WALKING AS INQUIRY

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1 ABSTRACT
Walking intensifies people-environment relationships, where traversing landscape elicits a deepening of connections between walker and landscape. This paper examines the role of walking in exploring in what is seen and how it is seen, and tests alternative ways of knowing (and coming to know) landscape through the use of various observational tools and assessment. Walking is the primary mode of acquisition, with design operations (sketching/diagramming/critique) the key tools for interpretation and exploration. Iterative walking and diagramming combine with temporal and experiential mapping to provide new translations of known spaces. The research finds that while objective methods of looking at landscape inform what is made known, design exercises enable new and enriched ways of understanding spaces, and of finding diverse materials, processes and meanings within landscape.

1.1 Keywords  
Walking as experiencing, landscape perceptions, interrogation through walking and design.
2 INTRODUCTION

This article explores the potential of walking as a design informant and as a tool for contextualised understanding of site. Extending past surificial visualisation, walking-as-design entangles the walker in landscape and navigates a way forward. Traditional methods of site observation focus on understanding how a landscape is physical formed and what materials, events or actions exist on site (as recordable inventory data). Emphasis is placed on observing, describing and classifying the presence, properties and development of materials. Landscape change may be recorded through the identification of physical or cultural drivers as events and activities altered the landscape composition (Howett 1998, Schrott 2013). Landscape forms can be captured in detail drawings. This research investigates how walking has the capacity to open up landscape, to question what is seen and what might be known.

Walking permeates the field of landscape architecture: as a performance prompted in the landscape (Ingold 2000, 2004); and as a form afforded by the paths we both construct and/or generate (Carter 1996, Abbott 2013, Rae 2015). Tapping into the rich experiential, sensual and physical qualities of walking is an enduring area of study for the discipline (Jackson 1994, Jacks 2004, 2006, 2007). However, while construction drawings might describe the structure of a path, such representations fall short in expressing the potency of path and the practices of walking, ambling, strolling, sauntering, hiking, tramping, strolling, trekking, wandering, roaming, trudging and so on (Halprin 1965, Thiel 1995).

Walking can be used to identify and observe the relationship between the walker and landscape and to provide a narrative beyond material observation. Landscape is more than physical. More than a collection of things seen, it is physical and cultural, material and articulated, and can be seen both objectively and subjectively. Walking changes perspectives, both literally as the walker moves through site, and perceptually as the walker dwells in place. Built of tangible experience and contact with ground, landscape becomes known in immersive and complex ways. Social anthropologist Tim Ingold describes how it is through movement that we come to be and to know. Through capturing the walk, a body of work develops which allows the walker to understand how "movement is knowing" (Ingold 2011: 160). Walking apprehends landscape from a particular point of view and allows this view to be altered as movement progresses.

Catherine Dee and Rikva Fine discuss the value inherent in a holistic and changing set of viewpoints. In their 2005 article, the landscape architects reveal the role of the visual and the use of image and critique as a disruptor of what is assumed to be known in landscape. “The viewer moves between whole and parts, successive interpretations necessitating a fragmental way of thinking” (Dee and Fine 2005: 81). Walks can be used in an identical fashion, with the walker creating abstracted images and maps subject to fragmented and disruptive interpretation.

Walk records are image rich, design generated explorations that provide a forum where the seemingly immutable known landscape is able to be interrogated and translated into new understanding. Designing becomes part of the walking and questions further what is seen, what might be seen and what might become known through visualising a walk.

Walking is iterative and generative. Each walk reveals new things: changes in a place, across a season, over a day, in a minute. Experiential mapping provides a way of capturing change and interaction, each walk generating a unique temporal and material record. Iterative walking and diagramming combine with temporal and experiential mapping to provide new translations of known spaces. While objective methods of looking at landscape inform what is made known, design exercises enable new and enriched ways of understanding spaces, and of finding diverse materials, processes and meanings.

3 RESEARCH APPROACH

In a diverse and materially complex landscape, how might we make sense of materials and how might site be structured? How do we crystallise the path? Landscape architecture is shaped by the ability of its protagonists to observe and respond to what is encountered. Walking forms a strategy for interrogation. This research uses walking to question the completeness of a view constructed purely of objective data and explores the role of the subjective in informing landscape discovery. Through immersion and deeper exploration of particular spaces landscape become critically known. Echoing the work of Dee and Fine (2005) this research seeks to explore the potential of a critical visual method using both image making and adaption. Walking experiments and image-making are used to interrogate landscape readings and develop new ways of seeing landscape. Design operations (drawing and diagramming tools) make the discoveries tangible and obtainable to others.
These experiments and images were produced following a period of walking inquiry (undertaken as part of MLA thesis research). In a series of walking-based explorations, the walker sought to discover how landscape might become known in unique ways through a series of solo and collaborative walks. Exercises were completed in a successive process, as a series of alternating steps that mirror in written form Ingold’s directive for finding one’s way where “we know as we go not before we go” (Ingold 2000: 230).

In this study, each walk is connected through their location within one area, Banks Peninsula, New Zealand (Figure 1). The peninsula landscape is easily recognizable by its distinctive forms and its prominent position sitting tall, astride the seaward edge of the Canterbury Plains. Isolated and rugged, the peninsula is criss-crossed with a network of farm tracks and hill trails stretching from sea cliff to summit.

Figure 1. Banks Peninsula key locations. Image by author (Jess Rae).

Walking is adopted as an investigative tool which reveals site consistencies, connectivities and particularities. The walks utilise a broad range of observational techniques and field analysis methods, which extend from traditional mapping techniques through to more phenomenological explorations. The two main techniques for acquiring data are explained in more detail in a subsequent methodology section (see sections 4.1 and 4.2).

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.

Walking was used to record data about a particular landscape, the path travelled and the walker themselves. In using walking as a research tool it becomes apparent that it is impossible to separate walker from the path. The walker’s self becomes expressed in the research record. Methods, processes and habits
are ingrained in the walker and blend into the experiences of the walks. Walk notes reflect a precipitation of self upon landscape and landscape upon self.

This relational way of understanding is adapted and mined in a design directed approach. Exploring both the process of data recording and sequencing, experiential encounters are extracted and proposed. The product is a series of temporal cartographies and typologies, lines of research that question and reframe the walker-observer relationship.

4 RESEARCH METHODS

The first step of interrogation involves developing a series of walk records: descriptive sketches, notes, maps and diagrams. The next step is more critical and reflective. To explore interpretations, sketches are taken back to studio and subject to investigation through critique and design. Questions explored a range of aspects e.g. what particular structures were drawn and why? What was the focus and why? What scale/proximity was the walker fixated on and why? What materials were important? What did others sketch?

Discussions provoke questions over the importance of physical structures (site tectonics) or microclimates, they draw attention to minute details and seemingly invisible features. They question how reactions might change if another route was taken or a different scale adopted.

4.1 Walking Experiments (walking-as-design)

Images, whether those directly developed from the field or those later modified in design studio, are a rich source of information. Exploratory walks produce records which are primarily captured using hand rendering and critical observation (in field or in studio review). Photography and GPS are used during walks to record a broad, supplementary view of site and provide an instantaneous record of a scene and location, with additional software used for image processing and research. Drawing is deliberately chosen as the key tool to explore and represent the walks.

Walking develops a knowledge of things in relation to other things (Ingold, 2011). This knowledge is captured and interpreted through a collection of detailed ‘walk lines’ or typologies. Through tracing walk routes and observations, a body of drawings, diagrams and scores is built. This catalogue of experiences and encounters reflects the materials and spaces from within a context of movement and time. This is further developed through image-making and analysis. The act of sketching allows time for focusing in and absorbing further, and the sketch itself provides a subject for analysis (Dee and Fine, 2005). Sketching allows elements to be explored and defined through the physical creation of the image. The reading of the image is fluid and partially ambiguous.

4.2 Critique, Sketching, Design

While the walks apprehend landscape from a walker’s point of view, they need translating into a legible image or story others can comprehend. Abstracted images and maps are subject to viewer interpretation. They require review as part of a critical process which questions the value and significance of materials observed and the things recorded. Opening up maps to interpretation in an active reading is a valuable source of insight into landscape.

Insights developed in studio critique suggest further ways of walking and reading, seek to enrich what is already known, and signify a shift in interrogation towards a dynamic, narrative-based inventory where material interaction and temporality is central. A typology of tracks is developed with a storyboard of experienced materials and spaces created through compiling maps and information, comparing notes and contrasting records.

4.3 Developing Typologies

This section provides a description of design tools and process used to extract and condense what might be discovered of landscape through walking, into a framework for possible application. Table 1 (over page) provides a summary of the key stages of the wider process involved in walking as inquiry and can be used to develop a program of designerly walking.
Table 1. Design as walking – A Process for Walking as Inquiry.

<table>
<thead>
<tr>
<th>Walking Explorations: Key Processes/Activities</th>
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<tr>
<td><strong>Step</strong></td>
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<td>Stage 1: Building a Typology of Materials</td>
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<td>Stage 2: Typing Operations</td>
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<td>Step 4.</td>
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<td>Step 6.</td>
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<td>Stage 3: Recording the Temporal as Experienced in a Walk</td>
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<td>Step 7.</td>
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<td>Step 9.</td>
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Data was recorded using standard visual survey methods (looking, noting, image collection/development, walk notes/journaling). Each record focused on developing landscape types, each type relating to a core landform and characterised by topographical and morphological features. 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 set of types may be found along one path in a sketch series which alternately represents and evokes a series of responses generated by the walk.

Each walk seeks to record a set continual series of material data: types which when combined in a sequence detail a longer length of path (a walk line). Once a walk record or linear sequence is developed,
it can be reviewed in a second stage of review. Table 2 summarises the key features that might be identified during field work (active walking) and briefly outlines how these may be reflected upon.

**Table 2. Key features to identify when developing typologies.**

<table>
<thead>
<tr>
<th>Material Typologies – Key Field Notes</th>
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<tr>
<td><strong>Base Survey (Primary prompts for feature identification/record)</strong></td>
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<tr>
<td>Record features using mapping, journaling, sketching</td>
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<tr>
<td>Material Palettes (visual description /material spectrum)</td>
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<td>Material properties (quality/ character/ type/size of materials)</td>
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<tr>
<td>Spatial qualities (spatial form/dimensions of key forms)</td>
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<tr>
<td>Landmarks [Natural and Cultural]</td>
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<tr>
<td>Vegetation/Colour/Substances</td>
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<tr>
<td><strong>First Analysis (Review walk notes/outcomes)</strong></td>
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<tr>
<td>Compare, contrast, collate</td>
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<tr>
<td>Compare and contrast observations</td>
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<tr>
<td>Sketch and explore interpretations/ideas</td>
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<tr>
<td>Overlay types/materials/forms</td>
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<tr>
<td><strong>Summarise Findings</strong></td>
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<tr>
<td>Describe, review, rescore</td>
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<tr>
<td>Write up summary notes</td>
</tr>
<tr>
<td>Key elements/features</td>
</tr>
<tr>
<td>Spatial layout/forms</td>
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<tr>
<td>Processes/Flows</td>
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The sequence of walks builds on observational methods from a purely physical set of observations through to the development of a more haptic approach to observing, and the exploration of movement and travel time. Other experiential qualities can also be mapped (responses to temperature change, walker comfort, points of interest, reasons for delay and distraction).

Walk studies were primarily formulated and undertaken as solo exercises. However, at times, group walks were used to stimulate discussion and to critique thinking.

Group walks were either participant led (where each walker chooses a route/path based on their own perceptions or capabilities) or walks were guided (walkers were given prompts to move using cue cards, maps, action triggers or verbal prompts). A supplementary form of observation was also recorded while collecting data, namely that of walker watching (observing other walkers encountered on a path from a passive or distal point).

5 **DISCOVERING WALKING: RESEARCH FINDINGS**

Walking exercises produced a vast array of records and experiences. In the beginning, each walk produced a unique type. Each type was represented in a diagrammatic vignette with a set of specific schematic and descriptive notation outlining materials and temporal properties. Each vignette represents a measure of a path, with a longer section of track being represented by multiple sketched sections or a walk line. When formulating each type elements are marked selectively. Figure 2 (over page) contains a sample of the initial type record, as generated in the field. Each line is considered and deliberate, a record of response between walker and environment.
Type generation was limited to solo walks. Solo walks were considered most consistent and easily observed mode of walking. In solo walking the actions and motives of the walker were able to be recorded in exacting detail and directly correlated against recorded descriptions. Group walks however proved inherently useful, providing a counterview and contrast with the more introspective solo walks and future research may focus on further type generation based on comparative group studies. In an analysis of solo walks, the individual walkers motivations and decisions could be studied (observation of walker state) and clear drivers able to be identified. When reviewing group walks (either walks undertaken as a joint collective or a series of individual experiences) a diverse array of reasoning and drivers was observed which often highlighted or contrasted individual outcomes. While this can be expected when considering the differences that exist between individual and collective, it allowed the act of walking and observing to be directly questioned and outcomes to be expounded. Even when given the same prompts, cues, and geographic space individuals responded differently, based on their own personal perceptions and agendas.

As a whole, across the broad body of data generated a set of clear perspectives were revealed. Each of these perspectives centres on a practical use or modal role that walking plays within landscape knowing and exploring. The outcomes show an almost endless array for walking’s capacity to stimulate research possibilities in landscape architecture however nine key modes are discussed here. These are outlined below.

5.1 Walking is Investigative

Walking is integral to the investigative process. Moving through site, exploring what is known and becomes known, the act of walking is integral to the investigative process. Site survey, description of 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 scientific thinking. Objective methods challenge the observer 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: design directly questions the relationships between things and allows for exploration and experimentation with rigour equal to that of objective, scientific study. It is liberating and critical, propositional and suggestive. Walking confirms inquiry or redirects attentions and allows new discovery. Moving through space allows a direct physical connection and what may have been overlooked or misread on a map is made real.
5.2 Walking is Inquisitive
Walking is a natural vessel for exploration, an active pursuit that requires the walker to go further, to not stand still. It is instinctive and personal, bringing us to new places and experiences, enabling encounters with diverse materials. 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). These tangible and relational aspects are recorded in walk notes and diagrams, walk lines which also act as design tools and prompts for further exploration.

5.3 Walking is Measuring
Each step is measureable, describable. 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 (2004:6) describes this type of measuring as “ordinary walking to determine the dimensions of land and the relative locations of objects”. Through establishing visual connections the walker “intuitively understands the relationship between physical things in the landscape” (Jacks 2004:6).

Walking produces both quantitative and qualitative data. The walker is able to measure more than physical materials. Movement reveals more: 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; captures changes in wind, in material, in temperature, in light. These elements affect the walker and guide movement through space, directing the route taken.

5.4 Walking is Participatory
Walking is often viewed as solitary, however it can also be social and collaborative. Many of the walks explored were undertaken as solo ventures, others as part of studio exercises and shared site visits. Even a solo walk involves walker participation however this is enhanced when walking with others. As a social process, walks are subject to suggestion, driven by desire (whether social cue or participant need). One walkers’ choice forces another to react and respond. Walk lines collide and overlap as participants make their way. When we walk with others (both past and present) we are pushed, prodded and cast along new pathways of moving, learning and knowing. In walking with others, notes and experiences are shared and compared, instinctive ways of observing and recording are challenged and new patterns emerge.

5.5 Walking is Active
The motion and method of walking follows a process-rich path allowing rigorous, grounded interrogation of landscape. Walk lines can be turned into scores which in turn give instruction and inspiration as to how to move and interact with the surrounding environment. Lines can be played with mechanically or mathematically through sequencing operations. This altering of path lines and typologies gives insight as to how material knowledge and studio exploration might further provoke more vigorous ideas of path making and taking. Studio process can explore path making in many ways through the research tools of design operations and tangible constructing.

In-lab design operations explore the relational potential of the various track typologies. Diagrams are used to construct typological prepositions. By adding or subtracting typologies new interfaces and associations are formed, revealing potential path structures and surfaces. Figure 3 (following page) provides an example of a completed typology and how it might be used in further study. A series of typologies is altered to form a new tracks and walk experiences. A new materiality and temporality of paths results. A range of potential connections and relationships from simple joins through to complex intersections result in potential walk scores.
5.6 Walking is Experimental

Physical experiments can be developed that manipulate visual imagery and create new path options. An example of this is paper folding, where tangible actions alter cartography in order to path make. Through the practical exercise of bending, cutting, stitching and folding the abstract is transformed into a visual possibility. Compressions and extensions of form became apparent as desire lines are made evident. As the paper is folded and the model shaped, a new line begins to take shape and a potential track form results. The combinations propose paths that are figuratively stretched or contracted. Materials are brought together like an orchestrated score to form a new potential walkscape: scores and new types which may be trialled and tested through walking (Figure 4).
Figure 4. Paper stitching and folding studies create tangible tools for exploring. Image by the authors (Jess Rae).

5.7 Walking is Testing

Walking or re-walking newly scored routes tests paths and design proposals. Creating ordered typologies allows the observer to test and check observations. Paths and landscape experiences are translated through imagery, written as scores and walked out in ordered sequences (as guided walks or directed pathways). Scores can be used for guided walks. This sharing of stories and routes not only enables other walkers to follow a path but also to provide feedback if the experience. In this manner a solo walk can become participatory and social.

A walk line can intersect with a site, to “accumulate as layers of history, organize sequences” and change a reader’s understanding of a particular place (Potteiger & Purinton 1998:5). Figure 5 (over page) shows how an ordered walk can be sourced from a simple set of typologies (score forming). The score generates an itinerary which guides the walker through space along a particular trajectory. This can be developed into a series of notes and then used as guide notes or prompts to encourage and stimulate other walkers to adopt routes and experiences.

Figure 5. An abstracted image turned into itinerary. Image by the authors (Jess Rae).

5.8 Walking is Diagnostic

The walk tells us about the state of the path and the walker. Walk lines and scores were seen to be diagnostic, performative and instructive, a “hieroglyphic the dancer can perform directly” (Burrows 2010:32). Scores can be used to make sense of the complex, capturing and translating, providing visual clues or a way of expanding performance through enhancing imagination (e.g. a dancer’s written choreography). They can be informative and provoking.

A path can be authored and given a direct narrative. 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 story of site.

Score writing and directed walking allows us to follow another’s footsteps. We are able to quote those who have gone before, literally retracing footstep or routes. Whether taken alone (with a set of cues and prompts) or with a guide, the path is opened up to new interpretation and the walker-reader extends beyond themselves. Novice walkers can learn from others’ experiences. Particular landscape histories may be shared in the telling and reading, others are able to gain awareness and understanding of the author-walkers’ meaning and a mutual sharing of knowledge exists.
5.9 **Walking is Constructing**

Movement and materials are intimately connected. In participating in the path and responding to environmental cues, the walker begins to construct and build the path (Careri 2002). The walk becomes performative and theatrical (ibid). The choreographer undertaking a performance which can teach us about the performer and inform with ideas of perception, memory and stimulation (Crang & Travlou 2001). A walker immersed in walking becomes one with the rhythm and the walker becomes observer and performer. In performance the walk becomes free and uninhibited, the walker writes their own path. The story of which can be recorded as a walk line or a script of walker-driven choreography and given to others. Certain elements gain meaning and interpretive forms become assigned and positioned. The walker engages with temporal qualities, a relative measuring of materials as a product of time and temporal change. Walking confirms surfaces, we use our own visual cues, we walk along a known or ideal path, a projected line, observing and recording. With time and use, new layers are made and new dialogue added to the existing story.

6 **CONCLUSION: A PATHWAY OF KNOWING**

Ingold identifies that the world is felt through our feet, and “in contact with the ground ... that we are most fundamentally and continually ‘in touch’ with our surroundings” (Ingold 2004:330). Walking, its performance, its rhythmic sounding as a score, has potential to provide cues and stimulus for further exploration of walking and material use.

Every time a walk is undertaken a unique outcomes results. Walking is inherently personal and subjective. The walker responds to the landscape walked in. Conditions and circumstances cannot be replicated as walking is an intuitive and responsive action. The same walker, walking the same path is able to experience new things (moods, events, distractions). Walk records capture differences in response and reveal a shifting dynamic, changing observations seen in the walker-actor (observing an observer). The walk line gives a reading of conditions, like an ECG reveals the inner workings of a cardiac patient, a reading of the walker is obtained. Slight adjustments to environment can create vastly different experiences and reactions. Reflecting on these differences, rich understanding can be extracted. It is in this turbulence that the most value is ultimately found. Just as Dee and Fine (2005) seek to disrupt and challenge what is viewed, by altering the journey (through changing path conditions and typologies) unexpected and surprising discoveries can be made by following and directing walker responses.

Observing other walkers opens up new ways of looking at paths. To follow another’s footsteps, reminiscent of Jacks’ idea of quotation (Jacks, 2004), allows new perspectives to be gathered. Walker watching allows for the observation of motion in action to be gained from a distal and uninvolved perspective. The walkers’ choices and decisions can only be speculated upon, allowing for a greater imagining to take place. The walker becomes the vessel for opening imagination.

Walking is a catalyst and source of design that design operations can accelerate and clarify. Building affordance for human interaction and contact with the ground informs us of the path’s qualities, and in the process enabling a deeper knowing of landscape and what landscape can become.

7 **REFERENCES**


