or where the texture surface is rough my walk slows, distance stretches and time thickens. With variable stimuli, at various points (the final dash to the summit, the cool of a shady tree) relative time expands or contracts. This gives insight into contact points, associations, the influence of materials, surfaces and features on the walker, and ultimately the experience of walker in a temporal flow. This first timeline gives clues that the path and walker are not self-determining but in relationship.

The time line is a record of what was found – it gives insight into what was experienced and into what relationships and responses were established and developed between the walker and the landscape while on the path. The timeline offers a look into how the walk, conducted at that particular time and that particular path, speaks to the walker.

Insights Gained:

The walk line is a diagnostic tool. The line changes in direct response to walker decision making and response. The timeline and associated records offer a glimpse into a dynamic moment, a particular series of events at a given time and place. The timeline cannot be read as a constant or a fixed entity; it gives insights and prompts ideas about relationship and connection.

It is not predictive. What is recorded is subjective and unique. The exact configuration cannot be repeated; even if the same walker returns to the same location, conditions will have shifted and a new line will result. The timeline is a record of a path which weaves through time-space; a

trajectory that changes in response to land and material. It is an experiential record that generates its own cues and prompts for movement, a critical view of the path and of the walker's use of the path.

As shown in sighting and sensing walks, the conditioning of both the walker and the path are dependent on material and immaterial changes. The walking experience strongly correlates with surfaces and textures. Harsh conditions or rough textures increase resistance and slow pace, revealing a friction generated between walker and path. Points of interest also slow the walker, a pause at a particular point of interest or view. Increases in pace also reveal peaks in walker interest or attention: the anticipated nearing of a goal point, a steep descent, and a burst of energy after a rest stop.

The walk is a measure of indicative time rather than a measure of fixed, mechanical time: it is based on a free walk, where the walker seeks to experience relative elements and positions at will, rather than in accordance with a predetermined plan. The walk is prompted by curiosity and exploration, the intent to discover and open experiences rather than achieve significance through measuring the distance or height gained.

Because of its inherent subjectivity, the use and interpretation of the walk line as a tool is particularly strengthened by the review of supplementary walk notes. Descriptions of emotive responses and walker motivations help frame changes in the walk line. Qualitative data helps reduce ambiguity in the record and allows the track to expand its meaning beyond its apparent linear form.

The creation of the walk line reveals more than a simple passage of events, it is a history of the walker, a traced out route and a geographic marking of experience and intentions. In understanding a walker's needs and intents a specified programme can potentially be crafted. Walk lines and temporal walking have the potential to inform itineraries and be used to plan experiences, drive reactions and inform conditioning.

4.5 Combined Summary of Material Walks

Movement reveals materials: seeing from a distance; coming closer, encountering and confirming; passing by and contrasting. Motion reveals the rhythms of material form observed through space. The act of moving and touching envelopes the walker with sounds, with atmospheric shifts in light and air and temperature. Relationship with materials also guides movement through space and directs the route taken. Movement and materials are intimately connected. Table 4 summarises the stages and outcomes of material walks and provides a program for experiencing materials through walking.

Material Walks					
Step	Survey Activities			Inventory	
	Aim	Inventory Goals	Task	Resource	
Stage 1: Building a Typology of Materials					
Catalogue and form typologies of materials encountered along the path					
How are materials, form and interactive elements observed?	Step 1.	Determine what is already known and structure study areas	Create a base map and gather existing information	Reading, review Mapping	Existing maps, literature review, historic accounts
	Step 2.	Survey and describe material form and features	Compile comprehensive track notes and experiential account	Survey Mapping Sighting Drawing Writing (walk journal)	Base map, guide/notes
	Step 3.	Examine how features relate and compare/contrast inventory	Structure a catalogue of materials and form types	Sketches Maps Notation	Collected inventory and walk records
Stage 2: Typing Operations					
Investigate how material typologies can create itinerary					
How can materials be used to alter the path?	Step 4.	Ideation: Consider how typologies might be explored further	Form a frame of operations and a set of tools/prompts	Design readings/theory Design examples	Type cards, cue cards
	Step 5.	Explore a range of relationships between types and explore connections	Build a collection of reworked types and relational sketches	Use design prompts and operations	New typologies and sketches showing structural relationships
	Step 6.	Reimagine track materials and experiences based on reordered sequences	Develop track notes and sections from new typologies	Explore notations and sequences, expand to account for path itineraries	Concept sketches and path routes
Stage 3: Recording the Temporal as Experienced in a Walk					
Explore how the walker responds to materials when walking					
How does the walker move through landscape?	Step 7.	Record how the walker moves through space and builds itinerary.	Establish itinerary of route taken	Record travel time (time taken), sighting and sensing survey. Observe walker interactions/attention (walk journal)	Base map (topographic)
	Step 8.	Examine recorded itinerary	Build timeline of events (establish walk line)	Map out walk (timings) Locate events Correlate with walk notes	Walk journal/walker record of response Photos, sketches Notation Marked up base map
	Step 9.	Analyse walk line. What can the walk line tell us about walker motivations?	Annotated map/sketches and marked up maps – itinerary of route	Review map and notes, compare changes in line with journal notes.	Walk line, maps, walk journal notes

Table 4: Summary of Material Walk stages and process. This table outlines a process for experiencing materials on site, collating walking steps into a collective process.

4.6 Outcomes and Implications – An Informed Theory of Moving

Careri talks of the theatrics and the avant garde in walking as performance (Careri, 2002). The walker is a performer, an observer, and a choreographer. Performance teaches us about the performer and is a tool that informs ideas of perception, memory and stimulation (Crang & Travlou, 2001).

As the walker travels through space they alter their pace and tempo according to their reactions to materials in space. Reactions are guided by ability to way-find, and the permeability of materials themselves. The walker's reasons for walking also influence pace and orientation. As the walker is free to choose their path, they may deliberately decide to stray from usual habits and routes, the path may turn off on a tangent (free/exploratory walk) or a strict route may be enforced as the walker keeps to a set time (directed/timed walks). What can the path become if we consider how it promotes and alters a real relationship with time? What could the path look like if marked with time and how is this revealed?

Walking as a Measure of Materials and Time:

Previous walking studies reveal a common link between walking, observing and recording; an element and dimension that has significant impact on the quality of movement and knowing. This link is time. Time has critical mass, it is a critical component. The walker is driven by time, and it is this driver which may alter a walker's decision making. The walker may dwell, they spend slow time in place or they may decide to pass hurriedly through. Taking time to notice, to pay attention, to become aware of interfaces and exchanges can enrich thinking. Time influences and informs observations through both mode and style of walking. It can be seen clearly that movement is connected with time. The ability to exist and observe is correlated with state of being: concentration and focus, intent, style and pace of movement are all linked with time.

The sense of time can condition a walker's sense of achievement and may be measured by a range of factors: rewarding encounters and milestones gained compared to the distance attained, speed of travel, and duration of walk. The outcomes of a walk depend on walk intent, walker goals and walker engagement: the speed at which one walker walks is different from the pace of another, and the encountering of terrain, materials or features causes different reactions in different walkers.

The smoothness of transition and the evidence of change depends on arrangement of surfaces and our apparent concept of time. If fully immersed, the journey is smooth and time passes by hardly noticed; if engaged by surface texture or features, the passage of time may be noticed and recognised in a succession elements and experiences – attracted and distracted. The recognition of time passing and acceptance or way of relating to time, conditions experience. Like the mode of walking, the mode of experiencing time also influences the actions and ability of the walker to relate to the world around themselves.

To Massey, time and space are not opposites, they are simultaneous occurrences: “space is imbued with time” (Massey, 2006, p.46). The walk line reveals space and time as intertwined. The walker’s ongoing passage is a story is one of a landscape formed of a multiplicity of trajectories with unlimited implications for viewing and making.

Site design typically centres on form and space. What happens when this is not the main focus? What if process and time are allowed to guide images, thoughts and materiality? If the material and the physical become a source of immersion and engagement, not a mere stage on which to perform?

Perception of time is not fixed: it occurs relative to each walker. Paths have friction and the type of contact and interaction is determined (and potentially able to be predicted) by surface contact, conditioning, score and rhythm of materials and movement. Who or what determines this rhythm?

Walking & Choreography

Choreographer Jonathan Burrows explores the role of choreography and the relationship between choreographer, performer and materials. In dancing, modern methods push the boundaries between maker and performer. Burrows reflects how modern methods (of choreography) are “organic and intimate, one on one.... a blurred line between maker and performer, each bouncing things of the other in an endless feedback loop” (Burrows, 2010, p.32). This can also apply to walking: the walk provides a tangible and comprehensible contact, it generates a story while simultaneously living out and recording narrative. This story can be recorded as a walk line or a script of walker-driven choreography. Walking, its performance, its rhythmic sounding as a score has potential to provide cues and stimulus for further exploration of walking and material use.

As material walks reveal, walk lines and scores can be diagnostic. Scores are both performative and instructive, a “hieroglyphic the dancer can perform directly” (Burrows, 2010, p.32); a visual clue or a way of expanding performance through enhancing imagination (e.g. a dancer’s written choreography); or they can be informative and provoking (e.g. notes to establish plot structure and layout of a book).

Scores can be used when walking to record times, materials, forms, events and to make sense of the complex. Walking tests and confirms surfaces, the score then captures and translates: we use our own visual cues, we walk along a known or ideal path, a projected line, observing and recording. Scores also reveal the use and influence of time.

Time is Cultural – it is Relative to the Walker

The third material walk explores time and raises questions over how time might be considered and used. Zen Teacher and Writer David Loy echoes this questioning in inquiring about “the real space and time in which our culture lives” (Loy, 2001, p.35). Time is viewed through a cultural lens. Seen as a commodity, as something objectified, used, spent, and invested in. Spaces are designed and used to accommodate our view of time; objects within this spatial field are encountered and passed by in succession as we move through space.

In reading the Monument Line, it is suggested that time and space can be viewed as a flow, rather than a series of isolated physical things and separate events. Time is not simply taken or spent as the walker moves through space, mechanical time does not prompt movement, rather the temporal is experienced in relation to material engagement.

Landscape Architect Catherine Szántó talks of sensing as being “immersed in space, experiencing temporal succession as a multiplicity of possibilities of movement” (Szántó, 2010, p. 54). In a journey the temporal is sensed and experienced as a storyboard, a series of events, imagery and action or as a fluid, continuous experience. Time marks the walker and the walker marks time.

The walker immersed in materials may cease to notice time or be drawn into a new sensing of time. Materials exist within their own alternative time cycles – the slow movement of water, the rush of wind, the slow relentless wearing down of rock and stone. The path is a flow of materials and temporalities.

Engagement with material form and features allows the walker to see time in the landscape and its traces and an internal sense of time allows the walker to adjust their pace, their engagement to match external time. The walker sets out walking with various intents; following

different trajectories, seeking different goals and moving to different rhythms. Elements along the way may alter our time and engage us. A landscape form or feature may stimulate contemplation and deliberation or prompt a change of pace. As seen in sensing walks, sometimes it takes a deliberate, disciplined action to keep to a set pace, or to engage with materials.

Site and its design can also accomplish a narrative of time. Meyer (2009) outlines how moving through site at variable pace, with various levels, forms and types of site treatment raises awareness and enables storytelling. Textures, plant materials, growing states, all emphasise process and the spectrum of time. "Landscapes exist in relation to the human actors who engage with them and imbue them with meaning" (Wilson & David, 2002, p. 6). This is the everyday, located through temporality (Crang, 2001). A walker who dwells, lingers, gets lost in landscape and in materials forgoing mechanical time, creating their own rhythm.

Path as a Change Agent:

Walking is a catalyst and source of design. It builds a platform for human interaction and contact. The walkability of place helps determine comfort, security, and use. Walking in turn, makes a place familiar, more comfortable. Walking helps us see time and use time to develop a relationship with landscape.

As sighting and sensing walks have shown, walking is a tool, a mode of interrogation and making. It enables us to find context and awareness of all layers: surface and subsurface, visible and invisible, hidden and revealed. Rigour and integrity in exploration and comprehension come with depth of sensing and are aided by variable approaches and viewpoints. Through walking we learn of the path, through recording the walk we see the influence of the path and its materials.

Contact with the ground informs us of the path's qualities. Ingold talks of "movement is knowing" (Ingold, 2011c, p. 160). We feel out our world through our feet, in walking we perceive: he outlines how "it is surely through our feet, in contact with the ground (albeit mediated by footwear), that we are most fundamentally and continually 'in touch' with our surroundings" (Ingold, 2011b, p. 45).

Movement generates friction, friction produces wear and leaves marks and alterations to materials and surfaces. It is friction that causes change to occur, friction that draws attention. Recording friction through a mapping of the markings and traces of the walker enables a unique reading of landscape to be presented. The path and its surfaces;

the walker and the walker's ability to access and negotiate, determine the level of friction.

Local conditions and preparation (of walker and materials) greatly alter a walker's experience. Landscape Architect and Designer Mick Abbott outlines how technology eases the path. Technological advances reduce 'the temporal scope', where a readily followed track and user-friendly equipment lessen the friction of the walker within the landscape (Abbott, 2013). The materials of the path, the layout and positioning of materials and structures along a route influence perceptions of time and permeability of passage. A programme of interventions can be developed to consider how materials can influence the walker. Path materials and forms can stimulate and guide the walker.

Awareness of materiality can form an itinerary and guide for the making of paths and can order time and space. Szántó outlines the production of itineraries and directed movement through site in her essay on the gardens of Versailles. Her study reveals how an itinerary of walking (as devised by Louis XIV) directs visitors on how to maximise their walking experience. The optimum route through space, revealing enhanced views and sensory engagements - the garden made known as intended by its designer. Szántó describes finding "records of views that unfold at different scales" at different points and "accompanied by sounds, smells, light and shade". Providing a vast range of views, possible in the one site, the itinerary goes "beyond primary sensory experience", and into the kinaesthetic, into orientation, surprise and expectation (Szántó, 2010, p. 54).

A score is a diagram of itinerary, "a way of reading and writing movement" (Burrows, 2010, p. 30). Scores may be made by process or as an interpretation of process, depending on their intent. A score is a record of time, rhythm and movement and the relationship between them. Scores catalogue life and provide ways of reading motion, of capturing process and of directing a path. What if scores are produced by experiential or temporal cues and the path guided by such scores?

Material walks confirm how an itinerary of materials can guide and inform experience; they also hint that the equation may be reversed. While it is clearly seen that primary experience guides the walker and influences their passage through place, the following chapter explores a counterpoint: it investigates the idea of temporal cues and influences as a driver of score and track design. Rather than programming experiences by directing a walker and presenting a passage through existing and fixed materials, what if experience and reaction are used to design materials?

Chapter Five

Making

Geographer John Wylie writes of how narratives emerge in walking (Wylie, 2006). Walking establishes more than a physical trace, it creates a storied place. What is usually considered when developing a walking path? How is the final path and its use considered?

Exploratory walks have so far consider how things appear from the path, how forms and features might be sensed and recorded, and how material properties might be used to prompt thoughts of itinerary and narrative. How does this knowing translate into making? What drives path formation and how does this formation influence use?

Path making and mapping is usually bound by topographical constraints and materials. Paths are plotted and formed according to certain layouts, conventions and drivers. A review of a track design standards such as the Department of Conservation Track Construction and Maintenance Guidelines (Devlin & Dobbie, 2008) show ease of access, availability of materials, route efficiency and maintenance as priorities for track making. While some walker experiences are considered (e.g. proximity to landscape features or anchors, access to views or natural heritage features, requirements of certain users), the predominant focus of path making and planning is centred on the use of quantifiable parameters. Spatial form and layout dictate physical design and little consideration is given to experiential design or temporal elements.

Track making and mapping rely on topographic interpretation and vector based projections: a path viewed as a measured line of a certain length and placed along a certain vector. This line crosses, lies adjacent to or within various marked out fields e.g. contours, vegetation zones, water courses. Knowledge of this line is based on map reading, awareness of conventions, or prior experience of similar places. This mapping of the path may also include a description of physical features and may, or may not be, supported by photographs. Such information is useful but it is not complete.

5.1 The Temporal as an Informant in Path Making

Consideration of temporal elements can inform knowledge of the path. Abbott (2013) describes how, through using a manipulation of mapped topography, two contrasting images of the same region may be produced: the first image uses a standard referencing system in which time conforms to space and a conventional track map is produced; the second image contains an altered grid where time is prioritised over length. When spatial vectors are re-aligned with time, a bending or 'distorting' effect appears.

This 'topographical morphing', as shown in Abbott, allows the landscape, or its image, to be folded and stretched creating a new view. In a representation of the observed field, the land surrounding a track is seen to be textural – smooth, fast, readily traversed or rough, slow, and laborious. The path becomes mapped according to an experiential frame; landscape becomes embodied.

Imagery can record actions and it can provoke. Material Walks reveal the latent possibilities inherent in scores. They suggest that images and scenes might be opened through the interpretation of rhythm and movement, and projections extracted and adapted into new forms or locations. Temporal walks explore this thinking further and provide a study of scoring and recorded experiences as drivers for path design.

Cultural Geographer Mike Crang describes the role of a score in helping us move and perceive, from a binding frame of satisfied time to a framework of temporalized space (Crang, 2010). In this frame, time is not added to models or displayed as an add-on, rather the use of time as a driver manipulates or innovates. Temporal walks are used to edit and expand walking inventory through the interpretation of the temporal landscape. Scores are used to mark and make time. Score can be used as a driver or a confirmer, the images or representations that result help expand our views, giving us an extended view into time and space.

Previous material walks used type operations and timelines to open up thinking and seeing; exploring material possibilities; creating avenues of visualisation and developing scenarios for future walking. The timelines produced add a human element to recording and marking: the walker becomes the source and driver for recording and material-physical things are not located or identified solely by their geographic context, rather they are viewed as potentially reciprocal entities (as products of an interchange between walker and landscape).

These walks have shown the value in considering time (seen time, sensed time, and material time) and how temporal elements can influence observations. This following chapter explores the temporality of walking and of the path and how this might drive path making and itinerary building.

Each scoring exercise presented in this chapter focusses on reciprocal relationship. A driver informs score, which informs the path, which informs score. The walks explore and record the marking of time – from the translation of walker needs into track potential, to an extrapolation of external views and sources of score formulated for site design.

The first walking exercise uses a reading of landscape as an internally driven score for path making (walker as agent). An interpretation of a walk line is used in the first temporal walk to position landscape and guide design operations. Path mapping is based on interpreting walker experiences and applying these to path layout.

The second exercise uses materials and temporal processes found in landscape to explore score formation and landscape derived itineraries. Time seen in landscape becomes a driver for the path.

The third and final walking exercise explores the sourcing and use of externally driven score to locate and design pathways it explores. How a path might be inspired by a non-related element or an external cultural driver.

5.2 Temporal Walk Stage One – Deriving an Experiential Path

In Abbott's temporal cartography the altered image offers "a more qualitative and experientially layered understanding of landscape" (Abbott, 2013, p. 14). Applying time and experience, not just as a layer placed upon a surface, but as a driver for mapping and scoring, alters the way landscape is perceived.

The building of a walk-line reveals the walker and the landscape in a continual, time-filled relationship. As a timeline or score of movement and interaction, the line forms a linear route map which reveals a rhythm and temporality unique to the particular walk and walker. Like material typologies, the walk-line has potential to be used for exploration and making. The physical scribing of the line marks time, and time becomes a change-agent: a maker and marker for thinking about paths. Time becomes a catalyst of material alteration and tactility, it acts as a restrainer and situator of space.

Experiential time recorded in score gives a commentary on time spent and landscape encountered; the resultant timeline acts as a record of walker and landscape marked by encounter. The record is a visual writing of time and relationship on topography and a lexicon of events and features. The first temporal walk explores how greater awareness of landscape can result from looking at landscape from an experiential lens. How might a temporal understanding of pathways situate path making and bring context to path design?

The Monument Line (developed in Material Walk Three) forms an assemblage of observed materials and experiences, produced from marked up topographic maps (physical and cultural features taken during visual and other sensory surveys) and the recording of walker interactions and reactions. The focus of the walk is not the generation of new physical data, rather it centres on a broadened understanding of material inventory. Design exploration seeks to expand what becomes known of the path when viewed from within a temporal frame and the mapped line is altered based on experiential record.

Interventions include paper modelling, sketching, folding, cutting and stitching. Each action represents a marking of time upon space; spatial form bends to accommodate and match the temporal record. The walker is both agent of temporal record and driver of material intervention. The existing temporal record is determined by the walker's pace, their location against time used in moving through space. Design operations develop a physical expression of the walker's intents and

perceptions – a spatial conceptualisation of the path or a future material record, based on possible itineraries.

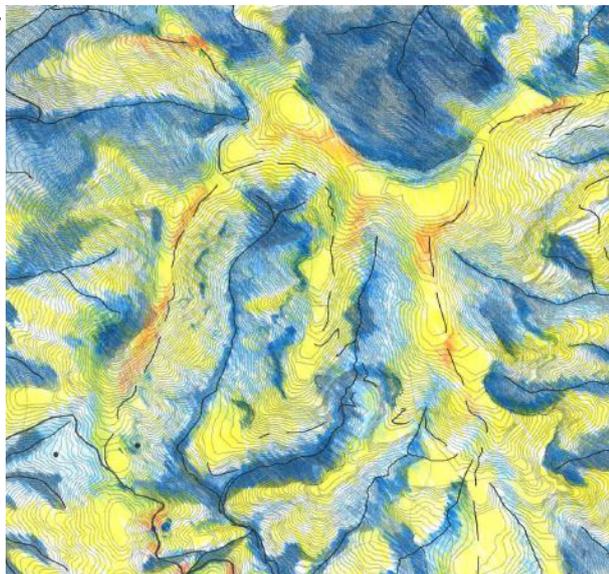
Each map and image becomes a spatial interpretation of the walk-line. Objects on the original plan were explored as walker attractants and detractants, and maps were cut, folded and rearranged based on analysis of the walker’s experience. Elements were reordered and/or rescaled using paper models to provide a visualisation of enhanced user experience. The final rendering results in the formation of a structured score, a staging of materials that reveal the surrounding landscape to the walker through a considered progression.

Recorded Observations:

Initial walking records establish base parameters and create an inventory rich in experiential information, which may offer insights as to what features might be changed to alter concepts of time and space and user experiences. A study of timelines and responses reveals causal factors that influence the walker, the route taken and the time taken to walk – in manipulating these factors, the qualities of the path are altered and the walking conditions changed resulting in a new relationship with site.

An example of this was seen in perceived temperature and comfort levels. In examining walk notes it is seen that the relative perceived comfort of the walker influenced rate of passage. Extreme heat reduced comfort, induced lethargy and consequentially slowed pace. A lack of shade provision also limited preferred rest points and where shade occurred resting time increased. Figure 26 shows a spatial mapping of perceived temperatures as interpolated from walking experiences and path section notes.

Figure 26: Experiential recording (perceived temperatures/comfort). Analysis of walking exploration observations for the Monument and Mount Herbert Walks (i.e. Monument Line) revealed that walking pace, perceptions and track completion times were closely aligned with experiences and qualitative sensory features (perceived temperature, shade availability, visual goals, material features etc.). A range of variables influenced the walking experience and affected not only actual, physical walk speeds but orientation and route used. Where there was little shade, or wind exposure, pace slowed. Shady patches prompted stops, water features caused deviations off the formal, marked path. Comprehensive field notes (including recorded change, spatial referencing and field description) allowed these experiences to be mapped spatially. Sun, shade and wind direction were also mapped. Blue indicates increasing comfort (cooler temperatures and shade), orange indicates increasing discomfort (sun exposure/exertion).



[IMAGE AUTHOR’S OWN: SUN SHADE WIND MAP - AN EXPERIENTIAL WALK MAP (SENSORY PATH – HERBERT SPRINGS/MT HERBERT TO WESTERN ROAD LINE)]

Connecting experiential records and mapped materials gives insight as to how a walk might progress across an area. Altering material properties can alter conditions, responses and potential travel times.

Walk notes show exposure to conditions affected both the walker and path conditions. In limiting or controlling effects, experiences are altered and a change in the temporal results. Where the walk-line shows a reduced walking pace and potential stress or a physical deterrent, design elements can be used to intervene, alter conditions and change the walking experience.

In exploring pathways and plotting their possible courses, it is seen that knowledge of form and features, (in particular the location and properties of potential attractants and detractants) is useful for informing track design and temporal materiality.

The walker's experience gives the path weight. In engaging with the walk, the path becomes a place rich in memory and meaning. It gains substance; an additional layer to the existing palimpsest found in traces of past use and path history. In mapping walk times and features, the path is seen as a thing embodied. Elements and experiences combine to give the path a heaviness, felt in a slow step as the walker progresses up a steep hill or in reluctance to walk as a warm and dusty wind envelopes the walker. Alternatively, the path is light and the walker steps quickly, refreshed and invigorated. Stitching was used to visualise this



Figure 27: A stitch and fold in time. Physical alteration of material and track based on the weight of the path. The folded map was cut, pulled and stitched according to travel times and perceived experiences. Each stitch marks the passing time: the stitch-line follows the path taken when walking, stitch length indicates approximate time taken and stitch thickness provides an image of the weight of the journey. Deviations and stops were stitched as they occurred. For long distances with short walk times the path was cut or folded and stitched - a quickened pace and a short stitch over a long length quickly tore the paper. This experiment quickly resulted in the destruction of surface – a tangle of stitches, pocked, torn and marked paper resulted in high use or slow areas. The exercise provoked reflection on the impacts of walker on site and site on the walker: the changeability of materials and form and the relative fragility of surface and system as perceived when walking.

[IMAGE AUTHOR'S OWN: STUDIO EXPERIMENT – MARKING THE PATH WITH FOLD & STITCH.]

interaction: a heavy stitch infers a heavy tread, a thin connection a fleeting touch as the walker is buoyed up and along the path (Figure 27).

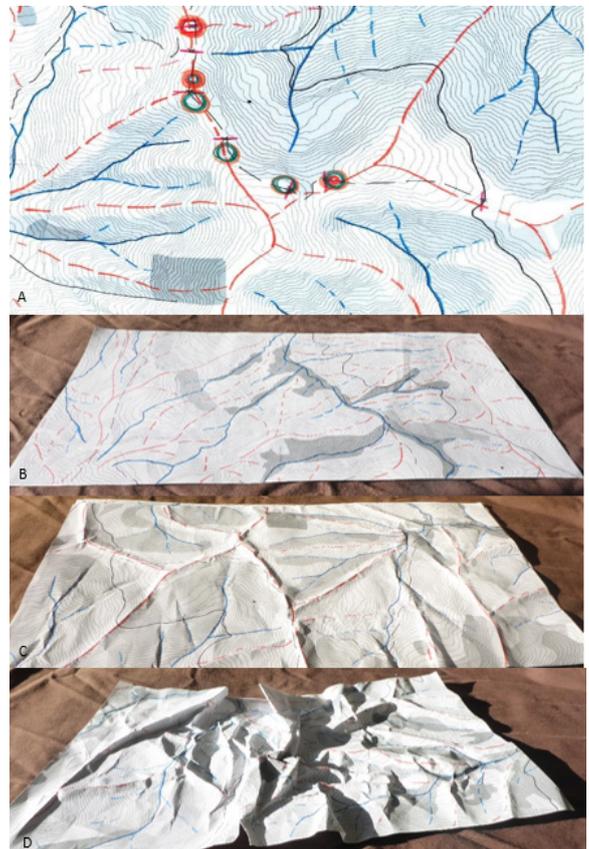
The stitched track produced a literal interpretation of a scored path. Forms and features of interest, elements of attraction, were brought closer together with a shorter stitch indicating increasing speed, a heavier layering of thread where time was spent lingering, and the path and paper cut where it was skimmed over with disinterest or discomfort.

The experiment formed an image of landscape so altered from the conventional it was unrecognisable. Cutting and stitching the path, correlating user values with form and feature as a guide, was at once deconstructive and constructive. As the path developed in response to focus on material and experiential qualities, a new surface emerged. One that was layered, in some parts ragged with stitches – the fabric worn thin, held together by a stitch that pulled apart at its edges.

Stitching the temporal journey placed emphasis on the path form and passage through space. A final folding exercise was undertaken to explore impacts on the landscape itself. A progression of altered landscapes was formed from paper folding experiments, using data obtained during walks taken in the vicinity of the Monument and Mt Herbert Summit (Figure 28).

Figure 28: Experiential folding - an altered spatial field based on temporal scope and sensory data. Review of walk records and field maps allowed the plotting of various temporal and experiential maps (figure 26). Features of special interest were also marked onto a base map (A). A series of modified maps were then developed. Each map utilised a copy of the same area map (B - Mt Herbert Summit/Monument Track). The first folding exercise (C) mimicked existing topography (valley folds, side creases and ridge projections as raised ridgelines). The second folding exercise (D) manipulates spatial form based on temporal record. Recorded walk times (10min intervals) were marked on the map as recorded, the map was then folded so time markings became equidistant intervals. In this last folding exercise time (and folded paper form) is subject to the experiential record – lengths of track with undesirable features (discomfort, high exposure) became shortened, more desirable sections stretched out as more time was spent in place. The images show a representation landscape modified and made of time rather than space. e.g. L’Hostis “crumpled space” and Wylie’s “depths and folds” of landscape which knit “biographies, events, visions and topographies” as described in Abbott (2013, p. 12).

[IMAGES AUTHOR’S OWN: STUDIO DERIVATIONS OF MONUMENT LINE NOTES]



The original record of the line was, like a regular score, processional, active, based on movement over time. These design experiments resulted in an embodied manipulation of surface and space. In performing each fold or stitch, in pulling layers and materials over each other (shortening segments), or tearing and patching (extending sections) a tangible topology is formed. New surfaces are made visible and new relationships are enacted. Each operation visualised the temporal landscape, forming a surface in which the human and the material are made tangible.

Insights Gained:

The use of design interventions (i.e. providing a shade source such as vegetation, which acts as a shade source, a wind break and may break monotony) has potential to alter walker perceptions and stimulate a new rhythm. A break in time increases future tempo by changing conditions. It can be inferred that altering materials and form in other places along a path could also impact perceived/indicative time by using usual cues and materials to prompt movement e.g. altering path form to invoke curiosity, placing features at set stages along the route to mark time or provide attainable benchmarks.

How should the time taken to walk a path be measured? What time is important: the time it takes to walk a path from start to finish, or the perceived time felt in walking along various sections of the path? As part of the walking experiments undertaken as part of research, the observation of mechanical and indicative time was undertaken: The time to walk from one point to another (mechanical/measured time), the perception of time taken as experienced when walking the track the (indicative or felt time) and dwelt time (time spent not walking but occupied in pursuit of other interests or occupied by various elements or features i.e. rest time, off track explorations, contemplation points). What is evident in the records, is that walk-time is not a mechanical, ordered and steady time, but a compilation of relative time, with ebbs and flows linked to specific responses driven by features and wider environmental cues.

As the Monument lines show, altering timelines is not as simple as a quick rearranging of paper lines. Each turn in the line represents a subject, an encounter, a material change. The formation of such a line involves consideration of a range of interacting elements, coming together in a particular way, at a particular moment. The reality is that the sequencing possibilities are endless, there is a multitude of potential outcomes.

Abbott (2013, p. 14) articulates how “diagramming movement and mobility involves more parameters than the single metric of journey duration”. In his text, Abbott outlines a range of studies relating to movement and mobility which are worth examining (e.g. the works of Halprin, 1965; Ingold, 2004; Ingold 2009; Cresswell, 2006). He concludes that one single journey can hardly reflect the totality of place - every time we view a landscape we see something new. We can never hope to capture every moment, every element, but we can interrogate what we do have.

While mapping experiential landscapes can be seen to be problematic, exposing difficulties in conveying movement and in grounding and materialising subjective records, there are opportunities in visualising the temporal landscape. Where the time-line is drawn, it is supported by a range of other data e.g. field notes, descriptions and sketches. Each bend in the line can be reasoned and qualified, and this enables a richness of interaction when the line is then explored and altered (morphed, cut, stitched, and stretched). The altering of the path, the pulling apart and stitching together of its components and features cause elements to meet and overlap, forming new relationships and creating a juxtaposition of time, space and perceptions. This action can prompt new thinking and propose changes to rhythm, materials and experiential cues found along the path.

The walker’s experience is constantly changing: no single experience can ever be repeated and there are a multitude of factors which influence the temporality of the path. The following exercise, the second stage of temporal walks, further explores the agency of landscape in conditioning the temporal. What rhythms and temporal cues exist in landscape?

5.3 Temporal Walk Stage Two - Time found in Landscape

The landscape is rich in unseen trails and temporal networks. Time is seen in remnants of materials, in things in motion and in rhythmic patterns and traces left behind on surfaces. This second stage of temporal walks seeks to explore time as seen and experienced when walking. It draws on examples of temporal landscapes and time seen in landscape, as observed in the works of a range of artists and designers. Time has been studied and utilised in a variety of ways; the following outlines some examples.

Time is seen and remade in materials and in rhythmic form and pattern; e.g. sculptor Andy Goldsworthy uses natural form and processes as the foundation for his works. Materials are used to emphasise changes, and to mark events and moments. Natural patterns are replicated and disrupted, highlighting change and decay. Goldsworthy's works reveal the importance of situation and location where in the right place the ephemeral has a sense of permanence or enriched meaning (Goldsworthy, 1993). Goldsworthy speaks of this temporality in describing where "rhythms, cycles and seasons in nature are working at different speeds in different places" and how "understanding those cycles is understanding the presence of nature" (Goldsworthy, 1993, p. 158).

The transient nature of materials can be used to emphasise the impacts of time e.g. Artist and writer Robert Smithson used landscape process to build and create forms which, in altering over time, allowed the temporality of landscape materials to accrete, erode and change the designed element. In introducing complexity into what might be otherwise understood as simple, binary relationships, "places overlap but are endlessly incommensurable" (Reynolds, 2003, p. 133). Smithson challenges the viewer's perceptions and awareness of time through his representations. His works disrupt perceived relationships and open up gaps in or reveal limitations to mental and perceptual experiences of time and space (Reynolds, 2003).

The walker or participant can themselves be a source of time-marking e.g. land artist Richard Long's works capture the temporal in photographing the wear of a footstep along a line, the temporary trace seen in dew, the fleeting, in-the-moment connection between walker and materials. Walking measures and marks the in-between, it locates and allows the walker to dwell (Strandhagen, 2014). Time is marked over an accumulation of footsteps; it is not separate from materials but recorded in materials.

The landscape itself can be used to make images and space through its rhythms and motion; e.g. artist Tim Knowles uses landscape elements to generate forms and lines. The physical processes which can mark the land or move materials are used to mark paper and other media and permanently capture a short lived event in time. Knowles' work takes on an element of 'hyperdrawing' where the unexpected and unpredictable result as natural rhythms and process control image making. "Knowledge is born of the moment" rather than "predicted and prepared for" ahead of time (Tracey, 2012, p. xvi).

The forms that result from process can be symbolised and represented by notation in a diagrammatic short-hand that documents time. Rhythm and process can be transcribed in a sketched form and a captured image used to influence a pattern of score.

Recorded Observations:

Time is found in landscape in a variety of forms. Time can be seen in motion: rhythm generated through materials and pattern found in the landscape. Form and feature act as a metronome, an indicator marking time. Time is also perceived and marked in seasonal changes, in tidal changes, in wave forms, in wind patterns. Such shifts can be sensed, and atmospheric qualities of time captured during the process of walking or being in landscape (Figure 29).

Figure 29: The temporal in motion.
Shifts in time and materials may be sensed by the walker. Materials can be seen in motion along a route and change actively observed. Changes in season are marked by vegetation, meadow grasses with seed-laden heads and summer flowers sway in the wind. Looking up from the ground, clouds are shifted by wind. With the changing of the weather, in one moment a sunny open view is shrouded in mist, perceptions and spatial fields seem to shift, time becomes tangible as objects open and close within the cloud bank.

[PHOTOS AUTHOR'S OWN: (FROM TOP RIGHT) MT ADA TRACK; CASS PEAK MEADOW GRASSES; MT HERBERT CLOUD COVER]



Time is also observed in a static form, where time is marked by a trace or a reflection of process. Change itself is not seen but the evidence of alteration is observed and a temporal process inferred. Physical materials provide a view of time, frozen in place. A moment of time may be captured in a photo or a sketch (Figure 30).



Figure 30: Traces of time seen when walking. Material encountered along the path provide a record of events hidden in time. Actions and events mark surfaces, new materials over or through others. Over time the edge of a path wears down, water seeps over surfaces eroding patterns and grooves, mosses and lichens spread and sink into materials, insects and other animals burrow and scar wood and stone. Plants persevere against the constant shifting of the tide as other materials are worn away. In looking closely at surfaces and materials the walker-observer is able to read not just form and texture but the passage of other substance in movement and the passing of time.

[PHOTOS AUTHOR'S OWN: CLOCKWISE FROM TOP RIGHT: CRATER RIM TRACK, PORT HILLS; PORT WILLIAM BAY, RAKIURA TRACK; KENNEDY'S BUSH RESERVE, PORT HILLS, CASS PEAK TRACK, PORT HILLS; TONGAPORUTU BEACH, TARANAKI.]

Time may also be marked by repetitive images, objects and materials; the products and positioning of landscape elements can form a score. Rhythm and patterns are easily observed when sought in landscape. In moving through space, changes in materials indicate rhythm and a marking of time – tree trunks create lines of light and dark. The walker's pace, added to the natural pattern of shade and light, creates an experiential arrangement, a tangible pattern of time and material.

Rocks punctuate hillsides, lichen forms smooth round markings: imagery that translates into form and rhythm. Colours, textures, line and form, all collaborate to make patterns and tempo. The material landscape is complex, a cacophony of movement and imagery that overlap in complicated melodies. Itinerary and score may be inspired by such aspects of place, or formed from a composition built from rhythms of observed site materials and/or process.

Material forms may alter subtly or abruptly and be mimicked through diagram and score. A path can be designed to mirror or exaggerate

material reality by extracting and working rhythm into materials. Soft or heavy rhythms might be replicated in the types and styles of materials, in the spacing or scale of built elements, or in sensory experiences provoked by movement through a space. A dense, heavy material which encloses gives a place weight and a feeling of heaviness whereas light, airy materials which allow natural light and breeze borne movement induce a sense of weightlessness.

In walking through a landscape, the walker-designer may note certain elements which are of significance to site, materials that are uniquely placed or of historical value. The walker may arrive in an exacting moment, where the confluence of elements inspires a design concept or a rhythm. A simple element is turned into a sketch which itself inspires ideas of form and placement (Figure 31).



Figure 31: Landscape gives rhythm. Observed form and pattern evokes thoughts of rhythm and material positioning. Plant or lichen growth, the natural arrangement of a rock formation, windblown trees standing on a ridgeline, layers and patterns seen in the ground itself. The landscape is rich in patterns, tempos, tones and repetition.

[IMAGE AUTHOR'S OWN: FIELD PHOTOS/SKETCHES – MOSS/LICHEN ROUNDS ON ROCKS, BLOCKS ALONG RIDGELINE ETC.]

The landscape is constantly unfolding, creating new sequences in which humans and ground become, and continue to become, entangled. Each shift presents a new opportunity from which to develop an itinerary of walking; an arrangement of elements traced along a path in a succession of textures and forms (Figure 32 over page).

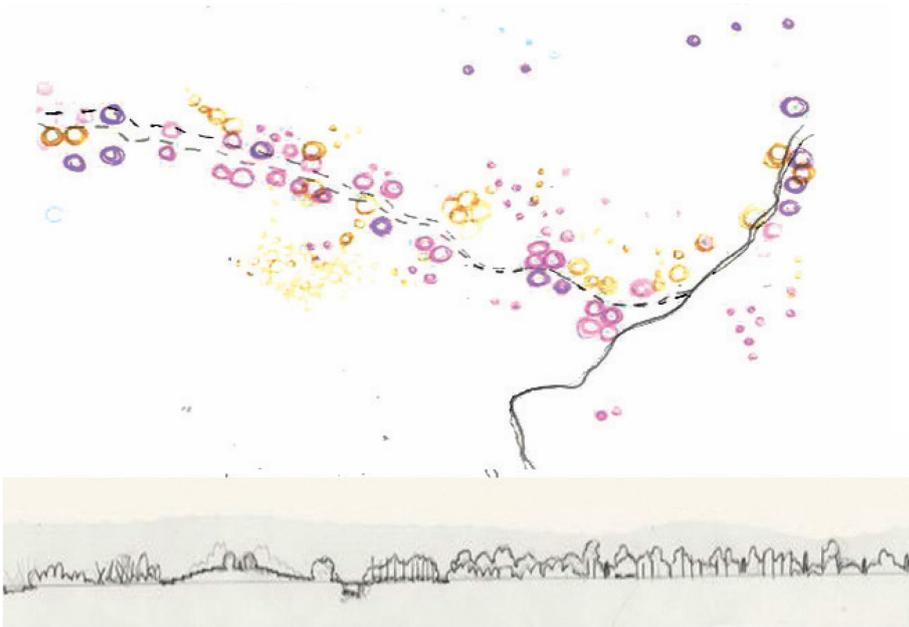


Figure 32: Placement and position into a sequence of textures and materials. Landscape elements are marked out along a track map and then transposed into a track section. A series of materials developed into an ordered sequence of textures, types and scales.

[IMAGE AUTHOR'S OWN: TRAVERSE TRACK MATERIALS ETC.]

Insights Gained:

Design explorations can be used to open up possibilities in the simplest of materials. Sketches and scores can find and reveal unseen rhythms and materials latent in site.

The scores themselves do not explicitly declare a value, or appropriate certain materials, they are suggestive and participatory. A score may be applied through use of materials with subtlety, or it may reflect a type of motion, rather than be expressed in material form. The images highlight and draw attention to the existence of materials and potential occupation of site through the use of time and space. When scales are deliberately overlooked the score expands in potential. It may expose and amplify a fraction of a site or it may distil an entire landscape into a single dynamic riff. Revealing elements through score allows for an open reader interpretation.

This conforms to Braae and Diedrich's (2012) ideas of transformation vs. appropriation. The score does not seek to appropriate site or enforce one particular method, rather it centres on transforming the reader's awareness. The reader may see and choose to participate and engage with elements, there is no forced experience through heavy intervention, or large scale material change. The score is an image that reveals what is found and potentially made from within site.

The final temporal walk explores what results if this process is reversed: if the conductor-designer works with an external tune, a rhythm taken from outside site, imports this into a walk itinerary and then overlays this onto site. The final exercise investigates how a path is appropriated and made from an external score.

5.4 Temporal Walk Stage Three - Applying Score as a Conceptual Driver

Architect Carol Burns and urban planner Andrea Kahn write of how a designer construes and constructs site through representation and interpretation. Burns and Kahn claim site as “a relational construct that acquires meaning and value through situational interaction and exchange” (2005, p. xv). The design process is an interchange between what is seen and what is intended. Design prompts come from ideas from outside the designer (physical site) and inside (disciplinary norms, personal convictions and societal ideals). The design which results is a product of the relational working of “the real as observed and the real as defined” (Braae & Diedrich, 2012, p. 23).

A score is a product of both the observed and the suggested. As its rhythms and sequences are developed, they may reflect a transcription of something experienced by the walker-composer, or from something observed from site (as in prior temporal walks). A score may also develop as the designer-composer attempts to express an internal rhythm or particular understanding.

The score may express a concept found outside of site and be applied on site.

The final temporal walk questions how an externally derived score might inform walker performance and path making. It questions the role of scores and their application, how a score can be developed from any source and then applied to a path concept. The walk also explores how an experiential score can be developed into a form of track marking, trajectory and walking itinerary.

In this exercise, a piece of contemporary music is used as an inspiration for the formation of score. The written compositional score was not viewed; rather, through listening to the piece, a new score is produced from auditory cues in response to its rhythms and melodies.

The score is a literal transcription of a piece of free composition, transposed into abstracted form.

Recorded Observations:

An external source of sound or rhythm can inspire and become transfused into us.

Music is often used as a stimulus during exercise; the rhythm of music allows the walker/runner to set a pace and keep time. This rhythm can also be transcribed into a scored form (Figure 33 over page).

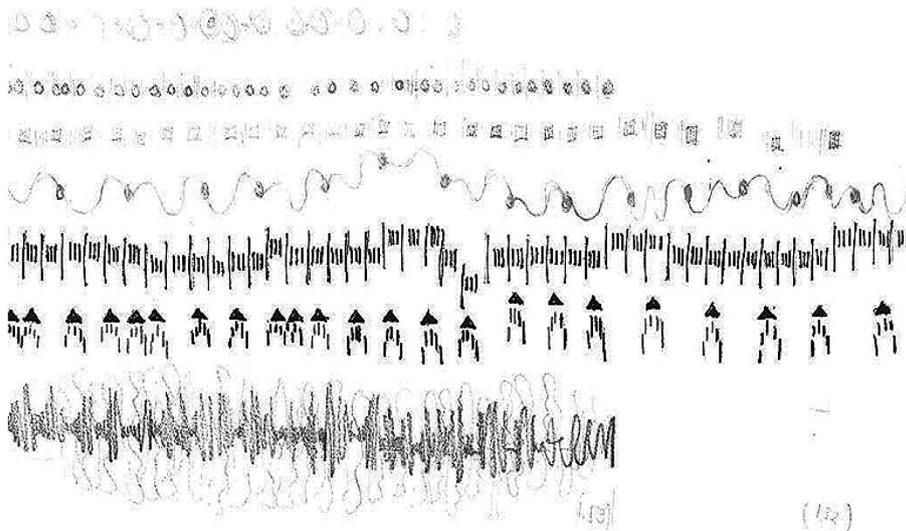


Figure 33: External rhythm gives score. Ólafur Arnalds' Tunglið, transcribed into a marked form.

[IMAGE AUTHOR'S OWN: HAND DRAWN SCORE IN RESPONSE TO MUSICAL COMPOSITION. (THE MUSIC OF ÓLAFUR ARNALDS' TUNGLIÐ)]

Made by hand and tool, whether by pen, pencil, paint brush or chisel, the listener responds and in turn marks. Marking represents a synchronising of rhythm and media and produces a new interpretation. A series of rhythms or instruments can make new forms and connections, combining to form a rich and varied score.

In observing inventory development and operational exploration of the Monument line it was concluded that a track score can be a beneficial tool in revealing the spatial and material properties of the track (material features, surfaces and structures) and walk-lines can provide a rhythmic ordering or itinerary for placement and use of forms features and materials.

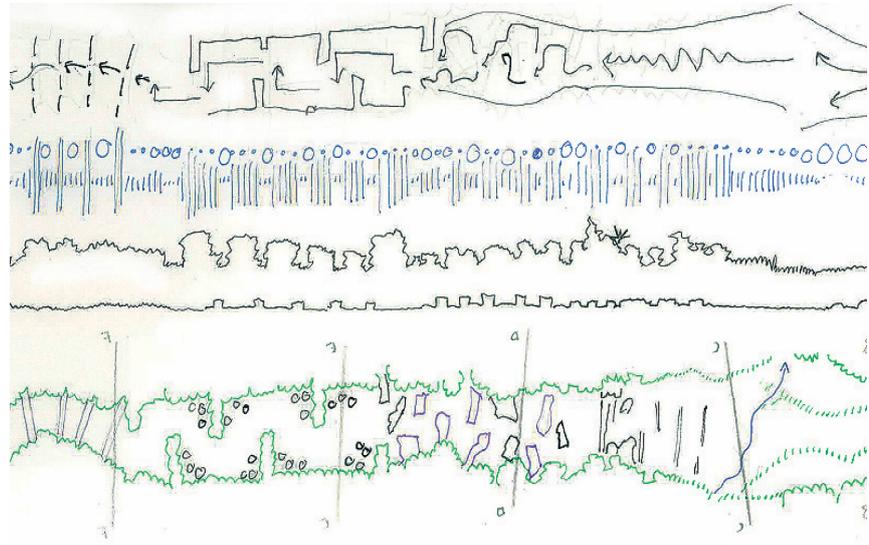
There are many ways to record rhythm and represent this in imagery, just as there are many ways to translate this into material form. All sketches are a form of arranged and ordered marking. Individual marks can accumulate into plans and guides. A path can be formed as abstractions are turned into movement, and marked out in steps or strides.

A rhythmic image may be explored through movement, each mark denoting a particular step or form of movement, or it might suggest permeability of space. Thick marks infer a thick surface, a long slow mark translates into a slow walk.

Each mark may be directly transcribed into material form, each symbol locating a particular type of material, a surface or a form (Figure 34).

Figure 34: An abstracted image turned into itinerary. A series of marks are transcribed into a flow of motion through a site. This in turn inspires ideas of material form and layout, vegetation structures, scales and surface textures. An ordered passage through space.

[IMAGE AUTHOR'S OWN:
PROPOSED TRACK ASSEMBLAGE
WHICH INSPIRATION FROM SCORE
BASED ON ÓLAFUR ARNALDS'
TUNGLIÐ]]



Insights Gained:

As an abstracted set of ordered forms, many ambiguous concepts for material form, site structure or movement through site may result. As score is reinterpreted into a plan or path itinerary and ideas of form and process are extracted and developed into new configuration of landscape, the path can take on a character totally foreign to its previous existence.

The scored line initially produced in this exercise did not contain any hint or suggestion of what materials might be used, but opened possibilities for structure, texture and spatial ordering, based on an interpretation of a sensory experience informed by time.

The score composer or designer can choose to add materiality to the score or allow a reader to add their own materials and form. The score acts as a way finder or frame for use. Score can be produced as a guide for performance or as a record of motion. It can reflect an external source, such as music, and translate this into another form; music becomes material, rhythm, and feeling applied to site. Natural rhythms and cycles can also be used to produce an interpretation of place and this can be applied to materials as a literal transcription, or scores can evoke creative imaginings.

Applying a score to a site can provoke or enhance. It can reveal existing elements or it can conflict with an existing rhythm. Design critic and

landscape architect Holly Getch Clarke describes how the use of sequencing, and the consideration of time, acts as a site mediator. The strategic application of the temporal within a site allows and conditions “an open-ended ordering that allows for unexpected adjacencies and alignments thus permitting fluid sets of relationships to emerge” (Clarke, 2005, p. 55). Scored walks and temporal studies open landscape reading and editing; allowing exploration of the ambiguous and the situated. Such exploration of the material and temporal can be used to form new ideas; each mark or trace of a rhythm can be transcribed into an informed track marking and be returned to landscape through built form or action.

The performative aspects of a score are dependent on the score’s interpretation and the frame within which it is allowed to exist. The performance is based on an agreed relationship or understanding between the composer and the performer. A score may be strict, every movement and flow of time tightly monitored and choreographed. Other scores may be more fluid and open.

Burrows (2010) describes the relationship between a composer and a dancer through the use of a transcribed score where movements are ad-libbed and controlled by the dancer, the choreography is open and the dancer is free to move at will, in harmony with the music produced by the composer. The movement is interpretive.

In another example the score is even more open (or unstated); what exists is a flow of dance and musical composition based on impulse and active collaboration between musician and dancer. The score may only exist as a record of captured movements, occurring after the event.

In using score, time, motion, movement and pauses can be given an active role in space. As time and rhythm are observed and focussed upon, ideas of materials and motion are able to percolate; the outside moves into the observer. In dwelling on how time can be applied, concepts can focus beyond the appearance of time. The walk score can develop into an itinerary that provokes a feeling of immersion in time. Site is not just described in terms of its materials and layout but in terms of historical and situated time. Diagrams of time can guide process, give rhythm, or they can reveal the complexities of existing rhythms. Scores allow actions and markings to be replicated, transcribed to paper and image as a rubbing of time, and reveal what may not be immediately apparent. They can also be applied onto site to juxtapose or expose existing materials and surfaces.

5.5 Combined Summary of Temporal Walks

We can manipulate spatial elements and representation to see what is revealed when altered according to temporal cues. Materials and representations can be drawn out, using simple sketches, montage, and layering. Sketches explore time, growth and the morphing of natural process. Sketch images and sections can reveal relationships and markers not initially perceived.

Scores act as markers and guides for the path based on a reading and interpretation of form and rhythm from elsewhere. They help us identify our position and the position of other things within an environment. As imagined constructs they are abstracted and suggestive, not fixed or absolute.

Our relationship with landscape creates a rhythm based on the way we move within landscape and our own unique responses. Activity defines place, the path is seen as a course along which people move according to their own time scales. Time is marked by the users of the path, by materials and by process. Scores mark time, exposing the silent march of time, and creating a record of rhythm as a walker moves through space in time.

Table 5 (following page) summarises the stages and outcomes of temporal walks and provides one process for exploring how temporal cues and rhythms might inform path making.

Temporal Walks					
Step	Survey Activities			Inventory	
	Aim	Inventory Goals	Task	Resource	
Stage 1: Explore connections between walker and path making through use of temporal cues					
Catalogue and form typologies of materials encountered along the path					
How does a study of walk time influence the path?	Step 1.	Record the influences which drive temporal responses	Build walk journal notes and map of cues/drivers	Identify causal factors, map responses and experiential data	Walk journal, field maps and notes
	Step 2.	Review influences: compare experiences and navigation	Design explorations, drawings and diagrams (passage, permeability, weight)	Use design operations/explorations to locate responses	Base map, guide/notes Sensory records
	Step 3.	Explore how responses translate into path maps, types and itinerary	Maps, sections, scores (reworked path based on a temporal datum)	Temporal cartography: manipulate maps and notation (explore how space conforms to time).	Base maps, walk records, temporal cues and walk times.
Stage 2: Identify time signatures in landscape and potential responses					
Investigate how material typologies can create itinerary					
How can studying the temporal in landscape influence path design?	Step 4.	Identify how time is seen and represented	Create a collection of time cues and time based typologies	Look for cues of motion and movement – products of time and process and perceptions of time.	Sensory notes, material observations
	Step 5.	Explore rhythms and markers of time	Sketches, diagrams and scores of time structures	Explore time structures in materials and landscape surfaces. (abstraction and notation)	Photos, field sketches and maps
	Step 6.	Expand the role of markers and score into itinerary and guides for materials	Develop new track scores and sections	Transcribe markers and notes into score and track itinerary	Sketches, diagrams of time and relationship, material palettes.
Stage 3: Explore how external rhythms can influence path making and experience					
Explore how the walker responds to materials when walking					
How can score inform walker performance and direct path making?	Step 7.	Detail and describe in inspirational source for time and tempo	Build a score/ time sequence	Use ideation/abstraction to conceptualise and compose a time score. Walk drawing tools to expand meaning	Media or other source of structural/temporal rhythm.
	Step 8.	Consider how external score might be applied to a site	Develop palette/types for materials, forms, structures. Collate into walk line and track sections	Adapt new score to site – consider potential applications and interventions	Maps, score, material records
	Step 9.	Review/critique proposed itinerary with particular site specifics	Build walk notes, and itinerary based of potential experiences	Summarise and compare design goals, path requirements against intended itinerary	Walk drivers, material properties, site materials and maps

Table 5: Summary of Temporal Walk stages and process. Outlined here is a succession of steps for engaging in the temporal elements of the path.

We live in a landscape made by time (Crang, 2010). “Space is nothing but an inscription of time in the world, spaces are realisations, inscriptions in simultaneity of the external world of a series of times, rhythms.... The city will only be rethought and reconstructed... when we have properly understood that the city is the deployment of time” (Kofman and Lebas from Crang, 2010, p. 190). The use of time, and the rhythms that are generated, build landscapes. This is also true of the path: seeing the path as a temporal trajectory, a passage through space based on time, alters how its making might be considered.

5.6 Outcomes and Implications – An Informed Theory of Making

To cultural anthropologist Katrin Lund, all walking is phenomenological: it is tactile, informing the walker of materials, process and time (Lund, 2012). Landscape is a construct built of experience. Abbott (2008) extends this idea suggesting that we know and engage landscape through forms which

“emerge as condensations or crystallisations of activity in a relational field. As people... make their way by foot around a familiar terrain, so its paths, textures and contours, variable through the seasons, are incorporated into their own embodied capacities of movement, awareness and response” (p. 225).

Making Built on Experience

Walking along a path and its surrounding landscape evokes “configurations of self and landscape emergent within the performative milieu” (Wylie, 2006, p. 532). Wylie continues, writing of his experiences of walking, his engagement in different materials and motions, encountering specific corporealities and sensibilities (moments, movements and events) which stimulate unique responses and awareness. The walk becomes embodied and grounded as the walker responds to various elements of the path.

The walker’s route and chosen itinerary reflect a situational awareness, the walker adapts and modifies the walk based on cues and drivers found and developed in walking.

The temporal record verifies and confirms movement and response. Where physical form and material waivers and varies, time progresses unilaterally. Regardless of a walker’s preferences or route, time provides a measurable constant. The marking of time can be correlated against the recording of subjective experiences and geographic location. Expressions of time can be explored and new understandings of landscape constructed.

Temporal Cartography – Tracing movement and building pathways through marking time

The walking undertaken in this research highlights several causal factors affecting walker response. These drivers are seen and supported by theory. Drivers and determinants may be built up from the study of human traits, behaviours and needs (as seen in landscape social theory and discourses on human responses to landscape e.g. Appleton (1975);

Kaplan (1979); Lynch (1960); Meyer (2008); Spirn (1997) etc.). Walker needs and facilities are commonly considered in track design – the location of services, shelter, access, preferred routes and views; the designer of site must consider the placement and positioning of all of these, as well as other legal and statutory requirements.

The broader context of the path, its forms, layout, and its representation are, however, indeterminate. Explored landscape and field records can be used to open up and locate potential qualities of the path and establish options for potential placement and interactions. Knowledge of materials and spatial layout can be used to develop track maps and configure a pathway through site.

The development of plans and site layout based on material concepts and form does not fully locate a path's experience or use. Translating experience into an ordered plan or itinerary can shift focus and reduce experiential traction. The centre of experience is taken off the walker, as an active enquirer and contestator of space, and placed back onto reliance on material form and spatial mapping.

Ingold speaks of inversion, where in attempting to map out the trace of a walker, the original idea and knowing is lost. "The logic of inversion, however, converts every track or trail into the equivalent of a dotted line, first by dividing it into stages" (Ingold, 2009, p. 36). Inversion changes how a thing is viewed, reducing a living responsive entity into a bounded frame, it turns "the pathways along which life is lived into boundaries within which life is contained" (Ingold, 2008a, p. 179).

A path is more than a line or set of bounded materials, it is a record of the walker, "the total inscription of his movements, something that can be traced out along the ground" (Ingold, 2011c, p. 151). How do we record responses and map changes that are observed? If the walk measures the walker, it also measures the path.

The path, when arranged as a line or as a sequencing of materials only suggests an itinerary or mode of passage. Temporal considerations form a much richer picture where path-making is less about the placement of material against or upon material and more considerate of reciprocal relationship and agency. Exploring pathways through temporal cartography allows the walker-observer to situate the materials and moments which build space. Material things are located according to their topographic position, and responses and actions mapped alongside. The resultant mapping is rich in context and allows a reconceptualising of the pathway – from a linear route of passage into a multidimensional element.

A mapping exercise which considers how time is used and experienced in reaction to materials results in a new understanding of topography and materiality. An easy path, an able walker, results in a lessening of time taken. This as Abbott writes “echoes Tobler’s observation of a world that shrivel(s) as it shrinks” (Abbott, 2013, p. 12).

A spatial path map reveals little of its users and their interaction with the path. A prepared and equipped walker, a walker with strong physical and mental condition, may move more freely, with a greater capacity for pace and free interaction: able to move or stay, to travel quickly and cover more ground. Alternatively, a well-conditioned path also increases and eases travel. This conditioning is recorded and seen in the temporal.

Walking exercises reveal how the path is a projection of more than the physical, it is formed of customs and culture, habits and behaviours, reactions and responses to singular events and moments in time. No one walk is the same – the path itself is constantly changing. Temporal cartographies allow a set configuration of materials to be viewed in an endless array.

Marking Moments and Intersections

Abbott (2008) describes how it is in different textures, increasing roughness and the requirement to negotiate passage that pull the walker’s focus, bringing interaction into the present. Simple interactions and moments in time connect people and place and reward. Small features build experience. Score is built of moments and allows a projection of more than materials. It can be used to record and inform the movement through, experience in, and representation of place and it can become complex: multiple layers and relationships can be represented.

Philosopher and sociologist Henri Lefebvre offers an example of diverse and interpretive score: designing score where rhythm “offers some purchase on the sense of localities as marked by both their own temporalities or better the conjunction of the tempos within them” (Crang, 2001, p.192). The way we move through space creates a rhythm; the layout of space also contains its own rhythms, a pattern or tempo that we may respond to or that through the physical arrangement of space, enhances and strengthens flows.

Walking is full of disruption and intersecting events. Score and notation form provide an alternative form of mapping which can be used to reveal events and create compositions unique to the walker and allow unexpected occurrences to be recorded and located (Figure 35).



Figure 35: Lessons from a fledgling bird – a moment in time. A walk may be recorded as a series of events, able to be interrupted and subject to moments in time. Out walking, I came across a fledgling blackbird which was sitting in grass stubble on the track edge. The bird was not yet ready to fly, uncertain and unable to move beyond a short hop. My movements in turn were halted, interrupted by this discovery. Ideas of walking on momentarily ended, focus on this tiny creature began. I had encountered a moment. For a fragment of time and space, my movements were mirrored by and mirroring that fledgling bird.

[IMAGE AUTHOR'S OWN: FIELD NOTES/ WALK JOURNAL – CORONATION RESERVE CRATER RIM TRACK]

“Experience is a living and moving force. In this sense, it is creative too” (Latta, 2001, p.49). Our experience is more than a mark on a page, it is altering. Design representation and field exploration can be conducted in order to accurately portray the role of time and experience in making paths.

New Ways of Seeing Site: Subtle or Direct Path-making

Scores shed light on new ways of looking at site and consideration of design form. It is not always desirable or appropriate to mimic what is found on the current surface of a site when considering its use and form. A designer may wish to expose an element, or emphasise a feature not necessarily obvious or seen on the site. A change of pace or rhythm may be called upon to renew or reinvigorate the site.

Meyer discusses in detail the role of the designer and the potential of design to emphasise site, to provoke thinking and alter behaviour in observers (Meyer, 2008a). The forming of score, its insertion into site depends on more than its observance and origin. It may be more suitable to use a score formed from site observations (place-based score) or to use an externalised score to highlight and juxtapose – bringing contrast and strangeness into site from elsewhere. Design concepts and master plans, like all images, project a certain narrative depending on design goals, objectives and ideals. Scored walks and their analysis do not attempt to critique design intents or imagery; they are intended to explore possibilities and potentials.

A New Aesthetic Territory

Time can be seen in landscape via moving bodies and altered substance. In his book on Walkscapes, Careri writes of how the world is an “immense aesthetic territory”: its surface is not blank, not sterile and white but a rich sedimentation of history and culture (Careri, 2002, p. 150). Movement defines materials and is made by materials. Over time deposits build or decay, surfaces change and landforms appear and disappear. In such a dynamic shifting world, the simplest map, the simplest way of representing the world is not an photo or a plan but “it is the tracing of a route” through, within, across (Careri, 2002, p. 151). A path and its representation, whether literal, conventional, descriptive or diagrammatic, is a course through time not just space or materials.

Chapter Six

Discussion of Findings

Hunt (2000) describes how landscape architecture is concerned with “a fundamental mode of human expression and experience” (p. 8). He says this is a discipline which is one of place-making or ‘milieu’. It is not just objective, physical surroundings, but involves an inscription on that site of how an individual or a society conceives of its environment’. Places are not just made but “register as having being made or continuing to be made” (Hunt, 2000, p. 8). Landscapes and pathways are formed of and through, evolving relational constructions. This relationship is revealed throughout the walking studies where paths are shown to be built of physical materials and human constructs; a composition of tangible and intangible elements and experiences.

Landscape architecture is a “profoundly phenomenological enterprise” and “a profoundly social process” (Bowring & Swaffield, 2010, p. 143). Here landscape architects Jacky Bowring and Simon Swaffield describe how landscape (in its original form as *landschaft*) was originally conceived as a way of managing the world based on social phenomena. The personal and perceptive nature of this research is core to its principal enquiry. In seeking to understand the place of paths within the field of landscape architecture, the research must explore both physical and human elements of the path, and it must be able to respond to physical and cultural, material and temporal, elements encountered within landscape.

6.1 A Thesis of Walking - A Subjective Process

Walking generates contact with space that is at once physical, sensory, personal and cultural. It reveals the “conditions of possibility of gazing upon landscape, by arguing that the depth of the visible world is the affordance and sustenance of particular senses of self and perceptions of landscape” (Wylie, 2006, p. 519). Walking is human, the path influenced by human constructs, just like the landscape which it is part of.

The studies presented in this research explore how various tools and methods of exploration might be used to expand what is known of this landscape through walking and a richer understanding of pathways. The

walks utilise a broad range of observational techniques and field analysis methods, which extend from traditional mapping techniques through to more phenomenological explorations.

Landscape becomes known in unique ways through walking studies. The research reveals how study sites have consistencies, connectivities and particularities. They are connected through their location, one area (Banks Peninsula) which is seen and explored in a myriad ways.

Each walking exploration shares commonalities in materials, types and processes. Such common elements are observable through the description of things physical and tangible. Connections are made between sites through the linking of elements and features. One walk reveals a certain type of material and this is seen in other walks, albeit from an alternative vantage point.

Sites are also viewed through a relational context. Place becomes situated and particularities are found as it walked through and interacted with. Each walk opens new views, discoveries which are found only at that particular site, at that particular time. Landscape is explored through an experiential and reciprocal position.

The research builds a layered understanding of the Banks Peninsula landscape and the area becomes known as a labyrinth of paths, steps and movements. The space which becomes known and grounded through one path becomes something else when seen from another approach. Each path reveals a new facet of observation, a complex lattice of knowing. Each path walked and each walking experience has the potential to create a rich knowing of a particular landscape.

The walking experiences measure and describe exacting instances: recording a coalescence of causal factors, of moments, movements and events. Like Wylie's experiences in a single day's walking, the work originates from "two horizons, inside and outside, self and landscape" which relation causes to "precipitate and fold" (Wylie, 2005, p. 236). Each walk, each moment, is unique to the walker and the moment; it can never be replaced or repeated.

Each walk is part of a broader body, which, to quote Wylie, "details various affinities and distanciations of self and landscape which emerge in the course of walking" (Wylie, 2005, p. 234). The methods and tools, the walks themselves, and the outcomes obtained, are all inherently subjective. The work is relational and particular to the researcher as walker-observer.

The goal of each exercise is not replication but exploration, provocation and place-making: "a perceptual actualisation of landscapes and self, of

materialities and sensibilities” (Wylie, 2006, p. 519). The value of each walk is found in its subjectivity, in its openness and responsiveness. The exercises encourage the walker-observer to become intertwined with landscape: looking, projecting, obtaining, and altering. The recording and review of exercises encourage the development of tangible results: tools and materials which not only provide an account of the walks but form a useable inventory for future use.

6.2 The Subjective as Tangible and Material

The tools and methods explored in walking exercises are rich in potential. They are used to describe and extract experiences and to present avenues of future exploration.

In walking and exploring paths, relationship is realised and shaped into tools. “Some actualisations, some sets of relations between self and landscape, are eventful and iterative. They convince, and propel forward, through continual subtle differentiation and refraction” (Wylie, 2006, p. 533). Experiences alter the walker-path relationship. In recording observations and representing these experiences through various forms of imagery and writing, a tangible product results which allows access to materials and process.

Diagrams and notes are key to recording and disseminating walking experiences and observations. Bowring and Swaffield (2010) detail how “diagrams that communicate understanding, intention and possibility are therefore integral to the way that landscape architecture engages with wider society and culture” (p. 143). Diagrams are analytical and representative tools which crystallise observations, make sense of the intangible, and explore ideas and complexities. Diagrams are able to represent relationships and convey information in a useable form, turning ideas into useful resources.

According to the landscape architect and theorist James Corner, images are not static or passive but analytical and constructive (Corner, 1992, 1999). Diagrams, sketches and other representations are generative design tools. Their viewing and making is an aid to understanding and exploration (Dee, 2004; Gazvoda, 2002). The walker can use the process of drawing and the recognition of images to orientate themselves and provide ideas and direction for further work.

Sketches and drawings are informative: they can abstract, extract, highlight, identify and provoke new seeing. Such images are operational, engaging and altering: they can be used to reimagine and express. Even the most subjective imagery can tell its viewer a story; informing the

viewer about an object, its formation and explore potentials. Images can be read and ideas of materials and processes can result. Once a drawing is produced it does not become static; with every reading a new story may be found. The drawing or diagram extends beyond the material it portrays and becomes a physical tool for operations and exploring. Representations inform the viewer and empower action. For example the viewer may choose to attempt to replicate an activity or produce a similar construction.

Images can instruct in subtle or direct ways. Score is an example of diagramming as used in this thesis to explore and to direct activity. Some scores give acute instructions and command a particular path or itinerary be followed, while others are more vague and suggestive of possibilities. A score provides a tangible record of an event or an experience and can be viewed as a souvenir. Like a souvenir, the original location or experience described by the diagram can be obscured. While an outside viewer may not be familiar with the original context of making or its intended meaning (known only to the person to whom the object belongs as score maker or as site tourist), a displaced souvenir or prop can bring about questions and evoke curiosity (Potteiger & Purinton, 1998).

Images and score can prompt query and imagining. Representations form miniatures: in forming a textured reconstruction of the path and/or a walking experience, the walker-constructor builds a tangible form which can engage others. A folded paper path can expose its viewer to ideas which extend beyond lines and folds. Small and simple materials can open pathways to imagination and exploration. New scenes, new worlds can result and the viewer-walker can develop ideas of materials, or find new possibilities regarding time and positioning.

6.3 Reviewing the Subjective: Role of Critical Review

Drawings, scores, and written records may prompt ideas and open up possibilities. They may inspire and stimulate others, but are these useful or constructive for a wider context or able to be applied to site and remain intact? How are personal ideas and subjective narratives tested and translated into a shared understanding? Design imagery and narrative needs some degree of legibility and translation. The importance and complexity involved in the communication and expression of design ideas is a well versed subject within landscape architecture as seen in the work of Bowring and Swaffield (2010); Corner (1992); Dee (2001, 2004); Potteiger and Purinton (1998).

Critique provides an avenue for reviewing and confirming ideas. Critique is creative, constructive and evaluative (Meyer, 1994); it builds and rebuilds (Corner in McAvin et. al., 1991). According to architect Hamid Shirvani (in McAvin et. al., 1991), critique should be a landscape architect's core skill, who while being able to draw, calculate, build must also question, explore and experiment. In Meyer's view, the purpose of critical practice is "not to reach a consensus or enforce hegemony", the point is to hold "interactive conversations" (Meyer, in McAvin et. al., 1991, p. 156).

Critique has been used in several ways within this thesis: it is a defining element of the research process, a prompt for reflection and review, and it is used to evaluate outcomes. The research process relies on iterative and reflective design exploration. A succession of investigations was undertaken in conjunction with self-review and theoretical grounding. Exercises are performed, ideas and site experiences located against the theories and practices of the discipline. Each exercise is informed by theory and has implications for the wider body of knowledge.

Each sequence or stage of study (Seeing, Being, Moving, Making) is then subject to further critical enquiry. Questioning and review is used to test and confirm outcomes and expand what is known from studies. This second phase of critique is not intended to form fixed solutions or finalise results but is aimed at furthering design thinking and possibility through considering alternative vantage points and potential meanings.

The following section explores the possibilities and positions found with critical enquiry.

6.4 A Critical Review of Outcomes

Landscape architect and historian Tom Turner describes how landscape design is never arbitrary, every theory and process has a position, an origin in time, culture and particular practice. Design thinking comes from 'somewhere'; it is conditionally and contextually situated (Turner, 1996). Never generic, all design is a response to external drivers (e.g. factors of place, politics, and economics) and internal drivers (e.g. designer's ability, personal history and preference). Turner advocates critical thinking, not only as a tool for understanding and classifying design products but also for improving process and making site. There is no one pattern or process; no singular answer (Turner, 1996).

Turner suggests designers need to find ways to see new perspectives, to place themselves in a position where they can see otherness. Turner's ideas for seeing through other's eyes include the use of role play, forecasting actions or needs, and scenario building (Turner, 1996). Is an idea useful? Is it viable? This thesis considers how explorations might use other perspectives and how design outcomes might prove useful in locating, describing and responding to a path from a range of perspectives.

Exploring the Queries Raised by Studies: Exercises as Openings

Walking opens and reveals: each set of walking studies, associated outcomes and findings prompt further questions. A comprehensive set of outcomes and associated queries (as developed during the completion of walking studies) is provided within the appendices (Appendix C1 Review).

In the first set of studies (Chapter 2) it is identified that looking does not equate to seeing. In critically reviewing how the walker looks and how the walker might know what is seen, it becomes apparent that there is no guarantee things will be seen or noticed. Sighting walks reveal how the walker sees through filters and lenses (internal and external). Prompts, cues and unexpected occurrences can aid seeing; slowing down and re-looking can thicken vision; checklists and guides can prompt looking: activities encourage the walker to seek beyond the habitual. In breaking habits, in moving beyond static recording, the walker is opened up to the unexpected, the unanticipated, and the different, resulting in engagement, attention and a new trajectory.

The use of different modes of looking (i.e. looking more than once, looking thickly) can cause the walker to observe with different eyes, to reconsider the scene and to see beyond the surface, beyond the seeing

of first sighting where surface horizons and surfaces are considered and into deeper structures. With time and ageing, materials and processes change: layers thicken and wear. Landscape is an interchange, a morphology of alteration where materials and processes (biophysical, cultural and social) are in constant flux. Maps and field survey can help provide objective viewpoints and categorise spaces, informing how a place might be known.

The sighting walks explored in the second chapter also reveal how not all that is present is visible or tangible. Seeing exercises reveal how elements may be interwoven and form only a thin veneer, a fragment or an imprint, seen at any one time on the surface of the path. Design tools and expressions (i.e. thick sections) question what is found on the surface and explore deeper connections. Walk outcomes show how the ways in which a walker looks, how they walk, and how their time is spent, result in different views and discoveries.

Even the seemingly empty contains richness. All landscape is occupied by something. Land is “inhabited by its cultural or natural history” (Corbin, 2003, p. 12). How we read and respond to that history influences what is seen; especially “what is not materially present or visually accessible” (Corbin, 2003, p. 12). All seeing is subject to interpretation. Architect Marc Treib encourages the viewer to use a critical lens that analyses and digs beneath the obvious that asks why? “Why does... why do?... Designers must ask that next question” (Treib, 2004, p. 8). When investigating how and where what is seen is situated, and in exploring the potentially seen and unseen, it becomes apparent there are many approaches and surfaces that may be encountered. Seeing is layered, fluid, and ambiguous.

Observations are enriched by juxtaposition of experiential record and known theory. The exercises are strengthened in review and their goals affirmed as the reader questions and explores the record. In questioning what is seen, what is recorded, what is noticed, the reader is prompted to confirm, and to do their own exploring. Seeing and sensing walks produce an inventory of materials which can provoke new viewers to engage in real materials, and stimulate questions about the seen.

Critical observation involves more than seeing and relying on a visual approach. This idea is confirmed in Sensing walks (Chapter 3). These exercises show how certain avenues of knowing and exploring may be dominant but are not always the most beneficial. Sensing walks reveal how the walker’s attention and responses may be pulled away from the path and the present. Presence on site does not equate to the walker being present on the path, just as observing does not always

automatically equate to comprehending. Time and contact offer a stimulus for knowing, deepening understanding, and providing opportunity to see and know in new ways. With contact and experience the walker becomes embodied into site and real connections are made between the walker and materials.

This opens up many potential avenues for the design and making of paths. If one way of knowing and understanding can influence potential outcomes and readings, how might other views and ways of knowing alter what is found? The way in which seeing and sensing is translated into operations and is used to locate the path offers many possibilities for path making – in field activities, in recording tools and in interpreting form.

The walker's capacity and state of being is a crucial factor in observations, their situatedness and personal perspectives inform sensing and knowing. Sighting walks reveal how objects can be overlooked, or 'rediscovered' if looking in a different way (i.e. re-looking or looking thickly). In sensing studies, mind mapping reveals the straying of the walker: the wandering of attention, the influence of distractions and allows the capture of loose thoughts. The situated walker is one who is actively in contact with the path and its materials.

Sensing walks (Chapter 3) also affirm the need to ground observations and recordings. The exercises test the walker's being-in-place and question how the walker pays attention and becomes located in site. Situatedness is related to identity and familiarity; Stephenson (2010) talks of identity gained from being and spending time in place and how being an insider causes the viewer to see differently. Time and familiarity alter how we see and respond.

Landscape architect Carla Corbin discusses this influence, in describing how "many places of our day to day lives become invisible through familiarity" (Corbin, 2003, p 13). This is true of paths and was frequently observed in walking exercises: I do not actively notice the details of the path I walk each day, what I notice is change, the unfamiliar and the unusual. Walking studies raise the issue of the role of familiarity and the visual: does the way we see and experience numb us, and make us immune to the usual? If the walker requires external influences and unfamiliarity to stimulate engagement does this result in a state of constant distraction and blindness and create what might be called a mute or background landscape?

Walking exercises (i.e. Sensing Walk One, Chapter 3) reveal how what might be perceived as distraction or a narrow focus can result in a rich understanding of a particular aspect of place. The landscape is

constantly changing and this dynamic creates a unique and ever-evolving relationship. Landscape is articulated, it has voice which can be heard if the walker has the required tools. The walker may respond to this voice or hear their own music.

The studies reveal a need to explore multiple avenues in observation and approach, to explore materials of the path and record what is seen, to engage with physical stimuli and to explore experiences of the immaterial, to return and relook with different lenses. The use of other senses allows insights into materials and processes which may not be observed through visual survey alone. Alternative body positions and movement also allow new insights. The mode of exploration is a valuable tool and has a significant impact of the type and nature of outcomes observed.

Isolating the senses opens up alternative ways of knowing and opens up perceptions of time. Just as looking with alternative frames heightens and draws attention to the unusual, isolating senses heightens awareness and sensitivity to other things. In standing still, or sitting in silence, with sight restricted, distance and space becomes tangible. The tactile is enhanced, the mind more aware of echoes, of voids and hollows, changes in temperature and pressure. Things touched become larger, fuller and more real, while space and time become subject to constructive imagination and new possibilities open up as narrative is altered.

Movement seems brittle and more fragile without sight, the person more vulnerable, the body's contact with ground more connected, edges felt and negotiated through touch. The walker becomes embedded in landscape, woven in and through materials. What was previously just a surface becomes a moment which binds the walker within a wider fabric recalling Ingold's series of knots (Ingold, 2013).

An Alternative Route: Intention of the Walker vs. Intention of the Walk

In undertaking walking exercises a walker may begin with a pre-planned agenda, but the actual intent and activities of the walker may change during the walk. Walking is responsive and experiential: changing conditions, directing trajectory and relationships. Alternative experiences evoke fresh understanding, allowing new inventory to be captured which might not have been obtained if the walker relied on a fixed agenda.

Material walks (explored in Chapter 4) reveal how movement (on and off the path) allows access to materials and provides vantage points for

discovery. Free walking or drift (Jacks, 2004), allows the walker to wander and become caught up in intricate phenomena and experience of their surrounds; directed walking alternatively focusses the attention and channels recording. A free walk can give the path a voice since the walker is free to respond to what they receive. With a fixed itinerary there is potential for this voice to be muted.

A guided or directed walk can be informative (e.g. Sensing Walk Two, Chapter 3). A checklist or programme can guide observations, while providing targets and prompts. Such a fixed route or restricted itinerary can also create friction (of materials, of time) which can expose new elements and types of experiences. Friction can result in a new dialogue, a clash between walker, itinerary and path surfaces. The restricted path commits the walker to a particular trajectory, or a route which falls outside the easy and familiar, resulting in new forms of negotiation and exposure. Recording such experiences reveals not only conditions of the path but also the condition of the walker and explores drivers and intents (i.e. what motivates and enables the walker).

Defining Constructs, Habits and Voice: Following Freely or Writing a New Narrative

Movement is personal; the walker moves within a constructed, mediated landscape formed partially of their own making. Material Walk Three (Chapter 4) identifies how walking can reveal constructs and it can help to build them. A deeper exploration of what timelines and other records can communicate, how representation of timelines and imagery expands knowing, may open new ways of engaging with paths and landscape.

In undertaking a scheduled programme, the walker is placed outside of their own routine and may gain insights into those of others as the walker follows another's cues; tracing a historic walk or following prompts found in a guide (keeping to a prescribed itinerary).

A guided walk is like a score, which, as Burrows describes, breaks habits and liberates. Jacks (2006) speaks of quotation as the following of and engagement with others' experiences and knowing. To follow a guided path, is to walk in others' footsteps: a walking quotation. Following another's trail positions the walker in a place where empathy may enlighten knowing or provide a new perspective into a previously unrealised construct. This aids the identification of those constructs and filters which inform and build landscape knowing.

Quotation allows the walker to follow another voice, to learn to follow cues and to pull out of the familiar and find an 'other'. It can be used to

critique the walker and their habits. This mode enhances the way paths might become known and the walker's responses and drivers are analysed and contextualised.

Moving and Mapping through Tracing Time

When typological operations are guided by walker responses, a diagnostic tool is produced (as seen in temporal walks and timelines). In walking, each step is a direct connection to landscape. The tempo of recorded steps is a reflection of interaction: a smooth path and the record is shortened; a rough path, an occupied walker, and the line undulates and lengthens. The recorded line is an annotated history of the walk – specific and particular (Chapter 4). When supported by reflective notes and sketches it can reveal an intimate and complex relationship. Timelines record events which can be used to build itineraries, events, and to compose score, for future quotation and new forms of mapping.

In a reciprocal relationship, patterns and variations in the record can reveal the conditioning of the walker as well as the path. What is seen in one walk reflects multiple discourses: the nature of the path and its making, the relationship between walker and path (reading and reacting) and the reading of the record. If a series of walks are reviewed, it becomes apparent that while each walk is unique, several causal factors may be found threaded through walks. The physical condition and materiality of the path, the condition of the walker, and the motivational drivers which prompt and orientate the walk, form a series of overlapped and interconnected discourses. Voices seen and heard when walking are evident in the recording and representation of the walk.

Marking the Temporal and the Responsive

The process of making a line, of recording movement and time is revelatory. The art of marking a map, of sketching out sites, of scoring a page and monitoring time engages the walker-recorder directly within site and path (Chapter 5). As a hands-on reactive process the maker is brought into materials; in active participation information is exchanged and the maker-responder enlightened further.

Artist and landscape architect Catherine Dee talks of drawing as a critical process, one that can build and make (Dee, 2004). In producing the walk line and score the walker-recorder finds a deeper relationship with the path. The map-maker is a choreographer marking the path as a temporal and responsive line. The designer is a composer, able to

deconstruct and reconstruct the line, the path-maker or walker interprets the score in a form of movement.

The path score becomes a tactile representation of path and walker interaction: in shifting and altering form, new translations for the physical-material result; patterns and variations in the line reflect changes in contact time, material properties and spatial character. Each alteration resets the line and changes the path.

Modelled rhythms can be used to imagine and inspire new track forms and narratives. The line can be tested through active interpretation, a reader can choose to 'walk out the line' in a practical activity or explore other forms of response (e.g. sketches, itinerary making, route making). Each reading is also unique.

Legibility in Scoring & Sketching

Walking exercises explore how the subjective and the ambiguous can be transcribed into a specified form. This raises questions over whether working drawings and design conceptualisation can be accurately translated. Can records remain legible and accessible while retaining a sense of fluidity and complexity? Bowring and Swaffield (2010, p. 150) discuss this idea in detail, outlining how the challenge is not in "representing individual subjectivity, but in representing probability". Time and experiences can be distilled into imagery, but representing future movements and complexity, in a world that is far from certain, remains a challenge. Time is a change-maker: it is influential in the walk and it is diagnostic when seen within a representation of the walk.

Images can represent time in a legible form since scores and score operations play with time and intent and examine responses to place and space. An intentioned walking and engagement with the path results in a series of encounters, interventions and markings. Just as Lassus plays with time in his designs, using form and representation to manipulate others' sense of time (Jacobs, 2000), scores can be used to condition the path. How the path is actually used and viewed can still remain vague and subjective.

Walking exercises are much like diagrams, since the outcomes can appear coded or masked. As a walker, I walk the path and work within my own conditioning and responses. I record and draw a manipulated sense of space and materials, the outcomes of which are a distinct knowing and recording. This record then translates into *my* map of the path, furnished with my experience and moments. The result is a diagram in which meaning may appear "latent, hidden and even deliberately disguised" (Garcia, 2010, p. 26). Review of outcomes and

walks suggest that it is this very subjectivity and latent potential that makes walking and walking records more meaningful.

There are limits to seeing, to knowing, to recording but these very limits provide avenues for exploration. Questions raise more questions, as a shifting and blurring of lines unsettles and results in multiple outcomes. Openness challenges how paths might be conceptualised and considered. Do we need to find clear patterns and consign boundaries to these ideas? What if a more open and ambiguous idea of paths is accepted? This work suggests that rather than close the gap and closely define how the path should be viewed and approached, a more informed approach recommends that openness and fluidity be embraced. Table 6 presents some ideas for how the questions might lead to new considerations of the path.

	<i>Initial Query/Issue</i>	<i>Concepts/Ideas</i>	<i>Query as Response</i>	<i>Path Form</i>
Seeing – Sighting (Chapter 2)	<i>The path is used to observe physical things and explore landscape structure from a particular viewpoint (Sighting Walk One). Materials are subject to process and change, they are distributed across space and what we see is a fraction of the whole (Sighting Walk Two). The way we observe influences what is seen (Sighting Walk Three).</i>			
	<i>Looking does not mean seeing – how can walking enhance things are noticed?</i>	<i>Walking exposes new views and relationships. Deliberate exercises and actions used when walking, opening up observation and possibilities.</i>	<i>How might particular spaces become known? If the ground is seen as thick, its recording ambiguous, can the path also be considered open, and fluid?</i>	<i>The path is a platform for observation and encounter with many surfaces.</i> <i>PATH AS MIDDLE GROUND</i>
Being – Sensing (Chapter 3)	<i>There are other influences and conditions that influence knowing; the walker is subject to external and internal agency (Sensing Walk One). External guides can help to focus the walker’s observations (Sensing Walk Two) and concentration observations on particular senses (other than visual) can reveal new knowing. (Sensing Walk Three).</i>			
	<i>There are many ways of knowing and many ways of exploring – what should be attended to?</i>	<i>Design tools and review expose intentions and explore potential avenues. Engagement is a choice and a response - the materials and tools inform decisions and responses</i>	<i>How might the path be defined if known through specific lenses and tools? If both landscape and path are fluid and dynamic, how is this responded to?</i>	<i>Path as prompt for change and conscious engagement.</i> <i>PATH AS FLEXIBLE CONSTRUCT</i>
Moving – Material (Chapter 4)	<i>Landscape may become known by types and a range of materials known by form and process (Material Walk One). Materiality can guide narration and be used to explore possibilities prompting and guided by movement (Material Walk Two). Recording the temporal allows a richer exploration of space, this however is subject to interpretation (Material Walk Three).</i>			
	<i>Movement is personal, each walk is unique - How do representation and narrative inform exploration?</i>	<i>The walking experience is defined by tangible interactions. The walker/path relationship is reciprocal and dynamic. Reading is related to material and temporal conditions</i>	<i>How do we locate a path (as spatial, temporal, and material) if the path is given a voice?</i>	<i>Path as a change agent and receiver</i> <i>PATH AS ARTICULATED SPACE</i>
Making – Temporal (Chapter 5)	<i>Time is seen in many ways within landscape, through many forms (Temporal Walk One). Time and rhythm can inform path making through score writing. The formation and reading of scores is personal and subjective revealing relationship as well as objects (Temporal Walk Two). A scored notation once formed, can be used to inform path making and can enable the insertion of external rhythms and sources into site (Temporal Walk Three).</i>			
	<i>Walking reveals walker & path – What results from multiple discourses?</i>	<i>The walker/path relationship extends beyond a physical here and now; it exists before the first step and after the last step is taken. Relationship is contextual and may be orchestrated and/or spontaneous.</i>	<i>How might paths be viewed, recorded and known if situated within a new discourse?</i>	<i>Path as a material and temporal mediator</i> <i>PATH AS EXPANDED FIELD</i>

Table 6: A series of questions and responses as raised during review of studies. This table highlights some of the key insights and queries prompted during the research process. Questioning is used to challenge thinking and prompt response.

Many of the queries raised during the walking studies are not readily answered, and may never have a firm or singular response. They are questions which, like the methods of enquiry which raised them, result in 'wicked problems': each question results in a number of endless possibilities. The subjective nature of seeing and knowing latent in each question is best answered through experience. In this manner, the walker becomes like Buchanan's audience: "an active participant in reaching conclusions rather than a passive recipient of a preformed message" (Buchanan, 1992, p. 12).

In order to explore how walking and active participation inform the walker-designer and add to their designing an additional exercise was undertaken. The activity centred on a review of the questions raised during the walking exercises and how these might inform design response. The study did not focus solely on the questions raised but also interrogated an independent design exercise undertaken during the course of this research. While the design exercise was not intended to form a case study for this thesis, it provided an ideal opportunity to probe walking tools and their application in studio and field. Details of this review are found in Appendix C2 (A Critical Walk).

It is immediately obvious that when engaging in walking studies (and their review) that both the engagement and reception of paths is highly personal and subjective. The walker's relationship with the path is informed by internal and external influences and there is no one easy solution or view as to how a walker may see or know the path, nor how we might communicate what is seen and becomes known. How we come to know the path and position its place within landscape represents itself as a wicked problem, rich in possibility. Rather than one simple solution, there is a range of potential openings; the answer to such a problem may be a suggestion and not a hard and fast objective.

The final chapter provides an outline of how paths and path knowing might be re-conceptualised and comes to a conclusion through proposing a new typology for walking and path knowing.

Chapter Seven:

Conclusions:

Paths are more than static materials and lines on maps or ground. The nature of the walk and the variable forms of contact along a path determine how and what is observed and experienced.

7.1 An Implied Theory of Paths

Walking is a rich and diverse practice; its outcomes situate the walker, enable exploration and confirm particularities. Walking can be used to clarify, to confirm and to provide a platform for discovery. This is expressed in the term “*solvitur ambulado*” or, “it is solved in walking” (Bowring & Swaffield, 2003, p. 1). A slow contemplative walk can clear thinking, a fast energetic walk can invigorate and sharpen senses. The philosopher Jean-Jacques Rousseau “understood walking as the source of the ability to make sense of the world” (Jacks, 2004, p. 8).

Wylie speaks of the walker’s engagement with the path through movement and negotiation, and the recording of such materials and interactions, as a furnishing of the visual and a furnishing of time. Materials are given context and content, made known and tangible (Lund, 2012; Wylie, 2005). The path that results is a product of authorship and reading; the way the path is seen when walking, and the way it is authored by the walker-recorder.

The path of physical time and distance alters to account for experience. Use of space wears and layers materials. Surfaces and skins break down, yet walking binds by stitching layers together and connecting across boundaries, breaks and scales. With time, “significance accrues through use and custom” (Treib, 1995, p. 48). My footsteps show my history and use: they provide insight and record of intent and time spent, they show my claiming of space.

In walking, the world is reordered and territory may be reclaimed. Walking is not neutral but inserts itself upon territory, commanding and suggesting. Walks may be undertaken with intentioned awareness. Jacks writes of how “intentional walking represents a means of reasserting a territorial hold in response to current conditions” (Jacks, 2006, p. 69). This may be physical and/or cultural, political and/or personal, tactile and/or fragile. Walking establishes a presence in place, asserts a sense

of territory, authority, and boundary altering. Walking allows landscapes to “extend themselves beyond all spatio-temporal horizons and into unknown territories in a way that goes beyond place dynamics” (Lund, 2012, p. 225).

However a walk is undertaken, it is never passive or other. It inspires change as actualisations become “cultures of landscape, mobile and morphing ensembles of topographies, bodies and percepts” (Wylie, 2006, p. 533). Design representation and interrogation of place can reflect this fluidity. If the path is seen through a series of types and forms, if its viewing can extend into multiple lines and variables, then the path becomes more than a binary this or that. The path is a place of the in-between, a middle ground. Space becomes intuitive, moving, and telling.

As articulated spaces, landscapes reveal rich and complex meanings. Such meanings can be observed along the path or they can be built into the path. Treib writes of other forms of meaning which exist as “synthetic or invented meanings” (Treib, 1995, p. 48). Meaning is found in synthetic construction. How the path is seen and made, whether as a series of dotted lines, of stitches, as a whole surface or a complex of layers, the path becomes a record of custom and projected ideas as well as physical materials.

To see this path calls for a new discourse, a constructive imagination, and new ways of seeing that move away from binary views.

7.2 The Path as a Diagram/ Diagrams as Paths

The path is a conveyance, a trajectory, a trace and track of process, within and upon landscape. A pathway is an easily understood, translatable idea and makes an ideal tool for exploring places and materials. The challenge of the path is how to represent its complexity: the depth, interchangeability, and intertwining of materiality that is found and expressed in relating with a path.

To revisit Careri’s idea: the simplest map is not an aerial, nor a plan but a trajectory; a route, the tracing of a line from point to point (Careri, 2002). Tracing a walk builds a typology based in movement from point to point. There is no singular plan or map; the line is a vector which forms a foundation for relationship and moves through a multitude of materials, relationships and interactions. Individual elements relate to each other according to user/observer perspectives, intent and the processes associated when materials interact with materials.

The path is material. Although a visual approach suggests a void between objects, in following Ingold's ideas of materiality, there is no in-between. Rather than a void, there is continuity. The walker exists as part of landscape, being within a continuum, a world of constant contact and change (Ingold, 2011a). Meyer confirms this thinking in stating that materials, and design, should be anchored in time, in context, in the specific, proposing a "middle landscape", "site as middle ground", which "does not sit passive or silent", rather it is a landscape that performs (Meyer, 1994, p. 31; 2008b).

This does not detract from the independence or individual substance of a material, but rather acknowledges that materials are unique, less absolute, more relative to their position in space. Ingold discusses how no thing exists in isolation (Ingold, 2007); there is a connection, a relationship between all materials. If everything is part of a wider whole then pathways must be considered as connected to the world around them. In the wider landscape materials are entities found within an expansive matrix which takes into account, and is altered by, origins and active processes. Things placed within a timescape are part of a flow, where time is considered a critical dimension; whether moving forwards or backwards, it is relative to the whole and may be seen through an itinerary, an arrangement of time-space.

The middle ground is articulated, figured not figure; a relationship of balance, not a power relationship of subject (gazer) and object (view) (Huxley, 1994). The resultant typologies and parameters should take into account human and natural values as part of not as other. Spirn (1997) advocates for a blended view – for a "reconstruction of our concepts of nature", to find "ways of perceiving and relating, for exploring relationships between human and non-human" (p. 260), a balance which acknowledges natural process and the dynamic autonomy of the non-human.

Separating humans from nature objectifies landscape, enabling the landscape to be seen as a *tabula rasa*, an open, blank slate or as a set of materials, known, contained and waiting to be manipulated (Raxworthy, 1997). When site has a voice, its materials are not a catalogue or a recipe book: such an understanding is fuelled by the binary view. Landscape architect Catherine Howett describes this relationship, this view, as "perverse" (Howett, 1998, p. 80). Howett argues against a way of thinking that reinforces a separatist, autocratic habit of mind, a way of thinking, where we can have A + B and do not consider the journey or consequence of the between space.

This research considers landscape as a tapestry where the walker and materials form threads of trajectory, which interconnect and interrelate. A physical, material world intertwined with culture – woven together across time forming a fabric, a series of threads. Each thread is separate, the edges of each thread in contact with others.

Ingold (2006) writes how “lives are not lived inside places but through, around, to and from” (p. 33). Places are made of and with embodied actions and embodied materials. The path is not a line but a fabric or an interface, there is no ‘this and that’, rather a world where the interstitial space around the particles is a real and valid substance, as much as the subject/object itself. Here, spatial configurations and relationships can be read a products of time and an edge is not the boundary of material, not a void, rather an interface, a potential growth source in the ever expanding continuum of space time. In this frame the path is an exchange, a series of materials, and has physical structure (Figure 36).

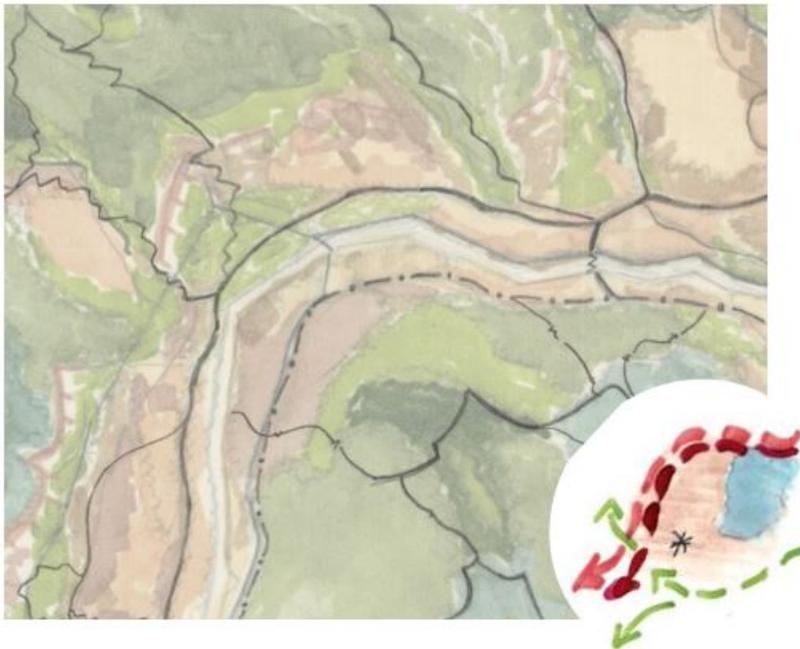


Figure 36: The path can be viewed as a series of knots and Intertwined threads. A layering of materials and trajectories, independent yet threaded through, into a woven network. The interaction of materials and things may seem independent of each other but in reality separating singular strands is complex. Each strand exists within a single line and series of loops and knots that must be negotiated in order to fully define and explore the line. Similarly the path takes many forms weaving, twisting, intertwining, and progressing based on a both multiple agents in a reciprocal relationship.

[IMAGE AUTHORS OWN: FIELD SKETCH BOOK
CONCEPT OF INTERTWINED THREADS AFTER
INGOLD (2013)]

Wylie writes how

“if landscape refers to the materialities and sensibilities with which we see then its narration needs to be attentive to ways in which these are emergent from and indeed constitute ongoing, refracting visual cultures. It needs also to foreground the always already performative and eventful nature of such sensibilities. And it must be haunted by, and folded with, the agency and autochthony of surfaces, reliefs, textures, and tones: materialities” (Wylie, 2006, p. 533).

The path is a place of interchange and during the walk this interface is seen. A path is not an “infinite series of discrete points”, rather it is an itinerary, flowing and continuous (Ingold, 2000, p. 226). When walking, we do not arrive at a point without continual contact with the ground prior to that point. Each step is part of a greater journey, a fluid dynamic understood as a journey or trajectory.

The experience of the path is a direct narration, an agent of the protagonist. Not singular, nor “necessarily unified wholes but as sometimes fragmentary and ragged patterns” (Reda in Crang, 2010, p. 190). The path, like the city and other human places, is not seen as a uniform entity rather as ‘a constellation of temporalities, coming solidly together in space’ (Crang, 2010).

Perceived time and materials are plural, as is the path.

7.3 An Expanded Field – Open Pathways

There are many possibilities in how paths are discovered, represented and potentially built. The walking studies presented in this research are intended to explore how paths and walking may expand the walker’s knowing and designing of paths and landscape, and in doing so open and expand the ways in which paths and landscape are seen and experienced.

This next section summarises and condenses those possibilities and, using ideas of trajectory and itinerary, suggests a series of potential path typologies. Each type represents more than a material form. Rather than see each type as limited or a finite means to an end, each represents a starting point. Each path provides a particular way of looking and coming to know landscape. Like a walk, the path chosen may vary depending upon the degree of openness and exploration applied by the walker.

Before describing types the discussion returns to Meyer’s ideas of an expanded field (Meyer, 1994, 1997). The research uses Meyer’s concepts to open up the idea of a model for an expanded path, a path which is conceptually layered, divergent and flexible.

According to Meyer's view of an expanded field, there is no room for one dominant discourse, one that reduces landscape to a neutered surface. The landscape and its materials are fluid, dynamic. The middle landscape is one of flux; a constant shifting of materials and things in motion, including the walker. In order to explore and confirm site, to

truly read landscape and create a position for editing, the walker-observer needs to fully understand not just the material and immaterial layers, but also the interface between. The path needs to be seen through multiple discourses and through multiple views.

Meyer's (1994) work explores an expanded field for landscape architecture. In this work Meyer adapts Rosalind Krauss' original (1979) work. As an art critic and theorist Krauss' work is concerned with a conceptual understanding of art.

In her original writing, Krauss discusses her research into how sculpture is viewed in relation to built form and figure. Krauss uses the mathematical model of a Klein diagram to critique the relationships between built form, structure and sculptural form. Klein diagrams are used to reveal links and connections between fields and entities. Both Kraus, and Meyer (who uses the work of Krauss to expand and critique her own thinking of binary views) use a four point diagram to highlight the binary views and its resulting oppositions.

Meyer builds upon Kraus' original model and has used the principles to highlight her own arguments and theories. Meyer build a case for several viewpoints. Her strongest argument opposes binary relationships. Like a sculpture is both built form and part of wider landscape so too all things in landscapes are both part of the wider landscape as part of an intricate and local state of being. A path has a physical form and may be measured and photographed, but a path is also part of a wider network of movement and migration.

The path is site and structure, access point and work site. This forms of non-binary thinking fits with Meyer's ideas (Meyer, 1994, 2008). Meyer's concern is that landscape is not marginal, it is not an add-on or an afterthought and it is not just a scene. Landscape is figure and ground. The object and spaces of landscape should not be consigned to 'other' (non-built, not-architecture) nor confined to be seen as viewpoints. The boundary line between this and that is able to be blurred.

Meyer states how 'landscape architecture has not fit within the descriptive, evaluative, and interpretive categories of mainstream modernism—historical or theoretical' and this has led to its exclusion or disregard (Meyer, 1997).

Many of the familiar relationships we see in landscape architectural history are based on the adoption of a binary view of landscape and architecture, nature and culture, female and male, nature and man. Meyer's goal is to construct viable alternatives to limit binary terms.

Using Krauss' original ideas as an armature for landscape conceptualisation, Meyer proposes that in place of oppositional binaries rather landscape should be considered within an expanded field which considers 'figure and field, man and nature' (Meyer, 1997).

According to Meyer's argument these fields are defined by concepts such as "figured ground, articulated space, the minimal garden, and landscapes for architecture". Each element exists in a complex relationship with the other; site description and site design fit within a middle or a continua, not as a binary either/or (Meyer, 1994, p.22).

Meyers work forms a foundation for initial walking exercises. This research questions what might be seen, what is able to be seen in walking: it is a question which extends out across broader landscape and which hones in to the very ground beneath the walkers' feet. How does the walker view the path? How is the contact or relationship with the path defined? Is the path also reduced to fitting a binary frame? Both Krauss' (1979) and Meyer's (1994) diagrams as used a basis for questioning how the walker might view the path. A new diagram is presented here which reveals various standpoints for path viewing/using (Figure 37).

Figure 37: An Expanded Field for Pathways. In this modified diagram, four different fields of knowing and relating to paths are presented. The diagram provides a summation of the ways a walker may view landscape and paths, and connect to landscape through the path. The diagram suggests four proposed path configurations (blue) and situates four relational modes (brown).

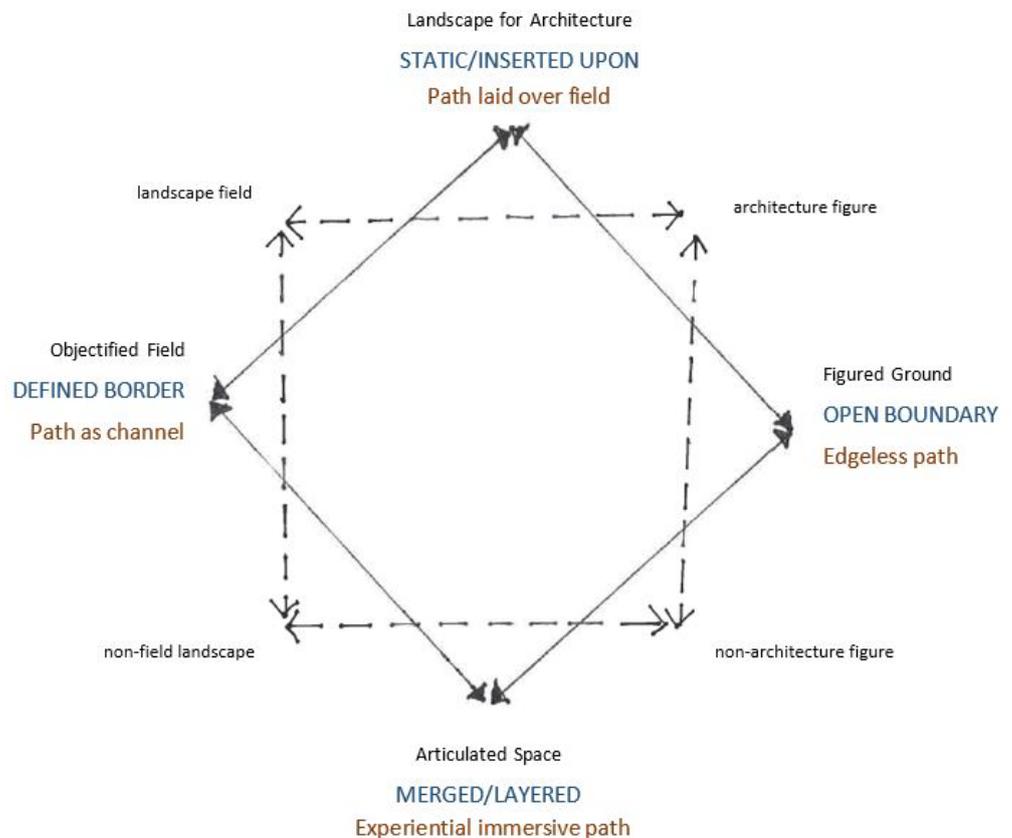


IMAGE: MODIFIED KRAUSS/MEYER KLEIN
 DIAGRAM WITH INCLUSION OF
 RELATIONAL FIELD FOR PATHWAYS –
 PRODUCED BY AUTHOR. ORIGINAL
 MODELS MAY BE VIEWED IN KRAUSS
 (1979) AND MEYER (1994).

The model adapts Meyer's descriptions of elements (i.e. figured ground as ambiguous, figural space, and thickened ground) to fit with ideas of pathway and walker-path relationships. Is the path an objectified channel or is it an edgeless tool for open contact with landscape? This research suggests that it may be viewed as both. A path might be viewed as an object, a tool or surface for transport, or as a place in which be become immersed in environment.

Each position is connected. Each walker can flow between lines. A walker in one day, at one particular moment might see a path from one standpoint then in another moment take an entirely different approach. What has changed? A moment in time, an event outside of the path? A changing of the path itself? There are many possibilities and not always a clear or solid line between points. The relationship may be circular, or a bit of this and that. Like the concept of yin and yang; dynamic rather than absolute, and always waxing and waning.

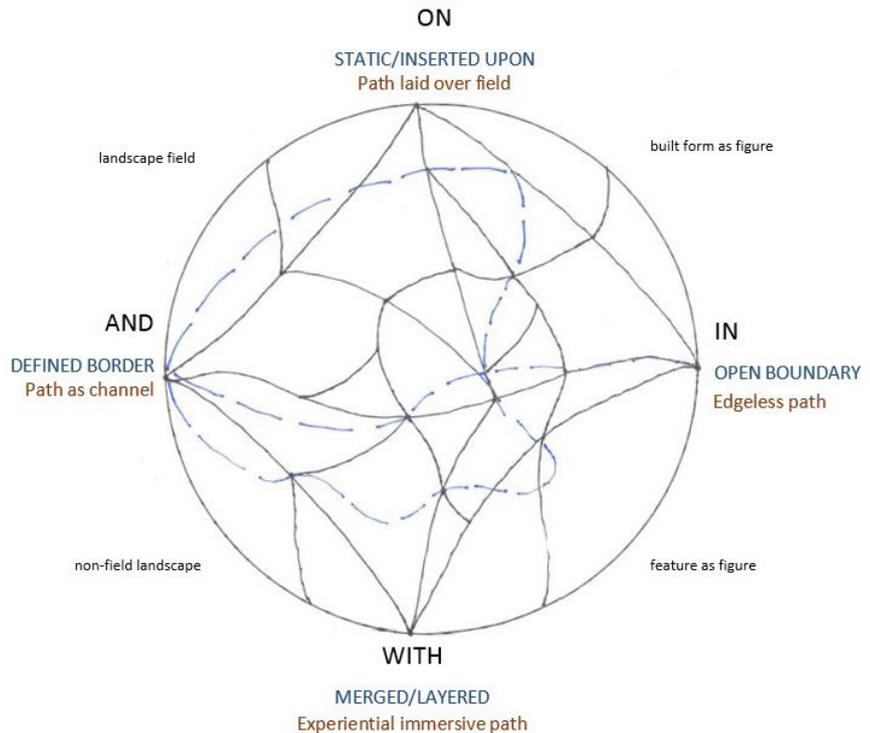
The path, its exploration and design is relational. This research proposes that the walker-designer should consider the path's place within landscape and design as an overlapping or intertwining thread. The path as a fabric rather than a binary this or that. The relationship between walker and path is a middle ground of ideas and objects, materials and process, observing and exploring, knowing and coming to know. The model presented here presents ways of relating to site (the walker) in, on, with, or and (the path).

Meyer (1994) writes of how seeing landscape as a middle ground, as intersection rather than binary opposites means that a dialogue is required between the site as a speaking figure and the designer's markings on that site. The exploration of paths is not simple, it is not easily defined. It is about the relationship between things, not the things alone. Our understanding of landscape and of things within landscape could be one of hybrids, in-between and layered complexes.

Figure 37 is used to convey initial ideas and thinking about how paths might be related to landscape and conceptual (ontological) ideas of landscape. Figure 38 (following page) takes this idea further. In recognising that a walkers relationship with the path can be functional, and it can be immersive, a more rounded and complex system of thinking is required. The walker's relationship with the path may be 'ON', 'AND', 'IN' or 'WITH' and it may be all these things at one particular time or simultaneously. Because of this reality, the walker's relationship with the path is best represented by a web. Like a complex intercellular system, or the neurone pathways of the human path, the walker's relating to the path is dynamic, subject to change.

Figure 38: A Networked Field for Pathways. In this modified diagram, the same four different fields of knowing and relating to paths are presented. However the more realistic moving between points is considered. Each field is linking to the other, through a complex series of connections. The walker (shown here by a dashed blue line) engages with the path in many ways and does not follow a straight course. Rather like a thread weaves through, around and back over the theoretical lines.

IMAGE: NEW RELATIONAL DIAGRAM. AUTHORS OWN. SOME TERMS ADAPTED FROM MEYER, 1994).



How might this relational knowing translate into a grounded awareness? The following section explores a set of positions: a series of relational constructs which have been developed and expressed as a set of type diagrams which reveal path elements and conditions.

7.4 Four Proposed Path Types based on an Expanded Field

The first position encountered is that of path 'on' landscape. At the extreme edge of this view, the path and landscape (or the path and walker) might be considered as mutually exclusive. The path exists as an insertion on landscape, it is other than. The walker moves across landscape, using the path as a directional tool. The path is a channel, isolated and separate from the surrounding landscape. The path is a thoroughfare upon which the walker may experience minimal interaction. The prime objective of walking such a path is to gain access to a destination: the relationship between walker and path is therefore expressed as an 'A to B' equation, the type seen as motion between and separate from surrounding landscape and over surface (Figure 39, following page).

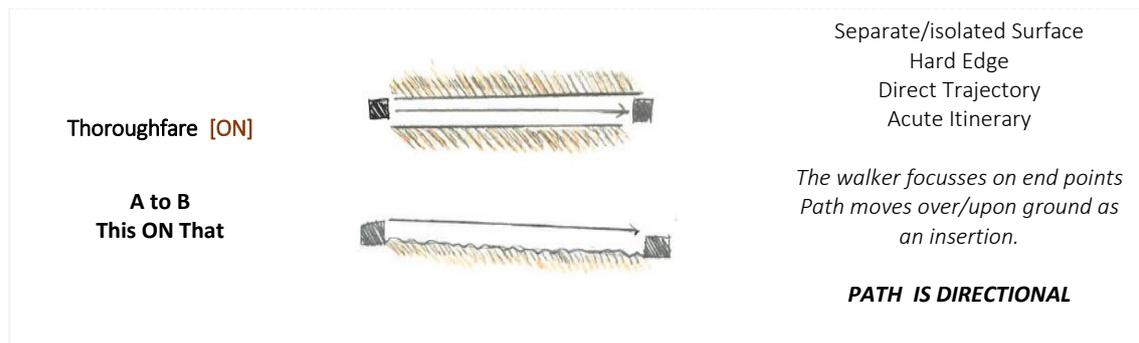


Figure 39: A Potential type of relating to pathways - On. The typologies describe the way in which the walker moves through landscape in an interpolation of trajectory and itinerary shown in path plan and section. Each figure also suggests a way of approach, describing how the walker-designer might conceptualise and interact with a landscape through the path.

[IMAGE AUTHOR'S OWN: DESIGN JOURNAL – WALKING CONCEPTUALISATIONS]

In the next position the path is established as a transect. The walker and path relationship is seen here as a consecutive transaction ('A to B to C'), its corresponding types viewed as a negotiated, involving a moment to moment contingent interaction. The walker moves over and upon landscape, interacting with its form and features (Figure 40).

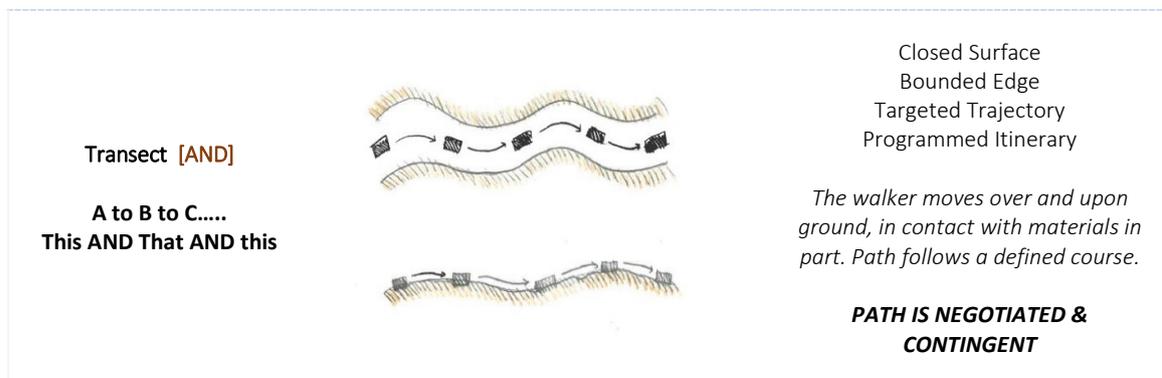


Figure 40: A Potential type of relating to pathways - And. The typologies describe the way in which the walker moves through landscape in an interpolation of trajectory and itinerary shown in path plan and section. Each figure also suggests a way of approach, describing how the walker-designer might conceptualise and interact with a landscape through the path.

[IMAGE AUTHOR'S OWN: DESIGN JOURNAL – WALKING CONCEPTUALISATIONS]

The third view considers the path from a conditional, haptic approach. The walker traverses through and in landscape. The path is permeable, the walker able to interact with surrounding materials and the final route taken is predicated by this interaction. The path and walker relationship is haptic and responsive; and might be expressed as an 'A through B to C' equation. The associated type is fluid and loose, moving through and within materials (Figure 41).

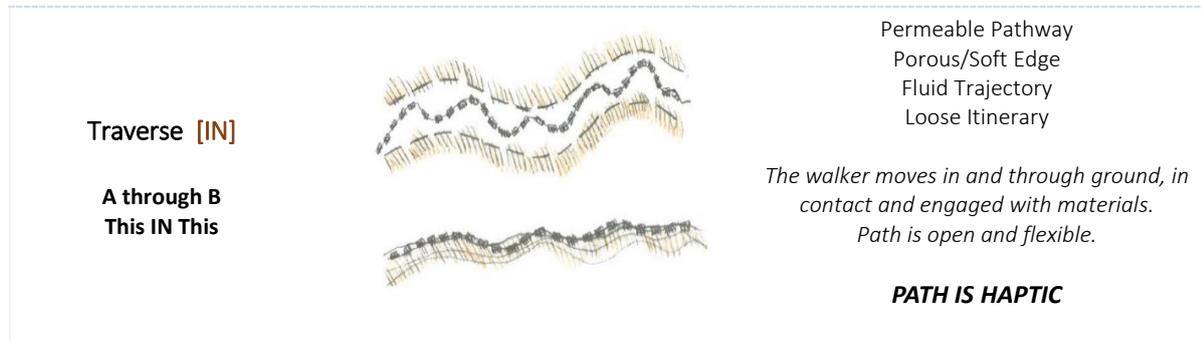


Figure 41: A Potential type of relating to pathways - In. The typologies describe the way in which the walker moves through landscape in an interpolation of trajectory and itinerary shown in path plan and section. Each figure also suggests a way of approach, describing how the walker-designer might conceptualise and interact with a landscape through the path.

[IMAGE AUTHOR'S OWN: DESIGN JOURNAL – WALKING CONCEPTUALISATIONS]

The last quadrant positions the path as immersive. The walker is in full contact and relationship with the path. This interaction is such that at its extreme periphery, the path's presence and its knowing is conditional on the walker's interaction. This form of path is edgeless and defined by engagement. A is found within B. The path exists as a trace etched out by relational processes, movement as transmission between walker as agent and receiver (Figure 42).



Figure 42: A Potential type of relating to pathways - On. The typologies describe the way in which the walker moves through landscape in an interpolation of trajectory and itinerary shown in path plan and section. Each figure also suggests a way of approach, describing how the walker-designer might conceptualise and interact with a landscape through the path.

[IMAGE AUTHOR'S OWN: DESIGN JOURNAL – WALKING CONCEPTUALISATIONS]

The typologies reveal four path elements which combine to determine path form and function: surface, edge, trajectory and itinerary.

The first element, 'surface', identifies how a path is positioned within the wider landscape and portrays the material relationship of walker and path, including how the walker moves over or along the path and the depth of connection and contact with materials. The path may be made of impermeable materials, solidified and laid on a fixed foundation (e.g. a paved courtyard), it may be elevated above earth (e.g. an elevated board walk), it may be permeable and soft (e.g. a broad meadow full of tall grasses) and or full of voids and contact points (e.g. stream bed and ford).

Spatial positioning and relationship is defined in the second element 'edge'. Edge defines the path spread and path/landscape porosity. Does the path allow or encourage the walker to stray off the path; does a boundary exist at all? A hard edge may infer that outside landscape is rarely contacted, it may be viewed but not touched. A soft edge may encourage contact or blend subtly with surrounding materials. The edge may be horizontal or vertical e.g. a change in material along a path or a fence erected to control passage.

The third element is 'trajectory' which is used to identify the walker's intentional route. The walker's trajectory is based on experiential and motivational drivers rather than quantifiable physical properties or spatial vectors. It provides a plotting of walker focus and attention. Movement through space can occur across a scale of intensities and orientations: the walker's focus can be narrow and intense, the corresponding trajectory abrupt and direct or, at the other extreme, the walker's focus may be sporadic, drifting, even backtracking or resulting in a seemingly pathless tracking.

In reality a walker's trajectory may not necessarily be physically recognisable, it is not always seen as an actual line along the ground, and the full scope of experience may be beyond a tangible imprinting. A physical path may bring a walker to a certain point, from this positioning the walker's focus may drift out and across space, it may shift to other places, to memory, or daydream or future intent. Trajectory may be determined before the walker even approaches the site and the first step taken. It is however only made evident by the real and tangible footsteps of the walker.

The final element is 'itinerary'. Determined by a succession of events and moments, itinerary is characterised by rhythm or score. An itinerary may be orchestrated and well defined or impromptu and highly fluid depending on design intent and/or walker engagement. As a

programme, the pace of the walker, the points or places visited (intended, hoped for and/or attained), the order that the walk is taken are all components of itinerary. Itinerary is responsive. Like trajectory, itinerary is largely internalised and subjective. It is an intended course of action which may be subject to change based on unforeseen conditions (a change in materials, availability).

7.5 The Onward Journey(ing)

Walking exercises, critical review and discussion are not intended here to provide fixed answers: the value of questioning and review is found in the ability to open and suggest possibilities. The concepts presented are not intended to be prescriptive. Rather they suggest the possibilities latent in the consideration of a different approach to seeing, knowing and moving along a path.

This research reveals many different ways of coming to know paths, formed as the walker-observer connects with things found both inside and outside the path. The path may become known from an externalised perspective, from theory and maps and the accounts of others and it may be known from internalised experiences and existing viewpoints. The ways in which a path is approached, from its initial viewing, to the relationship built between walker and materials, through to its recording and representation has a vast impact on how the path is known, on what may be understood and passed on.

This body of work is the product of a solitary walker-researcher. Throughout its development it has been informed by others: through literature and theory, through meeting others in their walking the path.

The voice of other walkers, other people in place, whether past or present have added to this journey. Even if not directly evident in the main body of work, they have informed its core formation. Even when walking alone there are other traces, other voices to bear witness. The footsteps of others are traced and cross over. Sometime that following is intentional, sometime it is passed by, and sometimes it is shared.

Walking is not always a solitary endeavour. It may also be collaborative, and as such, future research could focus on a collaborative exploration, with an understanding of paths expanded through exploring how other walker-designers interact with tools and materials while walking. As desirable as such a study is, it is beyond the time-constraints of this work; as it the ability or space to delve into the rich array of social and cultural interactions found along the way.

This research presents an expanded field of paths composed of itineraries and trajectories, modes, methods and frames within which the walker might interact with the path and which, in turn, might inform the path's making. Paths can be built in a variety of forms, for a range of purposes. The designer can format an itinerary and program trajectory using diagrams, drawings and plans to help convey how such a designed path might be made known.

This research also suggests the possibility of examining how a path might be physically made and represented when explored through an immersive view, and could be extended further to explore the role that paths have in making spaces and landscapes. How might an informed knowing of landscape, as formed through experiences of walking, shape site and encourage engagement with the wider realm of landscape? Ultimately the path is known and made according to its reader's intentions and use. A path can be drawn on a plan, marked out across site and built within landscape but it is the walker's experience that truly defines the path.

Knowledge of the path begins before the walker steps out on the land. The ideas and expectations of the walker, those things that frame experience, begin to be formed from a prior reading: images, representations, narratives gained from elsewhere, from brochures, maps, stories and imaginings. Physically walking the path confirms, elaborates or contradicts what is first known. The walker's knowing is enriched through a closer, experiential view. In contacting things along and within the path, in dwelling amongst and immersing in the materiality and temporality of landscape, new knowledge is gained and the path becomes layered, rich in complex narrative and meaning.

The walker-designer can come to express what is known of the path in many ways. They can use alternative views to provoke and reveal deeper meanings, explore other ways of representing and reading paths and path marking on maps and plans. This research questions the role of the familiar ways of reading and perceiving and what can be discovered when new ways are approached. Prior experiences and readings can inform exploration and they can also prevent new readings. The research suggests encountering paths from an unfamiliar or strange perspective provokes new learning unimpeded by previous knowing. There is value in re-looking at conventional ways of seeing and knowing. New complexities can be known through encouraging and exploiting new perspectives, embracing subjectivity and processes of change, exploring site from a temporal perspective, and from dwelling and immersing in place.

Designers can also learn from the morphology of process explored in this work: how things can be encountered and the way they are recorded. Time and contact on and within the path allows the walker to learn directly from materials and from the things found along the way; further exploring how those things continue to be known and expressed also extends the experience of the path and develops what can be known.

Walking is 'both means and end' (Solnit, 2000). This research began with a series of walks. Further research might continue in the same manner. It is in walking that ideas and theories are tested and consolidated, in walking that ideas of paths and landscape are given traction and the walker finds their place, and placing.

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Appendices

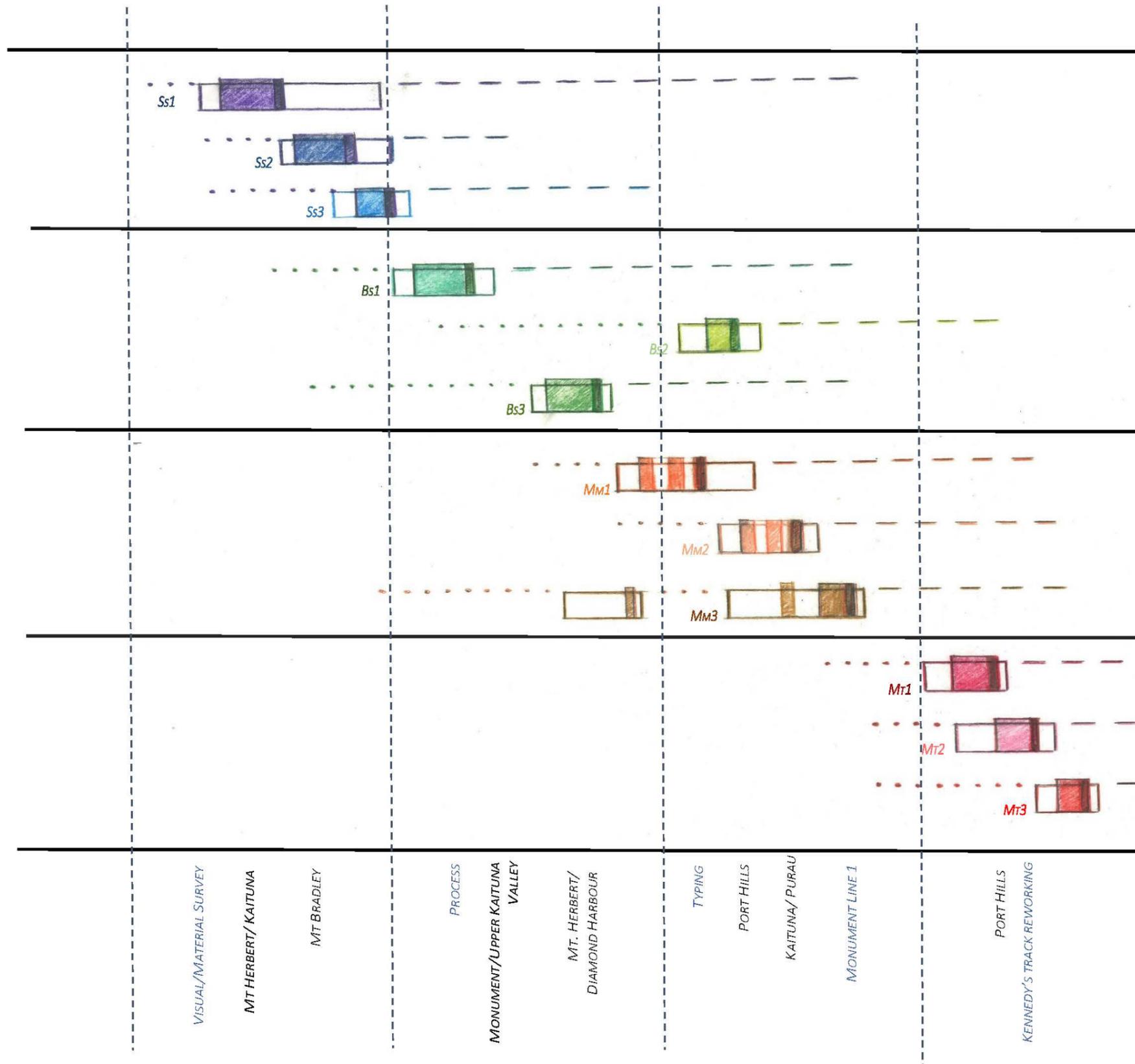
Appendix A

Locating Walking Exercises:

A1 Schedule of walks

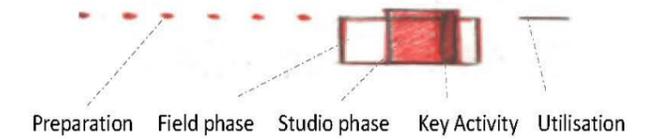
A2 Map of Walking Exercises – A Lattice of Paths

A1: Schedule of walks



Timeline Key:

- Ss1** Sighting Walk One Physical and Tangible Surfaces
- Ss2** Sighting Walk Two Looking Deeper - Thick-sections
- Ss3** Sighting Walk Three Plural Looking - Sustained Seeing
- Bs1** Sensing Walk One Filters and Distractions
- Bs2** Sensing Walk Two Directed Walks
- Bs3** Sensing Walk Three Focussing In
- Mm1** Material Walk One Building an Typology of Materials
- Mm2** Material Walk Two Typological Operations
- Mm3** Material Walk Three Temporal Experiences in a Walk
- Mt1** Temporal Walk One Connection through Temporal Cues
- Mt2** Temporal Walk One Time Signatures in Landscape
- Mt3** Temporal Walk Three External Rhythms



Pre-walk Preparation:

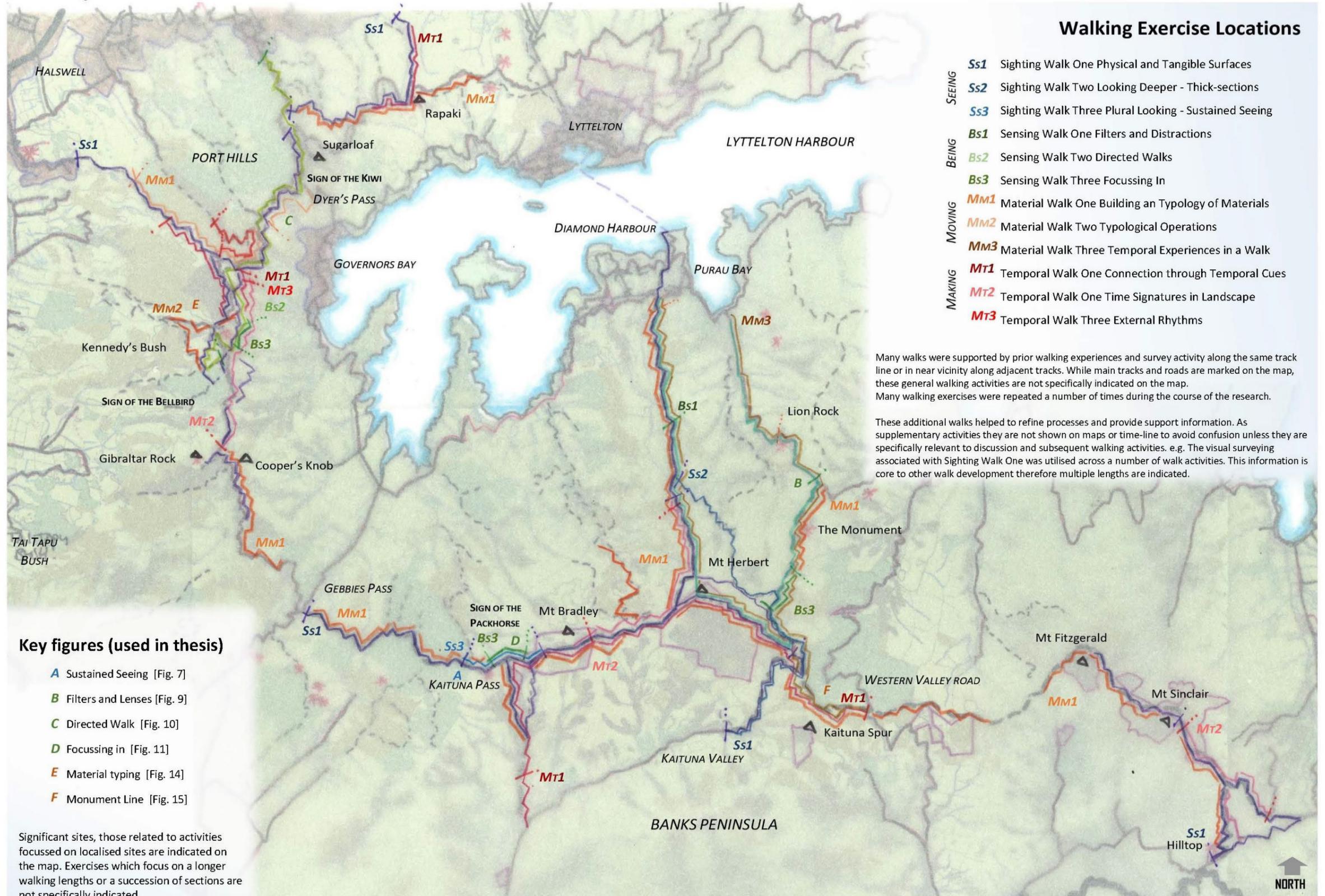
Before each walking exercises was undertaking a preparation stage occurred. In this early stage, initial ideas (which surfaced from prior walking exercises and literature review) were drawn up and shaped. The walk exercise was planned and any required materials or resources acquired (base maps, existing site information). This stage varied based on the requirements of each walk.

Studio & Field Phases:

Each walk involved a varying volume and sequence of studio exploration and field walking. The core activity (main walking event as is described in each relevant walk description) generally occurred towards the mid-point of field and studio interactions i.e. after an initial period of studio development and/or field testing. Exercises with a large studio based component e.g. Typing Operations were primarily undertaken off-site. Where walks were developed off-site they were bought to specific locations for testing and exploration of potential application.

A2: Map of Walking Exercises – A Lattice of Paths

A2: Walking Exercise Location



Appendix B

Exemplar Walking Exercise:

B1 Field Survey – Example of Survey Outputs

B2 Sighting Walk Two – Seeing Thickly

B3 Sighting Walk Three – Sustained Seeing

B4 Material Walk One – Encountering Materials along the Path

B1: Field Survey - Example of Survey Outputs

Specific walking exercises are supported by pre-walk preparation and information gathered during prior walking experiences.

Support information was collated before survey activities as part of pre-walk studio exercises. This was developed from existing historical accounts, area site based reports and a range of visual data including:

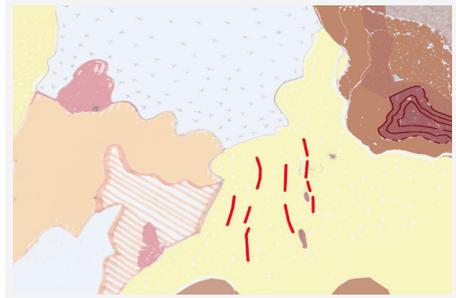
Base maps & Aerial Photos

Topographic maps are used to provide necessary geographic/spatial information such as location of landforms, elevations, physical/natural features, track routes, settlements and general land types. Aerial maps given indications for materials, textures e.g. vegetation types, land cover and land based activities.



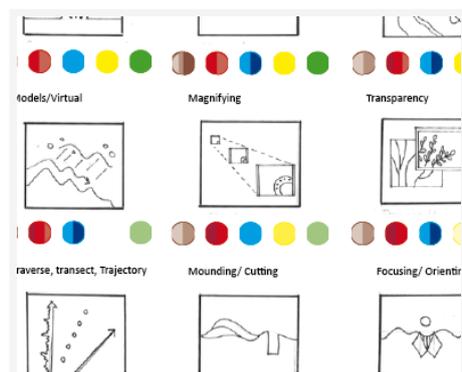
Specialised maps/ Diagrammatic maps:

Mapping exercises were undertaken before survey walks. These exercises involved reviewing specific map types and extracting data e.g. geological maps were used to supply information on regional structures, specific material surfaces and landforms. Diagrammatic maps were developed to highlight key features and elements of interest



Design Tools & Exercise ideation:

Prior to completing the exercises ideas for walking activities were explored in studio. Design tools (diagrams/ exploratory activities) were used to interrogate and clarify walking programme and objectives. This incorporated analysis and exploration of existing examples found in design media and journals e.g. a study was completed which explored various ways of using design to reveal site elements and ecology (Eco-Revelatory Design). The methods were extracted and used to form process based diagrams.

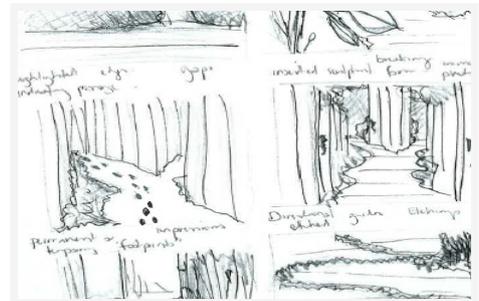


A range of information was collected during survey walks to provide evidence of materials, processes and site activities found along pathways.

In later stages of research (moving/making walks) the focus of walking exercises and survey shifted from the observing and developing of a materials-based inventory to a more process-orientated and interpretive style of investigation. During this stage exploratory sketches and on-site analysis were incorporated into walks.

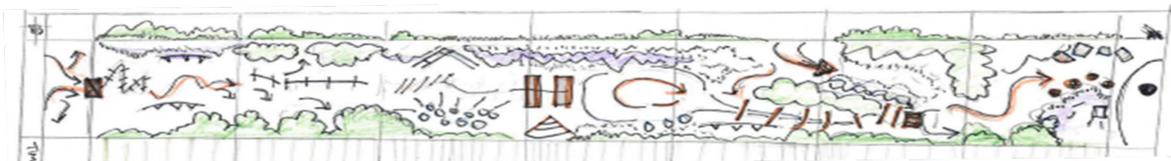
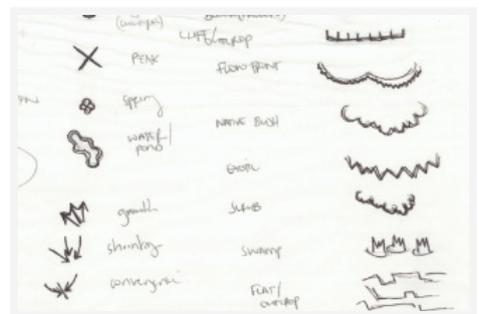
Potential Site Interventions/Alterations

Existing track sections were explored and ideas of potential interventions explored in vignettes. Different materials and forms were inserted into spaces e.g. ideas for track markers, track edges.

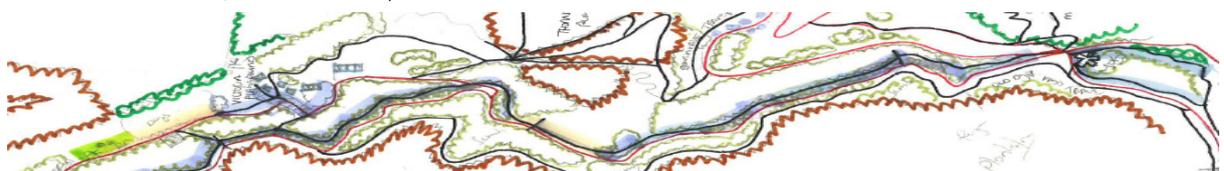


Site morphology and active process:

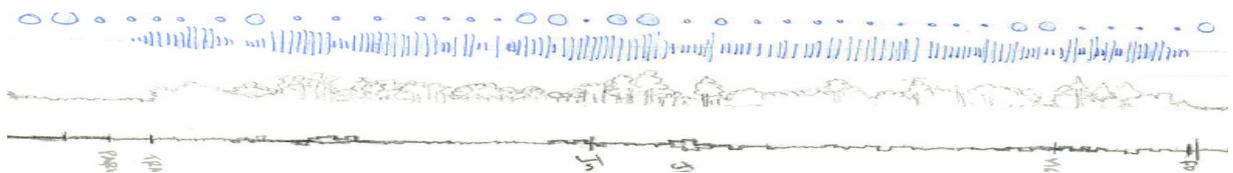
A notation system was developed to allow the capture of morphological site information: this included the observation and mapping of features formed by a range of physical and cultural processes and included recording topographic features, forms and materials. This system of recording was used to form type sections (Material Walks) and aided the identification of temporal elements.



Typing notation creates a process-based map of the track (process informed materials, form and use)

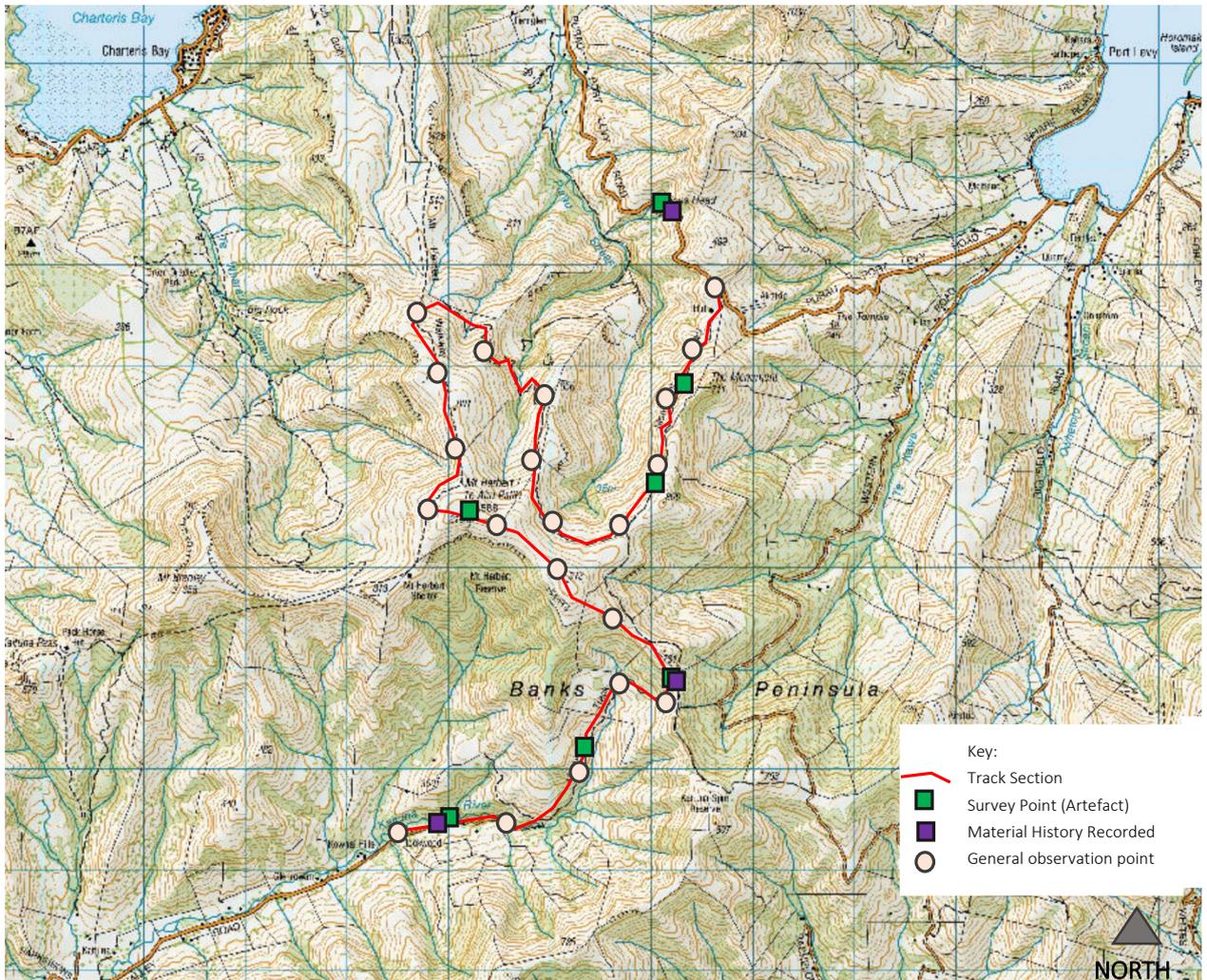


Track sections were identified and categorised based on a common typology of form, materials and process.



Experiential data is also expressed in note form. This notation formed a vital precursor for timeline development e.g. Monument Line 1 (Materials Walk Three).

B2: Sighting Walk Two –Seeing Thickly



Purau Bay to Kaituna Valley via Monument Track and Mt Herbert Summit

Study Site:

The route taken extends from the hillslopes above Purau Bay, past Purau Saddle and the Monument, around and over Mt Herbert before dropping down into the Kaituna Valley. The predominant land use is pastoral farming (sheep and beef), although there is some housing in the lower valleys and upper slopes contain sections of DOC reserve (scrub/tussock lands).

Exercise Brief

1. Several locations of special interest have been identified from a study of local maps (topographical, geological, and ecological). These sites were selected due to the prominence of their location (adjacent to junction, physical feature, highpoint, boundary line etc.) and were targeted for specified survey.

2. At each special interest site a range of features are to be actively investigated. There are two types of survey to be undertaken at these locations, these as follows:

A: Site artefact and/or product: record the occurrence/distribution of particular physical objects (products or things that representing the presence of an active agent or process i.e. built form, marker, spring, observation of particular native species etc.

B: Landscape material and process (material history): In addition to recording particular objects (evidence of active interaction or making) at each site, a material history survey is to be undertaken, with a focus on broadly describing the wider materials and processes present at selected sites (geological, ecological and socio-cultural).

3. Once survey data has been collected it is to be mapped out/diagrammed.

Artefacts or objects: These are to be grouped into five categories – indicated by coloured circles. Each colour indicates a particular type of element or artefact. The size of the circle signifies presence – the larger the circle the more evident an item is on site and the more dominant its presence.

Material histories: Material presence (evident dominance or absence) is identified at various points by a thickness or depth of material cover. Sections with particularly heavy coverage by one particular element are generally described or labelled according to that element i.e. Lion Rock is a volcanic outcrop and volcanic rock dominates the site and its material survey. Where a number of different elements compete for attention, or co-exist in relative harmony this is indicated by type of fill (e.g. two elements may be intertwined or layered). This relationship is also diagrammed (see below).

4. Different section may then be traced back to the map according to survey location.

Notes:

In addition to specified survey activities, a broader track record was also maintained where general survey exercises were under taken at a range of sites along the track length. These followed the general field survey principles explained in Appendix B1. The goal of this recording was to provide a more lineal collection of data, as encountered and spread across the whole track length.

Site Artefact/Objects

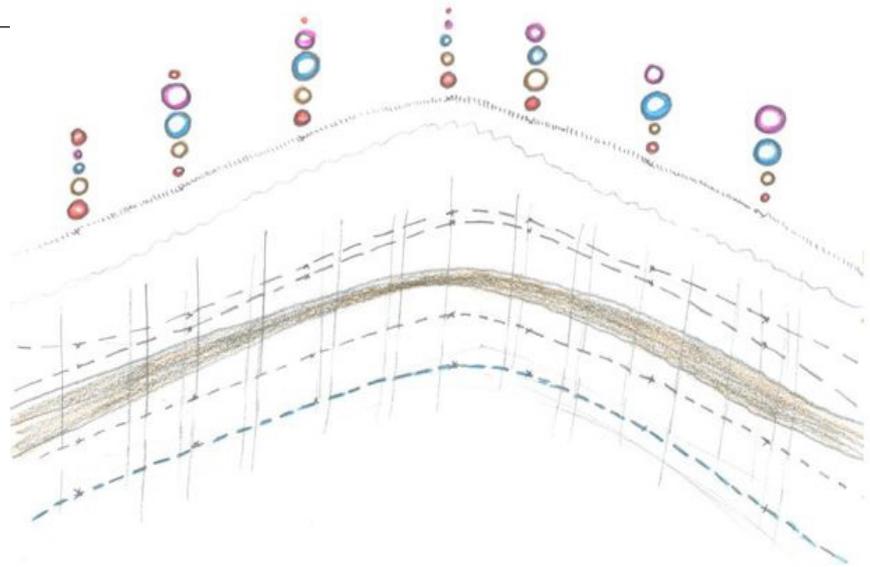
Observed Artefacts & Surfaces:

[Key Features & Landmarks]

-  Geological form/deposit
-  Ecological feature/species
-  Hydrological feature
-  Built form/structure
-  Remnant/marker (trace)

[Layers Present]

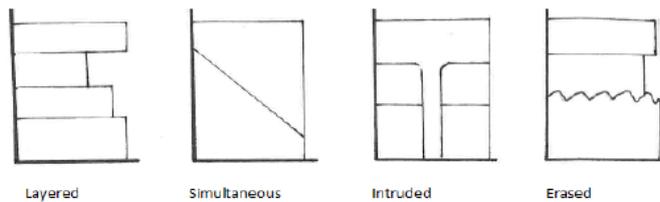
-  Track Surface (Material)
-  Track Surface (Form)
-  Exotic species
-  Native Species
-  Built form/intervention
-  Time
-  Topography (elevation)



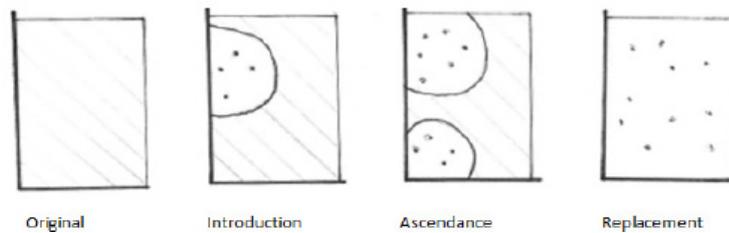
Valley > Saddle > Valley (Total length of route)

Site Materials and Processes – Material History

Relationships between materials:



Physical/Hard materials (human or other origin i.e. geological/cultural source)



Living/Soft materials (human or other origin i.e. ecological/biological source)

Other Observations, comments and reflections:

In choosing to look for various surfaces and in attempting to see beneath the surface there are many things that might be found. Many of these items and layers are easily overlooked, disregarded or drowned out by other more voluminous things. Without careful attention, prior knowledge or an active interest many items would not be recognised or sought after. Seeing thickly involved an active, informed looking but it also involve intuitive knowing. In looking I must move past what I think I see, what I want to see and I must delve deeper: I must learn to see others footsteps and histories. Some of this learning comes from books and photos and reading local histories but other knowledge comes from drawing connections. I know this, I see this... I put the two together and what do I see? The line thickens, and as it coalesces it gains traction. An example of this comes from an afternoon's walk in Purau Bay – undertaken as a preliminary walk to Sighting Walk Two.



View from Stoddard Point overlooking Purau Bay and Ripapa Island.

The following text comes from Walking Journal (Purau & Ripapa).

When I first walked out to the Bay, stood at the headland at stared out across Ripapa Island I did not expect to feel such strong reactions or to draw such connections. Looking across to *that* island, on a sunny peninsula day my mind travels back to Taranaki. Like an echo, I think of the people from there, transported south to this part of the country. From under the shadow of the mountain to this harbour. Stolen away, imprisoned. That mountain, Taranaki /Egmont, is my mountain too. Under its shadow, is home. From its green slopes flows the Stony River, the Hangatahua, down to the Tasman Sea. Far from here and this Pacific outlook. So different yet a journey we have both made: they captured by soldiers, me here of my own accord. Different routes and modes, different histories, different bloodlines yet I feel a kindred spirit, we are

both of from the mountains shadow. I state at Ripapa Island and think how I cannot go there (not after the post-earthquake closure). I think how those who were imprisoned there could not leave, they could only dream of a mountain and western shores far away.

As a child I was taught to 'ask that mountain' (Scott, 1981) ... It is an asking that resides in me. I am conscious of its presence as I walk in these hills. Conscious of histories and memories not my own but which mingle with my own knowing, seeing, and learning because I am here.

Walking the paths above Purau Bay, Parihaka seems like distant history, it also seems very alive and present. The land has a story to tell, beyond my own – the story of its formation, the story of other people who have passed before me. I bring these voice with me, and I find them as I walk. I must learn to discern these voices apart from my own.

'O voiceless land. Let me
echo your desolation.
The mana of my house
had fled....'

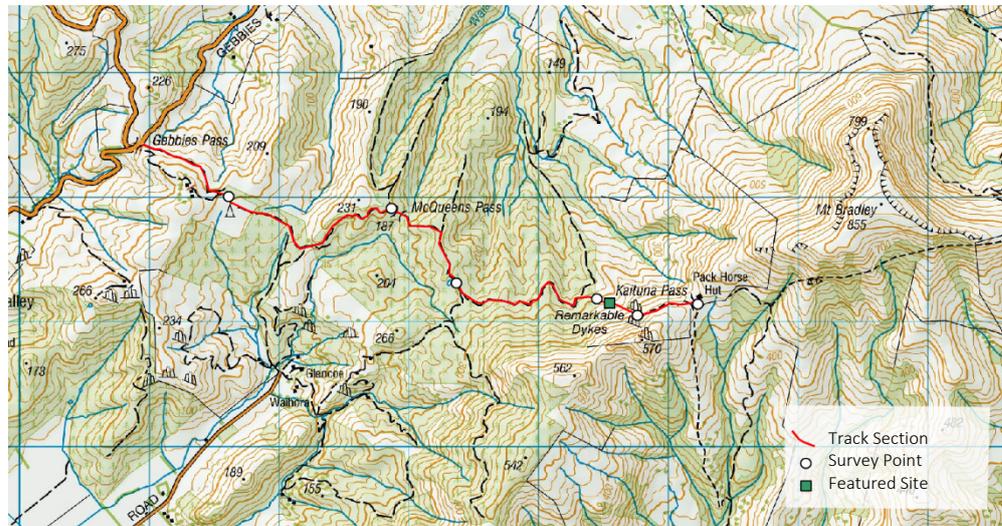
In his poem '*Not by wind ravaged*' Hone Tuwhare (1964) writes of a land stripped of its voice. A voiceless land, muted not only by its own loss, but the loss of its people. People and landscape intertwined. The land echoes of people, who echo of land – a living incarnation, *in dwelt*.

The path takes me past my own familiarity, into this new knowing. New scenes, new experiences - limited only by my capacity to observe and take in. As I walk in landscape I must learn to observe deeply: not just using my eyes, but my ears, my fingers, my feet, my heart. Using all of my senses to truly understand and to know. Beyond this, there is yet more, for I must also recognise time. Over time – dwelling in place, in revisiting and with attention, my view expands. The echo takes a new form as I add my own voice.

How I touch the land, how I will design within, upon and of this place is bound to how I know and experience. Observing, knowing, hearing the echo – letting land, letting people past and present speak.

In the context of the walking exercise – this reaction, this knowing of space is but a layer. It is not insignificant, quite the reverse, but in terms of a visible trace it is almost invisible, it is immaterial, just a view to an island. This in itself reveals the depth of landscape, that one thing viewed in one particular way by one person can have huge depth. When connections are made between two peoples this is exponentially so.

B3: Sighting Walk Three – Sustained Seeing



Packhorse Hut Track/ Gebbies Pass to Kaituna Pass

Exercise Brief

5. Identify a site of interest found during a previous walk and obtain a visual survey at site. Review observations and inventory recorded at the site.

OR: IF a survey has not been completed complete a full survey of site and record observations: compile walk notes, maps, and sketches/diagrams.

NB: *This exercise is intended to explore what is additionally seen after a first survey exercise. Having already obtained detailed records of site subsequent viewings should be treated differently, as separate and the walker-observer should feel free to explore new avenues of seeing.*

6. Having reviewed the previous survey information. Re-visit site and explore what is *now able to be seen*. Take time, pay careful attention in re-looking at the same site. Record and describe what is new, what has changed, what might be seen given time.
7. Repeat. (This exercises may be aided by the establishment of set viewing criteria or checklist of objectives e.g. a specified range of survey criteria or length of time per view).
8. Analyse observations and identify new information, new insights or changes in process. Compare and contrast two surveys and identify differences

Notes:

In this exercises the same scene was viewed and six different lenses or frames of view were established. Responses drew on previous knowledge of materials and site. Questions also helped in re-looking at site: i.e. what is considered natural? How long has it been here?

The first look involved photographing/sketching a view from a section of track previously explored during a field survey exercises. This looking was centred on surface materials and identification of objects within the frame of view. The subsequent looking undertaken as part of the exercises used a specific focus and a sketch of a particular surface was created:
Perceived temperate changes in materials
Native vs. Exotic species and elements
Felt textural changes
Lines and mass (material volume and form creates linear patterns of process and movement)
Removal of cultural features ('erasing' man-made elements)
Structural lines seen in topology and form)

Each 'looking' revealed new materials to add to inventory.



Study Site:

Located along the Gebbies Pass – Kaituna Saddle Track, approximately 800m west of the Packhorse Hut. The track curves east towards Mt Bradley, around steep hillside through the Remarkables dyke system (a series of long thin magma intrusions).

Photo show localised area around feature site. Land use is predominately pastoral grazing on open tussock with pine plantation to the south-west in the valley below. Original land cover was thought to be mixed podocarp forest and low montane scrub.

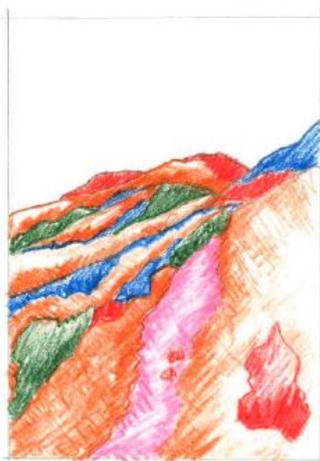


Interpretation One / First Look



Warm & Cold: Sitting, waiting for an epiphany. What is new? Can I see something different? The rock where I sit is warm in the sun and so I start to look around and out. A sunny day and rock will slowly accumulate heat, in winter this melts snow (on a local scale) and forms pock marks, in summer heat exchange creates a thin layer of condensation, enough to support lichens. So I beginning to look for cues of heat exchange, and to look for those things which respond and require such exchanges. I see a landscape of conductivity, of exchange, of consequence.

Interpretation Two / Second Look



Native vs. exotic: I look upon a pastoral scene. It is beautiful: the ridge-line ahead, the forest edging frames and guides my eyes to each valley and open tussocky slopes between. A scene of rocks and plants and weather... natural but not. What is natural? Native? This landscape is modified, heavily so. If not for the grazing vegetation would take over. What would that look like? I look at the types of plants – would these species take over or would a new species take over? Would natives eventually claim the top order of succession? What of other NZ natives, not local to here but growing at this site – are they considered introduced? It is hard to divide the endemic from the brought to site. How far in time to extend? Can site be re-imagined as it was or can be?

Interpretation Three / Third Look



Textures: Looking specifically for finer details. Looking past the bigger picture, isolating individual elements and seeing small things. A patch of moss, a collection of fragments on rough stone. Tussock – not as a shimmering mass over there but a series of thin, wet tubes here. Each blade, a water channel having captured the heavy dew. Each element separate yet interacting and responding to what is found in a shared or adjacent space.

Interpretation Four/ Fourth Look

Structures/ Mass & Form: Lines and layers - lead the eyes, prompt thoughts of past surfaces. A range of masses and scales. Tight spaces, open out to broad skies. The path hugs the slope and cuts through these layers, a crack along the grassy slope, until it hits rock. Intersecting the dyke, the track pushes through. The track is a line, a conduit, it is an erosive force across landscape, and it appears as a void. On a broader scale, the line of the path becomes invisible, dwarfed by other lines and layers, the mass of Mt Bradley overshadows and asserted its dominant presence. Other more temporary lines also reveal themselves – the line of clouds, remind that even in the lee of this slope the northwester leaves a mark.



Interpretation Five/ Fifth Look

Absence: Actively searching and for what is not seen. To look at a space and mentally stock-take. What is seen? What should be seen? This involves looking past what is currently in front of me and thinking deeper, about wider relationships. Looking for clues of prior existence, the traces and marks of past presence. Thinking about what should or could be seen here? To think of an element, to consider its former or potential positioning, to see its current absence and to wipe it literally of the sketched image. It is remembered in my mind, in my memory. On this page – a mere smudged white space remains.



Interpretation Six/ Final Look

Wider structure: So much of this looking and seeing centres on objects and individual things. Items in a collection forming a wider scene. The landscape is a mosaic: if I pull my focus I see a whole surface, integrated and flowing and of which I am a part. This landscape ceases to contain traces of humanity or groups of materials – it becomes a fluid mass.



B4: Material Walk One – Encountering Materials along the Path

Aim: Building typologies based on material/experiential record

Building typologies based on material/experiential record

Study Site:

Various locations were surveyed along multiple tracks. Refer to maps/walk list in Appendix A for a map of walks and programme of walks. For a site to be known or determined as 'typical' or as a representative type the walker/cataloguer/mapper must gain a thorough understanding of the site and its peripheries.

Many of the sections of track surveyed and used to form typologies were visited multiple times. In addition to this, a large volume of studio based mapping was undertaken (using walk notes, observations, GNS geological maps [QMap] and other GIS based map services [i.e. Canterbury Maps]).

Exercise Brief

1. Survey:

Complete a full walking survey of each selected track length and gather a full inventory. Identifying: (topographical, geological, ecological and other geographic data. Objects/things to find:

Material Palettes
Spatial qualities
Material properties
Sources of change
Surfaces

While walking also record a full range of sensory data and actively sketch record findings. Use a full and varied range of tools (not just photos and description – complete maps, site sketches, rubbings, journal notes etc.) Spend time on site. Go again.

As this exercise is to be completed after several others stags (Sighting and Sensing Walks) past journal notes and track maps will make a rich resource for review.

). These sites were selected due to the prominence of their location (adjacent to junction, physical feature, highpoint, boundary line etc.) and were targeted for specified survey.

2. Analyse:

Check data. Map out what is observed and use a full range of tools to confirm and explore:

Make overlays, map out individual layers (processes, materials, products of time/geomorphology, vegetation...).

Pay attention patterns, convergences and deviations.

Double check.

Look for common elements and connections (materials, sources, original materials, change factors, predict scenarios).

3. Collate:

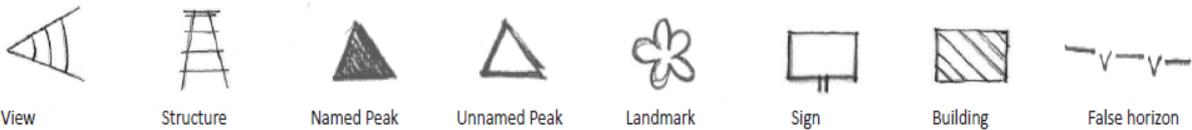
Pull it all together and using symbols/notation create a series of cue cards and quick sketch maps. Use these to look for further connections, patterns and relationships.

4. Compile:

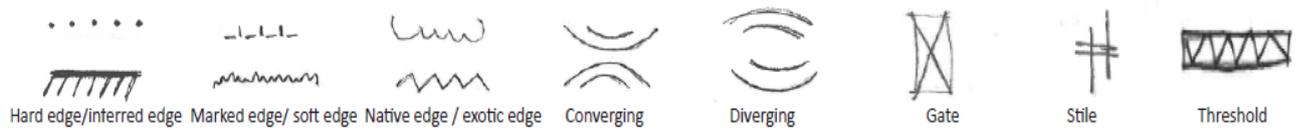
Narrow down possibilities until a feasible number of types is realised. There is no scientific way of formulating this – the number of types is based on observational data and constrained by future uses – range of types should convey diversity of sites observed, yet be equally manageable for field based work (aim for practical and memorable quantities).

Notation Guide – Diagramming Element (Visual/Material/Structural/Processual):

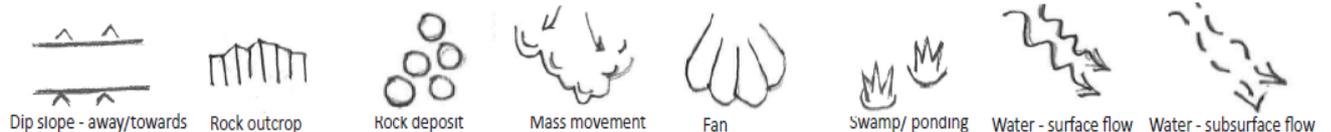
Visual



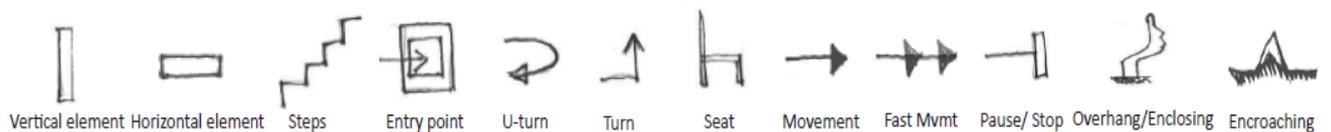
Typology



Morphologic



Kinetic/Movement



Collation of Survey Types/Elements: What to Record

Typological Element: Text descriptor

Title (Element Name)

- Topography
- Path form
- Enclosure/exposure
- Material type
- Dominant vegetation
- Land use
- Drainage/Surface condition
- Context/features
- Quick description (3-5 descriptive words)

Experiential Element: Recorded in Notational form

- Wind flow
- Shade
- Surface roughness
- Surface material
- Observed landform/structural feature(s) & sense of path containment/ ease of movement.
- Rapid sketch/diagrammatic plan

Example Survey Sheet:

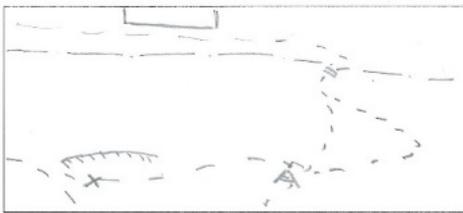
Field Survey:

Date: 10/11

Site Name/No: K1 Reference:

Locality Description:
Kennedy's Oval Reserve - FOOTBALL
Quarry Junction

Locality Sketches:



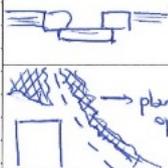
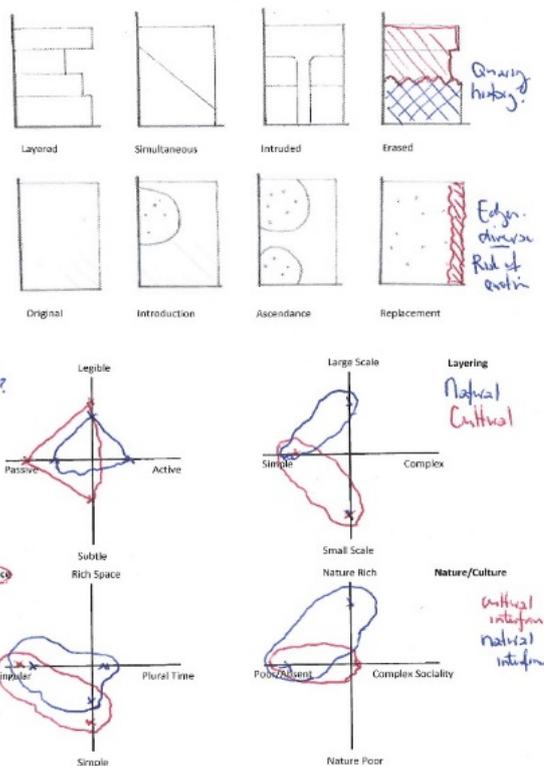
Description:

Feature (Formation): Track junction: Edge of stone wall in bank covered

Fabric (Texture/Structure): Fuchsia bank, fern - mosses, road, patches, bank path, but light track, solid, hard like asphalt

Matrix (Micro texture / Composition): Stone lined path, fern, moss, road, asphalt - locally quarried rock, hard like asphalt

Other Properties (Colour, strength, surfaces, form): Edge - brown + weathered, exposure on edge of bank, moss, fern, but light track, + base of wall of stone, nearby path on site.

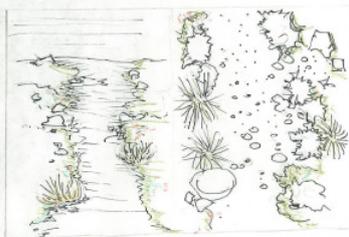




Collated Examples:

HILITOP/PEAK

FLAT
OPEN
WINDSWEPT/EXPLOD
ROUGH/SWAMP
MUD/HEAVY/TWIGG
FARMLAND/RESERVE
DRY
HIGH POINT/VIEWS

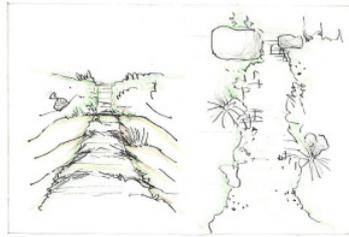
EMPTY SPACE - VOID | TOUCHABLE / UNTOUCHABLE PROSPECT



EXPLOD RIDGE

STEEP/INCLINED
NARROW
EXPLOD (STILL DOWN PROSPECT)
ROUGH/SWAMP/TWIGG
FARM/TWIGG
FARMLAND/RESERVE
DRY/FREE DRAINING
EDGE

FRAGILE | CLOSE TO SPAL | PROGRESSING



SADDLE/PASS

UNDULATING/EXPLOD
CONTRAST OPENING
ONE SIDE EXPLOD
GRASS/PROSPECT
GRASS/TWIGG/SWAMP EDGE
FARMLAND/PASTURED
DRY/FREE DRAINING
SADDLE/VALLEY HEADS

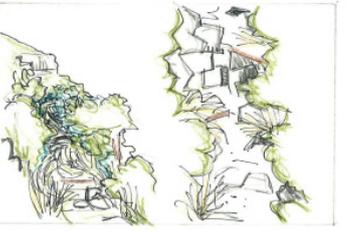
JOINING APEX



UPPER VALLEY HEAD

INCLINED
SIDE SLOPE
SHOCKED
ROUGH/UNDULANT
SWAMP/PROSPECT
FARMLAND/RESERVE
DAMP/SPRING/ONE
SPRING, ROCK OUTCROP

POWERS/RICH/LAYERS | COOL



RE/GEN SCRIBLAND

INCLINED
SLOPE
SEMI SHELTERED
ROUGH GRASS/ROUGH/TWIGG
SCRUBS - GRASS BEAM, PINE, MUD
FARM - RESERVE (COWHART)
DAMP IN FREES
OUTCROP, SOIL FACED

POTENTIAL/FUTURE (SCRUBS) / RUGH.



ROCKY OUTCROP

SHIP EDGE CLIFF
SHADY FEET (LOGS/PLANT)
VARIABLE - PROSPECTING - EXPLOD
MUD/LIGHTEN, ROCK/HEATHFIELD
COOL, SMOOTH, HARD, SLIPPERY
FARM/RESERVE/ROADSIDE
DAMP/DRY - MICROCLIMATE
SOLO ROCK, PROSPECT VIEWPOINT

ISOLATED/JUNTING | PROMINENT/PAVILION



PLATEAU SURFACE

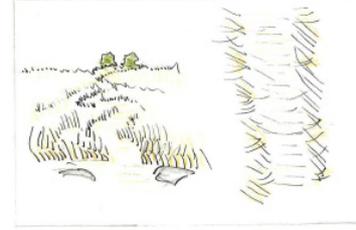
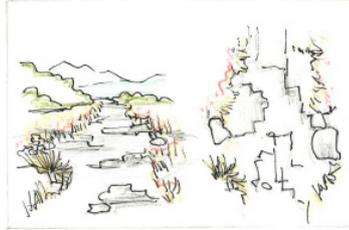
FLAT, LEVEL
OPEN, CLEAR
OPEN TO ELEMENTS
WORN, UNWEATHERED
GRAVEL, LOW SLOPES
FARM / RESERVE AREA
DPS / DAMP Pockets
OPENING

REST / SURPRISE / CHANGE / WIDENING

MEADOW

FLAT LEVEL
OPEN, CLEAR
OPEN TO ELEMENTS
SMOOTH, SLICK, PIFIED
GRAVEL, UNWEATHERED
FARM / RESERVE
DPS / WELL DRAINED
EXPANDING SURFACE / THRESHOLD

BIG SKES / OPENING / LIBERATING / EXPANSIVE



FAR TRACK

INCLINE, TERRACE
STEEP, EDGED
EXPOSED ON SIDE
WOOD, STONE, GRAVEL
PASTURE GRASS, THIN, SLIP
FARM
CROPPED WITH CHANNELS / REGION
TERRACE, BANK, TRACKED

BRAND / GENERAL / VEHICLES TRACKS

RIM / EDGE TRACK

VALLEY WALL, SCAFFOLD
STEEP, STEEP, WINDY
EXPOSED, FRAGILE
BANK, STONE, THICK STEPS
SLIP, SLICE, GRASS
RESERVE (PAST PASTURE / STEP)
DPS, FREE DRAINING, SLOTTED FOR
OUTLOOK, SLIP, INCLINE, DPS

VULNERABLE / VOID / GRAVITY / FRAMED / OUTLOOK



PLANTATION

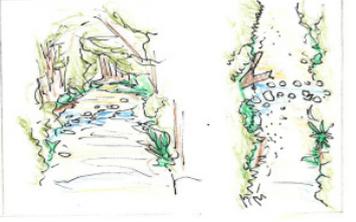
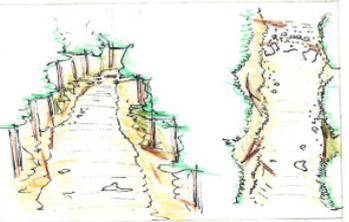
HILLIER VALLE
STEEP, LINEAR
SLOTTED, COVERED
LEAF, WOOD, SOIL
PINE / UNWEATHERED, WOODS
FOREST STRIPES / PRODUCE
SPOT / WINDY UNWEATHERED, ROAD
LEVEL / UNWEATHERED, FARM ON ROAD

UNWEATHERED, MONOTONOUS, MONOCULTURE

LOWLAND / VALLEY FOREST

FEAT / FOOTHILLS
TERRACE, COVERED, FARM
SHROUDED, COVERED
MUD, GRASS, CLAY, GRAVEL
2nd GEN BUSH, IMPROVED
RESERVE, FARM PLANT
DAMP, IMPROVED DRAINAGE
FOREST PLANNING, TIMBER SET / REGION

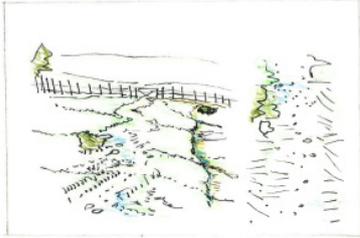
GREEN PALLETS / MIXED PLANT / CANOPY / CORRIDOR



FARM FIELD / FLAT

LEVEL TERRAIN, WELLY FLOE
 FLAT, FIELD, GRADED SECTION
 OPEN EXPOSED (SOME GRASSY-BEEN)
 PASTURE, GRASS, SOME SCRUB
 SMOOTH, EXPOSED SOIL, PUNGENT SOIL
 IMPEDED DRAINAGE / BANKING
 ANIMAL TRACKS, FENCE BOUND

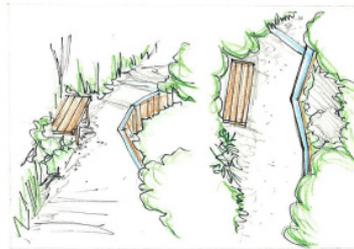
CONTAINED / HUMBLE / ARTIFICIAL / MAINTENANCE



PARK TRAIL

FLAT - GENTLE / MID MODULATING
 EDGED, GRADED, UTILITIES
 VARIABLE
 MAINTAINED, ARTIFICIAL / GRASSY
 NATIVE / EXOTIC, DIVERSE CLUSTERS
 PRIVATE / PUBLIC PARK (SOME RES)
 DRAINAGE, CHANNLED
 SEAT, VIEWS, WATER, SHELTER

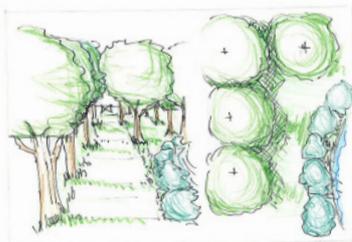
PROGRAMMED, PLANNED, ALTERED, BUSY



GROVE / GARDEN

FLAT VALLEY, EDGE
 ROWS, STRIPED
 COVERED, SHELTERED
 SMOOTH, EVEN, MAINTAINED
 NATIVE / EXOTIC / PRODUCTIVE
 PRIVATE LAND / RESID / COMMERCIAL
 FREE DRAINAGE / HIGH DRAINAGE
 PATTERN, PLANTING

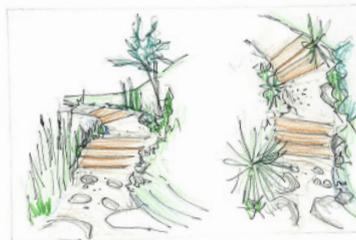
SYSTEMATIC, SELECTIVE, DELIBERATE



BOM / WETLAND

FLAT, CONCRETE
 BOWL, DAM, SWAMP
 OPEN, FRAMED
 MID, BUSH, REED, KAHLE, MUD
 SPONGY, SOFT, MUD + VEGETATION
 RESERVE, VALLEY, DUNE
 WET, IMPEDED DRAINAGE
 RICH FLORA + FAUNA, COLOR

ORGANIC / RICH / WET / LIFE SOURCE / CLEANSING



Appendix C

Critical Reflection & Review:

C1: Review – Walk Outcomes & Queries

C2: A Critical Walk

C1: Review- Walk Outcomes & Queries

This appendix provides a summary discussion of walking exercises and queries. These outcomes were subject to reflective review throughout the process of walking and in post-walk reflection.

Walking is a very subjective and personal tool for interrogating space; it is this very subjectivity that makes it valuable and informative as a research technique. Like Wylie, who uses “forms of narrative and descriptive writing as creative and critical means” (Wylie, 2006, p. 533), journal notes are used to frame and review walks (providing narrative and description) in addition to field notes and inventory development.

Meyer states how critical activity “represents a culture’s complex relationship to environment. This representation is manifest in physical form through the medium of landscape” (Meyer, in McAvin et. al., 1991, p. 157). Landscapes which aspire to hold and convey meaning require critique of content (form) and context (relationship to immediate surroundings and to its cultural and environmental milieu). Critique explores possibilities, used to refine and establish meaning in both content and context of design. Critique expands and enriches in language and form by making language precise and producing new ways to think and evaluate. Critical thinking agitates for change (Meyer, 1994) and for comprehensive understanding.

This implies that seeing and knowing landscape requires more than a surface view. It requires comprehension of what is seen, how it is seen and what is implied and it requires an understanding of site context and content, of reading and editing and of knowing what should be on site.

Meyer’s strategy of critically situating theory and site, her reordering of landscape discourse within an expanded field and her resultant approach to seeing and knowing landscape through reading and editing is central to this research. To Meyer, the discipline requires that the designer knows site and materials and engages critically with what is theorised and found, building a landscape that actively critiques and creates.

This implies that design outcomes and ideas must also be grounded in theory and situated in landscape. This review uses critical thinking to query exercises and to ground thinking in potential application. The ideas generated in review are recorded in a design journal as reflective writing (writing as a way of review). Reflection is intended to continue to open up thinking and frameworks, to provide additional theoretical framing and to act as a prompt future research.

Here critique is used in self-review and to test and confirm ideas through questioning. Self-review confirms ideas and questions generate further thinking. Critical review is not intended to form fixed solutions but aims to explore design thinking from other viewpoints, ground concepts against applications and expose more possibilities. A range of questions were raised during participation and review of walking studies, these are summarised in the following table:

		<i>Questions Provoked by Walk Studies</i>
SEEING	<i>Sighting Walk 1</i>	<i>How are edge conditions observed from the path? How are cultural elements and human influences seen across a site or path? How might conditions be explored further and mapped? What is the role of familiarity in seeing and knowing?</i>
	<i>Sighting Walk 2</i>	<i>Does our representation of landscape hinder our knowing? Can one image tell many stories?</i>
	<i>Sighting Walk 3</i>	<i>How much does the walker see compared to what they instinctively react to subconsciously? How important is my view?</i>
BEING	<i>Sensing Walk 1</i>	<i>Can such walking result in a richness of knowing that other methods of observation might not allow? What happens when the walker allows landscape to move and prompt, following the path as a guide? Can I, in walking I experience others constructs?</i>
	<i>Sensing Walk 2</i>	<i>What happens when we deliberately alter our senses, shift the balance and focus on one particular sense for observing site?</i>
	<i>Sensing Walk 3</i>	<i>How does awareness of a reciprocal relationship improve receiving and reading? How is my relationship reflected in a record of my time/walk?</i>
MOVING	<i>Material Walk 1</i>	<i>How many times does the walker need to look/touch/move through to know? Can looking and relooking multiple times build possibilities and create potential scenarios for making?</i>
	<i>Material Walk 2</i>	<i>What could be possible if it is the walkers' movements and intent or their required time concerns that drove track design? How do path/materials, modes of walking and looking, as experienced by the walker, reveal the temporal? Can walking and its records be diagnostic?</i>
	<i>Material Walk 3</i>	<i>Can we use design and representation to not only inform others of time, but to explore time and to reveal new ways of seeing landscape?</i>
MAKING	<i>Scored Walk 1</i>	<i>The altering of the path forms new relationships and creates a juxtaposition of time, space and perceptions. In changing the rhythm of the path, what happens to the walkers and their response?</i>
	<i>Scored Walk 2</i>	<i>How can the rhythm and flow of materials can be used to conducting movement and interaction?</i>
	<i>Scored Walk 3</i>	<i>How do we translate and represent score through built form and participation?</i>

Questions raised during studies. Reflective review is used to generate questions regarding walk outcomes, findings and explorations. These may then be used to prompt further studies.

The following text expands further the questions asked during studies and draws from theory in an expanded reflection.

Reflecting on Walking and Landscape Architecture: Knowing Landscape through Paths

Landscape elements originate in a human/social context where viewing and knowing transfer onto the ground and form a deep and complex layering of material and immaterial, static and dynamic, seen and unseen. To explore and work within this complexity and understand site in richer ways, Braae and Diedrich (2012) promote a transformative process rather than a replacement orientated designing and account for

all layers of existing and potential by considering the landscape a state of flux (the in-between or middle). Transformation involves 'the changing of states which relate to one another', the present now but also the past and the future: landscape is fluid and layered, site is read and edited but not always appropriated.

This influences how the path is positioned and designed: engaging with landscape and path-making is not necessarily heavy on the ground. Some walks and some interventions are light in tread and reflect a learning and interaction with 'site as it is'. Sensing walks focus on listening to landscape's voice, rather than taking our own path. Landscape is given voice and the human footprint is only light. Any works which result from sensing exercises and aim to express what is found in such interactions should attempt to harmonise with site.

The collection of walks show how paths have potential for many forms and interactions – what is given priority is subject to the designer and designed decision.

- *If the path, like landscape and site, may assume or be assigned many forms how are these determined? If the designers final conceptualisation of site and path is dependent on reading and editing how do we read and edit landscape? What are the objects or things that need to be accounted for in observations?*

Walking and Movement as a Way of Knowing and Designing

How we understand landscape informs our treatment of site – what we observe and ultimately how we design.

It is not enough to look or read a description or map. 'Words cannot substitute for landscape form and space' (Meyer, in McAvin et. al., 1991, p.158). Meyer argues that while landscape can be verbally described, it is in seeing and going into actual spaces and exploring that landscape is made known and theories are grounded. Landscape is situational and contextual: it is being in landscape, in walking and contacting the land that connection exists. Landscape tools must also reflect this.

Jacks (2006) states how walking provides a tool for knowing and positioning ourselves. Walking is a tool for discovery, for uncovering and map making. Braae and Diedrich (2012, p. 25) also use the term "reading", the content of which reveals a designers' general site thinking, that is, "how they construe their sites". Reading informs our interpretation, but is dependent on our ability to read and comprehend the language presented (Spirn, 1998). The walks

presented in this research open up several further questions for future work:

- *In walking a path, can its dimensions and spatiality be truly determined? If types of knowing require intuition and a heightened sense of awareness, how are these states initiated and enabled? How do we see and understand relationships between the walker and their path? If paths are not just physical entities to be measured and described, how might they be known in other ways and how might our use of them inform us?*

Grounding and Inscribing Relationship – Time and Movement:

Sighting and sensing walks (Chapters 2 & 3) confirm how the viewing and conceptualisation of landscape has implications on the understanding of that landscape which effects any subsequent editing and designing of that landscape (Meyer, 1994a; Spirn, 1997).

Meyer (2009) writes of how experiencing landscape influences our knowing and establishes an emotional connection. A slow, considered walking allows absorption and time to process and question. In her writing Meyer reviews her walking experience, exploring the seen and the felt and the results that are generated through her walking. Meyer questions the role of walking at its influence on the walker's consideration of landscape in asking whether "the pleasure and desire evoked through the experience of a designed landscape increase one's concern for the environment?" (Meyer, 2009, p. 23)

- *As designers, can our knowledge of movement and interaction within a particular landscape, and our awareness of the potential narrative generated by the path, provoke others and influence their behaviour?*

Material and temporal walks (Chapters 4 & 5) also show how the negotiation of space has influence on how that space is seen, considered, used and made. These walks provide for the intent of the walker and give ideas as to how site might be designed to enhance experiences along the path. The seeing of landscape and our understanding of landscape condition influence the things we insert, onto or in with landscape and the way we think about that spaces' future. This consideration extends into objects found 'on site' or 'adjacent to site' or those that we intend to designing into landscape (Meyer, 1994b).

- Seeing, knowing, moving through or negotiating a landscape alters more than the making of the landscape; the comprehension and awareness of landscape influences more than the design form and style of a potential site since they influence the future engagement

of others with site. If there are many ways to see, to know and to move, are there many ways to make and communicate? Can walking and the engagement of others with and in site, and their use of place also make? Is this evident in track typology, scores and other imagery?

Active & Responsive Knowing and Recording: An Approach from Halprin

Halprin considered others in his designing. Landscape is something shared and something responsive. Like the landscape which it sits, the path is also active, reciprocal and contingent.

Halprin's approach to exploring and designing is process focused, active and engaged. Design work is a responsive, iterative and adaptive knowing; the materials and processes discovered in site investigation are not static objects to be used, rather they are a resource to interact and collaborate with and understanding of spaces and flows involves continual feedback (Halprin, 1970). The inventory of a landscape (or a path) is not a catalogue of products waiting for the designer's intervention, they are not fixed in a set time or pattern. For this reason Halprin describes scores as being fundamental to his research and design process. The development of score provides a way of formulating resource, prompts the seeing of site materials and process, and directs the designer in how to move through a site (Hester, Halprin, & Mullen, 1999). A score, like similar forms of notation can help the designer to explore perspectives and relationships. Ingold (2014) talks of how movement "is not what a body does but what it is" (p. 53). Following this thread of logic, the body of the walker does not just act on or along the path but becomes part of the experience. The score is a record not of doing but being and responding.

- *How can the designer capture this movement, and how can the score inform and engage the exploration of conditioning and response where the score shows a state of being with the path?*

Design as Influencing practice

Abbott in his 2008 thesis highlights a distinction between "design which might open up an alternate practice of landscape, and the capacity for the landscape architect to design specific practices of landscape" (Abbott, 2008, p.222). Through our walking we come to understand and know a wider system and, as Abbott (2008) describes, design can enhance or detract from this relationship. Abbott writes of how 'certain forms of track design can result in an abstract and separate relationship. Rather than the walker experiencing part of an integrated system, one which is part of the local landscape around it, the walker is separated

from landscape and from an enriched sense of knowing. The landscape is watched but not kinaesthetically experienced. It is subject to a gaze and our movement and interaction becomes passive.

In engaging with landscape through paths the designer-observer is presented with opportunity. Working from a temporal and ephemeral viewpoint offers challenges:

- *How does the designer represent and recreate within this context? How can an understanding of pathways and their specific situation help to ground the experience and activate the walker/reader?*
- *How might paths be viewed, recorded and become known if they are seen as belonging to an expanded field and how might the landscape of the path be defined?*
- *If paths might be known by specific lenses and located in relative fields, how might particular spaces appear? When landscape is considered as subject, as articulated (having voice and agency) then does the path, its reading and the read/designers response merge and layer into the landscape narrative? If the ground is seen as thick, rich and dynamic, can the path be considered open, and equally ambiguous?*
- *What does it mean to observe landscape and paths from within a critical frame, where landscape is a middle ground, seen within an expanded field? How does strategy that opens concepts of landscape and an approach which questions the accuracy and orientation of discourse inform the investigative process?*

A Final Note:

Meyer (in McAvin et. al., 1991) argues for a 'landscape architecture that is critically enquiring through design practice'. This means asking questions and practically exploring not just theory but also site and using design as a tool for expanding knowledge. 'Landscape architecture is not synonymous with problem solving, or even creative problem solving'. It is not equal to 'the art – or the science if preferred – of arranging land, together with the spaces and objects upon it... Rather landscape architectural design can be a critical activity... This representation is manifest in physical form through the medium of landscape' (Meyer, in McAvin et. al., 1991). Landscape architecture finds solutions, it queries and problem solves, it designs and builds spaces creatively but it also looks deeper.

The questions and thoughts reflected here make room for future studies and for potential applied experiments. How may the creating and positioning of paths be explored in physical form on site?

This is explored in the following section: Appendix C2 (A Critical Walk).

C2: A Critical Walk

The walking studies undertaken as part of this research reveal a rich resource that is able to be accessed when walking. This is particularly apparent when reviewing journal notes and reflecting on exercises. The following table contains a range of outcomes generated in walking exercises.

<i>Walk Series</i>	<i>Insights found in exercises</i>	<i>Inventory formed during walks</i>	<i>Tools suggested by studies</i>
<i>SEEING</i>	<i>Sighting Walk 1</i>	Mode of looking style and form of walking Walk speed, timing and intent Taking time to look	Horizon lines, surfaces, & layers Transect line (material & temporal inventory)
	<i>Sighting Walk 2</i>	Sections reveal depth See, beyond one story, one surface	Thick sections
	<i>Sighting Walk 3</i>	Layers of seeing Focal point. Relooking	Active surfaces; hidden surfaces Multiple visual objectives Process diagrams
<i>BEING</i>	<i>Sensing Walk 1</i>	Thinking follows stimuli activated focus internal and external prompts	Mind map; Record of sensed features Pattern sketches
	<i>Sensing Walk 2</i>	Seeing beyond self Shared consciousness	Direct Observations Record of Diversions Walking modes
	<i>Sensing Walk 3</i>	Isolating senses path as a composite Time and contact enable and control knowing.	Sensory record Materials inventory Single sense vs. multiple sense records Isolating/tuning in
<i>MOVING</i>	<i>Material Walk 1</i>	Walking reveals flux Interchange between material and immaterial. Active space in-between	Type sections and sites Track edges & types spatial form and layout
	<i>Material Walk 2</i>	Movement through spaces, movement of time Reactions & moments in time.	Track scores spatial form and sequencing Invented/Operational typologies
	<i>Material Walk 3</i>	Walk line as a record of walk modes and intent interface of walker and path Identifying limits which stretch or restrict the path. The path and walker are not self-determining but in relationship	Timeline Material typologies Experiential/sensory record
<i>MAKING</i>	<i>Temporal Walk 1</i>	User values as a guide response to material and experiential qualities, Path conditions the walker quality of time is relative to external and internal drivers.	Altered timelines Schematic sketches and models of temporal landscape
	<i>Temporal Walk 2</i>	Place can inspire score (site materials and process rhythms). Rhythms may alter the made track	Scores Rhythms Materials
	<i>Temporal Walk 3</i>	Sequencing and consideration of time mediates adjacencies, alignments and fluid relationships	Theoretical/experimental walk line Score developed using base maps, Externally driven score and site observation.

Summary Table of Outcomes. This table highlights key insights found while walking, lists materials and resources utilised during exercises, and provides an overview of the tools (processes and prompts for completing investigations) as developed in this research.

To walk, to record, to make:

During the course of research a large design project was undertaken by the researcher. While the design work itself was not completed for any formal assessment nor was it completed directly as part of thesis research, the task allowed for the opportunity to explore walking in a design studio context. During the design study and concept development stages, design journal notes were recorded and a series of design probes/site explorations undertaken. These records and their subsequent review provided much insight into the usefulness of walking as a design tool.

What follows is a summative discussion which is based on this process of reflection. Indented sections of text are sourced direct from the walker-researcher's notes (design journal) and are largely unedited.

The Challenge of Communication & Application

Walking provided an ideal and informative tool for finding site and coming to know place. This aspect is not covered here, it is already thoroughly address. What is principally discussed and reflected upon is communication and legibility.

As already noted (future research Chapter 7, review of walks C1), one of the potential challenges for this form of research is its translation and use by others. As with any subjective and inherent fluid material, how do you ensure that the intended message is heard?

As reflected in journal notes:

The problem is not with finding site or of coming to know landscape, the problem is communicating that idea to others, creating a representation that others can also read, as if on the path themselves. To see the path as more than a line on a map.

The path is not a line, it is a dynamic, experiential field BUT: people have a habit of reading lines on maps as just that. While can be active and engaging, I suspect the average reader reverts back to default mode: in this context the path is only a line.

An active line, a true pathway requires active communication:
depth,
Layering
Mystery
Progression
communication of the temporal
a successive and compelling format (media and mode) of
telling.

The required format does not do the knowledge of site or the tool itself (walking) justice.

Mode of Seeing/ Field of View:

In reviewing what was actually observed on site and how it was translated, it became evident that much of the richness gained from the walk was brought about by the multi-dimensional fields of view – the landscape full of colour, movement, scents, sounds, height. The vertical element was overwhelmingly influential – it impacts sense of enclosure (in the bush) or raises exposure when high up on an outcrop. It is captured in the steepness of the track, the tall, thin trees, and the view through a break in the bush. An aerial view does not do this justice nor does it capture true layering and surfaces, or the sense of progression felt when immersed and face to face with the volume and tangible contact points of landscape.

The following figure contains a field journal sketch showing fields of view, many of the sketches and diagrams used to record walks convey this verticality and volume. Here plans and views are found side by side:

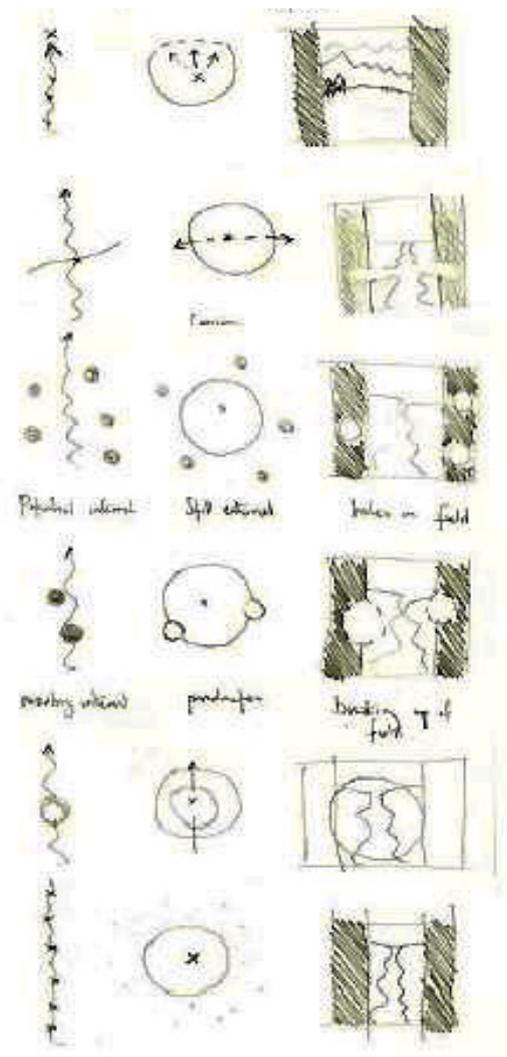
FIELDS OF VIEW:

The image on the left is a plan view of motion experienced along a piece of track. The central column shows a diagram of an idea (projecting a view point) and the right column shows a quick vignette of what that view might look like.

From Top:

- Opening field*
- Intersection/crossing*
- External glimpses (small holes)*
- Punctuation*
- Narrowing gap*
- Closing field*

The most compelling element is the vertical view, when comparing a plan and a sketch or perspective, it is the sketch which attracts and appeals. On a plan, I can see it all and it overwhelms me, when revealed in part I am intrigued.



Is there another way of communicating paths that avoid or mitigates the plan dominated view?

Submission requirements: The same set of design journal notes observe that the submission requirements for the project were a limiting/controlling factor in this case.

It is true that certain requirements for plans require certain levels of communication and legibility (i.e. technical details/construction drawings) often even concept drawings fall back into a default plan mode.

Is this true of all projects? What other ways are there of communicating ideas?

How else can we innovate our communicating – beyond the plan?

Materiality: The materials of site are also influential in changing the walk. Material convey scale, temperature, softness, volume. Can a change of materials help communication? More modelling? Film? Lighting? Where is the boundary? How do you convey materiality, particularly succession through paper?

If materials and the spaces they inhabit can be read as products of time, if we can see time and process acting and morphing we can understand change. We can feel part of it – when it is tangibly all around us. The present material represents a moment captured from within a longer timeframe. It is an interface.

This interface was distinctly lacking when the walk was taken out of the field and placed into a formal setting. One option suggested by the walks was to send people into the field – to provide an agenda or itinerary of walking. This is viable and entirely possible but not always practical or achievable.

If materials can be placed within a timescape: seen as part of a flow, where time and pressure is considered a critical dimension how is time conveyed I design communication?

This question kept repeating throughout the notes. Materials of the path are also subject to time and pressure (or outside influence). The tread of a foot, the wash of a heavy rainfall, the baking of soil sitting in the hot sun of a long summer. The wider landscape is part of the path, the two are not separate.

Can the path be directly narrated? Rather than picture the path through a plan or image, the designer becomes orator?
Can the landscape architect simply disseminate ideas through conference or seminar or field tour?

When we consider the process of viewing site, of exploring path and interrogating the path we need to explore from multiple angles. The path acts as a driver enabling us to see from many angles – forward, back, and side to side. Both site exploration and design process follows a trajectory through time but its substance and sources are multiple, plural. Like Deleuze and Guattari’s “body without organs” and concept of a ‘rhizome’, the path and its meandering and active edges also supplants the ‘root-tree’ thinking model (Deleuze & Guattari, 2004). There is no one source, no one model, and no single strand.

To hear one voice limits the conservation, no matter how educated or smooth the voice – I am wary of the one word.

In making pathways and applying observations and design thinking to place there are several methods. One method is to apply a text to site. We can use set narrative to make spaces, and to prompt conceptual thinking.

One method for this is to take a known text, a set narrative and examining it and apply it to a place. Making site conform to a given story using words or metaphoric representation. Here we must question the use of words. Words can be interpreted in many ways or they can be taken literally. For Italo Calvino, his readers are invited into the story, encouraged to move beyond passive reading, into a world where words, ideas and opinions meld and are lost in the story-telling (Washington, in Calvino, 1993).

To Colin McCahon words gave a depth image could not obtain. For McCahon, “image was too emotive, too direct. Words still gave, still allowed room for interpretative requirements but allowed readers time to focus between the lines” (Brown, 1993). Whether using words or applying narrative to make the path, a clear intent is the driver behind any representation and making. A major consideration of making is audience.

This is also valid but people are individuals, and the greatest experiences come from personal discoveries. It is in **exploring** landscape and **experiencing** the walk ideas of site and design intervention germinate.

An object here, a surface or form here. The site is built from the path up, not driven by an overarching plan.

Perhaps we can learn of others, and then go out exploring. Recalling Reda's ragged patterns and unified wholes (Reda in Crang, 2010) can I learn a rhythm? Can I gain a little from you, then go out, I find my own, learn a little, come back; learn some more... see a little, hear a little... find a new rhythm?

Place are made through movement, trial, touch, repetition. Notation works this way – present a pattern, learn the pattern, go out a use it and be empowered with a tool to aid, not distract or confuse.

Like using scores (refer to temporal walks) the system first requires comprehension and education supported by **a willingness to try new things.**

When does a score or plan become another metaphor heavy narrative?

If the reader struggle to interpret and requires metaphor, when does the metaphor or image projected become more powerful than the original material? Every form of representation carries an interpretation. A key question to ask if using story or metaphor to design is to be aware of whether stories and other forms of representation (diagrams, scores, drawings) lose their potential impact if the audience is not used to moving beyond the literal? Or does evocative, multi-layered representation challenge the audience and push further. How might we aid interpretation? Rather than neutralising, watering down image, can we expand and strengthen the view?

The path is 'a porous identity (subject) inseparable from the world, engaged and transformed by an on-going active exchange with it' (Deleuze & Guattari, 2004). We need to stimulate engagement with real materials.

This does not mean imagination and provocation cannot occur.

Design approaches can shape materials and play with morphology to create new forms, or be focussed solely on problem solving and functional response. Design however must become more than surface alteration.

To reiterate Meyer (1994, 2004, 2009), and others (Thayer, Corner, Spirn) – designers have a responsibility: to invoke change. To challenge and change the reader, to help people read. This return to format: An ideal studio challenge – to design site and process without a plan? What would result?

In exploring how walking informs design I return to how walking can inform process and how it might alter how we communicate. This is an area that would benefit from study. It poses potential for studio exploration and for a wider audience.

There is a richness that comes from walking, a local and a global landscape that needs inspiration and positive change. How do we truly reveal richness but by walking and other forms of active engagement? To find subtleness and discover what is real and not on a screen, or in another's words. This is the challenge of walking.

A final note: Walking in a Culturally (Un)familiar Scene:

It is October and I am walking the hills above the Lyttelton Harbour. It is a misty morning – the sun has yet to penetrate the mist that rises off the sea. Everything is grey, dull but for the wet sheen over the paths' surfaces – even the new spring grass has taken on a melancholic hue. That's when it hits me... halfway up the hill where the path edges around a low shoulder in the scrub. A subtle breeze and coconut? For all the chill of this countryside I am suddenly in the warm Pacific sun again. Warm sun, lush vegetation. One scent has pulled me miles from where I stand. I walk on, and then I see the source. A stand of yellow against a grassy backdrop. Gorse. And this sparks a question in my mind. How can something so enticing, so beautiful also be so despised. Here in New Zealand, and in my subconscious, this plant is reviled. Gorse – that plant associated with wasteland, with years of labour and lost farmland. Yet here it is and in this place it is a treasure. Deliberately left alone, protected, cared for - its presence welcome. How can one plant evoke so many associations and contrasting effects? The answer is also here, in this place, in this landscape. It is its context, its situation. Here, my eyes see one thing and I know that it has particular, local meaning. I also know that in another place, it has another meaning. So place and our awareness of the particular informs us. As I walk on, I wonder what this place will become, when it is regenerated and the gorse has done its 'nursery-duty'. I wonder what other discoveries I will make today, what other connections this place will provoke in me. As I walk this well-trodden path I wonder who I will meet and what their thoughts would be? This path into the hills has brought me a gift, unexpected yet delightful and in this it has expanded my

experiences and my knowing. On this path in the mist, I see a little more clearly than I did before.

One encounter with the real can change everything. The walk finds the real. The challenge is to communicate it.

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