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Karen Landt-Isley Doctor of Philosophy

20

Reassessing Re-presentation:

a quest to provide a multisensorial experience to render the natural landscape

by

Karen Landt-Isley

Master of Arts in Photography, RMIT, 1993 Graduate Diploma in Media Studies, VIC, 1986 Certificate of Applied Art (Weaving) VIC, 1985 Bachelor of Arts in Photography, RMIT 1983 Diploma of Arts in Illustrative Photography, RMIT, 1980

A thesis/exegesis submitted with creative artwork in fulfilment of the requirements for the degree of

Doctor of Philosophy

James Cook University, School of Creative Arts 2013

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Karen Maree Landt-Isley

Statement of Sources

Declaration

I declare that this thesis is my own work and has not been submitted in any form for another degree or diploma at any university or other institution of tertiary education.

Information derived from the published or unpublished work of others has been acknowledged in the text and list of references given.

Karen Maree Landt-Isley

Statement of the Contribution of Others

Declaration

The following persons have contributed advice in the preparation of this document:

Supervisors

- Dr Steve Campbell Principal Supervisor
- Professor Stephen Naylor Associate Supervisor
- Rosemary Dunn Adjunct Lecturer, Associate Supervisor
- Professor Diana Davis Principal Supervisor
- Lecturer Ron McBurnie Associate Supervisor

All other contributing to the production of creative work including artists, galleries and librarians are listed in the Acknowledgements.

Karen Maree Landt-Isley

Acknowledgements

Geographers: Gethin Morgan, Doug McConnell Botanist : Jenny Terrey Librarian: Jan Graham IT Systems and Support: Stian Andreassen, Jamie Bates, Moloy Rossiter, Clive Hutchinson, Phil Clark and Richard Ormond SEM Analytical Centre JCU: Kevin Blake Photography of Artworks: Robin Gauld Sound Recordings: Robin Gauld and Dr Steve Campbell Graphic Designer for Invitations and Catalogues: Adienne Cerutti Indesign for exegesis: Gareth Wild Helping Hands: Hilary Mangan

Galleries:

Pinnacles Townsville: Guest Speaker Kevin Blake Umbrella Contemporary Art Studio Townsville: Guest Speaker Gethin Morgan Artists' Workshops:

- Adele Outeridge and Wim de Vos, West End Studios: Artists Books
- Keith Smith and Scott McCarney: Artists Books
- Silva Glattauer, Baldessin Press: Photogravure
- Les Walkling and Clive Hutchinson: Digital Fine Printing
- Ron McBurnie: Etching
- Allan Vellantine: Sculptor

Permission to use photographs of artists' books: V. Cooper and A. Outteridge Botanical nomenclature after Jackes, B.R. (ed. 2003) *Plants of Magnetic Island*. Townsville: James Cook University.

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Abstract

Landscape art has a long tradition in the creative arts, and as a photographer I have had several exhibitions which depicted the beauties of the natural world. However, I became increasingly unhappy with the limitations of these exhibitions in enabling people to become aware of the full experience of a place. Why was it that the photographs failed to capture my intense involvement and love of a place, referred to as topophilia (Bachelard 1969, Tuan 1990) which had led to my taking photos of it in the first place?

I came to realise that two-dimensional photographs appealed only to the sense of sight, and that experience of a place involved perception, which is far more than a sight-based record. Perception is based not only on input of data from sensorial experience, but also the internal faculties (the thinking processes mediated through culture), emotions (like and dislike) mood and feelings of intimacy and connectivity, all experienced over time. Following theorists of landscape, such as Cosgrove (1984), Malpas (2007) and Porteous (1982), and phenomenological theorists such as Merleau-Ponty (1962) and Rodaway (1994), I was determined to create an exhibition exploiting the fullest sensorial perception possible. Practice-led research was chosen as a methodology because it involves the stages of observing, reflecting, planning, acting and re-observing (O'Leary 2004) and so suited the thesis' approach to art as lived experience (Heidegger 1962) reflected upon.

The principal aim of this research was to determine if a multi-sensorial representation of natural landscapes could provide me, the artist, with a deeper perception of place. Six different geographical sites on Magnetic Island in North Queensland were selected to provide a variety of landscapes. If any conclusions were to be drawn about perception of landscape, then those conclusions should draw on data from different sites in order to assess if there are common factors

involved in perception. The sites varied from seashore, to mangroves, to high rocky places, and stimulated different physical and internal responses.

As the research process was artistic and analytical, the study required a methodology that could be flexible and responsive to new knowledge gained. A practice-led research structure meets these needs and informed the methodology, three-phased structure and conclusions informed by O'Leary's (2004) cycles of research from a phenomenological perspective of the artist.

The study took place over eight years and involved three stages. The first stage was the data collection and exhibition (2004) through artist's books of material representative of the six locations. The second stage involved reflection on the success and perceived challenges of this exhibition in achieving the principal aim of the study. Consequently another two exhibitions (July and October 2006) were held to further explore possibilities of refining re-presentation of the locations through small and large bookscapes. The final stage involved reflection on the whole project and the documentation of those reflections in this exegesis.

The third exhibition was instrumental in clarifying the importance of several notions in the artist's own perception of place: the essential ingredients of time, space and balance (or embodiment). Clearly, the introduction of sense perceptions helped convey a personal experience, but experience of a place certainly deepened over time as I reflected on the minutiae of that experience, and reflected and experimented with different media to reproduce that experience. My own perception of a place had developed, clarifying that perception involves time and so my exhibitions had moved from a 2D to a 4D experience in order to reproduce that awareness.

This project extended the idea of artist's books and installations beyond the static and objective presentation into an integral experience of viewer with art, and so it extended notions not only of how landscape can be depicted, but of how humans perceive. Photography, traditionally seen as a 'snapshot in time' was used here to illustrate the artist's experience over time. The integration of scientific and aesthetic frameworks revealed the fuller, lived response to a place. In a time when landscape is a contested term, and land appropriated for different ideological positions, this thesis shows how viewers can be encouraged to see landscape in newer ways, and so see their own involvement and integration within that landscape. Landscape can no longer be seen as

objective reality but as an extension of the internal landscape of the viewer. The fundamental conclusion was that a multisensorial approach to artwork did greatly enhance the artist's ability to re-present experiences of landscape.

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Introduction

From the cave drawings of Altamira to Damien Hirst's installations/sculptures, artists have sought to visually present something which they have perceived - whether this is an objective observance like a bison in a cave painting (Jones 2001), or a conceptual representation of how culture interacts with animals (Hirst 1990). Representation then, can be of mutually agreed observable facts or of internal mental concepts. While exactly what the cave artists had in mind is a contested area, the representation could have been purely descriptive, but also probably involved magico-religious concepts. Representation is rarely purely descriptive because of the complex nature of human perception: people see objects not as a preconceived and universally agreed 'thing', but perception is filtered through a long interrelated amalgam of direct senses, aesthetic judgments, emotions and culturally engendered biases (Rodaway 1994).

If representation is not a matter of mimicking or imitating an observation, then the concept of the reality which art aims to represent is no less problematic. Plato famously raised the problem of the dangers of the arts to misrepresent reality and lead people away from that reality (Plato 410). The representation stood in between the viewer/reader and the thing described and so distorted the viewers'/readers' perception of the original. In a similar way Pierce understood the notion of icon and index (Pierce 1883). A photograph, for instance, is an icon of that which is photographed because of its resemblance to the thing photographed, but few would accept the fact that the icon represents the reality of the object. The reality is so much more than any visual medium can convey.

This thesis emerged from the artist's desire to represent not just what the artist saw in a landscape, but to explore systems to communicate to the viewer the experience of the reality of the landscape. While it is clear that no individual's experience can be perfectly captured and re-presented, this research seeks to explore to what degree it was possible to communicate a holistic re-presentation of the artists 'reality' experienced in a specific place. The research and the exhibitions challenged the artist to experiment with new ways to convey to the audience the same response to landscape that she herself experienced.

In my prior practice I had sought to capture landscape through photography and other media, and to represent the reality of my experience of place. As I reflected on my work I realised that what was missing was the sensual and holistic experience; indeed a phenomenological perspective was needed. This sense of a gap in my practice has lead to my interpretive conceptual framework which underpins this exegesis.

Place, landscape and physical areas are often depicted in visual art, but traditionally they are only presented through a two dimensional medium and this means the viewer is not provided with the totality of the holistic sensorial response of the artist to place. Two dimensional landscapes can be depicted as objects—distinct and separated from the viewer's own experience, and certainly not as a representation of the artist's total sensual experience of a particular location.

A response to place involves more than merely the visual appreciation of its lines (Cosgrove 1984, Porteous 1990): it involves a fully sensual response. One must listen to the sounds of a place, smell the aromas, touch the bark of the trees and feel the wind on the skin. This thorough absorption into place is not one that can be appreciated immediately. To properly "feel" a place requires time to allow oneself to be absorbed into it (Heidegger 1927, Malpas 1999). Time allows reflection on experience, and so deepens experience. This absorption into place will, of course, be personal and subjective, but in analysing the various aspects of this experience, and trying to re-present the experience as closely as possible, the artist may be able to help the viewer to appreciate not just the art displayed but, to some extent, the artist's particular perception.

In my research I had wished to represent landscape as I perceived it as a thingin-itself. Certainly, my experience is subjective, but experience also involves an encounter with something that is 'Other' (Hegel 1807). Traditional landscapes had often seen representation of place as subordinate to the artist's human narrative. Landscape becomes drama for human entertainment or education (Appleton 1975). Yet perhaps there is room to consider landscape itself as 'Other' in order to reassess how we as humans fit into, and are written and narrated by, our experience with landscape and nature. This thesis draws on notions of 'sensuous geography' as described by Rodaway (1994), and Tuan's topophilia (1990) to understand place/landscape through the interrelationship with the complex and holistic sensorial response of the viewer. Andrews (1999) explored landscape as the relationship of the human and natural worlds, while Casey (2002) described a closer connection of human and place which is "a reconnection that calls for the embodiment and implacement of the human subject".

This implacement of a fully aware sensate body in place was an important part of my emerging understanding of landscape. As Malpas (1999) described, we find significance not so much in an experience of place, but the grounding of our experience is *in* place. What emerged through my research was an understanding, not of landscape as something-in-itself, but as landscape as understood only in relationship to myself, and in particular to my awareness, over time and examination, of my complex sensorial and inner facultative perceptions. The notion of subject/object dissolves and boundaries of person become porous between self-experience and place.

The research at the sites, and the analysis of data and reflective writing on that data, were essential elements in the emergence of a new understanding of the artist's experience of place. Time was needed to reflect how a sensate body perceived something, and how the deepening awareness of a place extended an awareness of the experience. The research, although profoundly phenomenological in approach and drawing on Heidegger (1927) and Merleau-Ponty (1962) for that perspective, extended beyond conventional phenomenological considerations to integrate more recent scientific perceptions of nature, as well as the phenomenological aesthetics (Sebb and Embree, 2009) and Baumgarten (1750), and Milton's (2002) notion of the importance of emotions in perception.

The emotions, particularly those of love, security and wellbeing, which are integral to a positive experience of something, had to be analysed so that the aesthetic choices in the art work could be authentic to the felt experience. This research, then, integrated and extended principles of phenomenology, aesthetic phenomenology, topophilia and scientific art to develop a new medium of artistic re-presentation using artist's books.

1.1 Choice of Artist's Book

In order to re-present this complex experience of landscape, and to be fair to the complexity and variety of conditions in the chosen landscapes, I decided to use the medium of an artist's book, and I shall outline the reasons for that choice below.

The landscapes I chose to represent included five sites on Magnetic Island in North Queensland, a place of particular significance and meaning to me. I had wanted to invest any representation of these sites with the love, the sense of centredness and connectedness to earth that the sites evoke in me. It rapidly became clear that photography and painting in themselves would not provide a medium to deliver my intent. In summary the structure of this thesis explores the notions of re-presentation and how a contemporary artist can restructure her practice to incorporate a multi-sensorial approach to the re-presentation of landscape. To re-present a perception of reality, in an external visible format which can be apprehended by others, would certainly require more than an objective visual depiction of place. Classical, Romantic or Modernist landscape painting were certainly imbued with the artist's mental perceptions, and the landscapes may be depicted symbolically, allegorically or with some form of ideological construct. However, although the artist's viewpoint is readily perceived by the viewer, the distinctive sense of the reality of the particular landscape is absent.

I realised the need to develop a medium which would convey both the physical sensorial responses to a place as well as my internal and emotional responses to place. I considered installations but finally decided on extending the concept of an artist book into a full-sized exhibition space. The reasons for the choice of an artist's book are described in detail in this thesis but, in summary, the artist's book provided the most viable medium to communicate this nexus of tactile reality and inner mental perception. The senses of sight, touch, taste and hearing could be involved but, more importantly, the viewer needed to physically walk through the spaces and the sand of the exhibition in order to read the story of the landscape.

The artist's book allows a different kind of reading: it enables a marriage of the inner and outer, the external physical form which can embody the internal message (Carrion, 1975). Writings by Drucker (1995) Smith (2003) and Phillpot (1988) helped refine my ideas about the usefulness of an artist's book to express this holistic and self-conscious awareness of experience of an object with subject.

1.2 Physicality: Space and Time

Chapter Two reviews both the visual and history of the art of landscapes from two dimensional practice to installation art. The awareness of the importance of my own physical body as perceiver (Merleau-Ponty 1962) within place lead me to realise that I had to involve the viewer's physicality within the exhibition (see ChapterThree). Concepts of space and time became integral to my own perceptions of place (Heidegger 1927, Bachelard 1958) and therefore to the conscious construction of a methodology which integrated time and space (see Chapter Four).

This study has demonstrated that experience of place deepens over time through analysis and reflection on experience. When the initial exhibition (see Chapter Five) was completed, I became aware that the totality of my perception was not conveyed, and so I developed a second, fuller exhibition (see Chapter Six). The study and the exhibitions challenged me to experiment with new ways to see whether I could convey to the viewer the same response to landscape that I experienced. This second exhibition, I believe, succeeded in re-presenting my complex perceptions of landscape and place.

My reflective practice allowed the inner perceptions to clarify, but this deeper awareness and analysis of my internal perceptions lead to a deeper appreciation and awareness of the landscape. My sense of reality of a place grew with the re-presentation of that place. The construction of art is a re-creation in time and space of the human's interaction with the world.

This world is itself complex. The sense of sight concerns only the surface, but my experience as a photographer extended into microscopy (using a Scanning Electron Microscope), which exposes the inner workings of plants and life itself, and reveals some of that glorious complexity. In addition, a photograph of a cell structure has a beauty in itself but also a power of attraction which, to some extent, may come from the sense of curiosity and wonder which stems from seeing these normally invisible aspects of creation. The cellular level is part of the physical reality of a place, but the sense of wonder, and the scientific quality of curiosity which is inherent in the development of SEM photography, are two factors of intellectual engagement with an object.

My perception of a place involved both wonder and curiosity and so I wished to integrate this 'scientific' photography in order to try to stimulate in viewers the same sense of intellectual involvement. The revelation of what a certain object might be is itself an intellectual involvement and this concentration on reflection can deepen the experience of the perception of a place.

The research and the three exhibitions have provided a valuable learning experience for me, and helped to develop my understanding of place as an artist. However, although so much of the artist's practice is subjective, and must be because it emerged from an analysis of the artist-in-place, the thesis has implications for the wider art community. The extension of the artist's book as re-presentation of a particular landscape is, as far as I am aware, novel. The integration of the scientific and the traditional manual artistic approaches to the development of the artist's book is also new. The methodology, which involves the analysis of sense perceptions and the conscious reflection over time of those perceptions, has relevance for discussions of *plein air* painting and art. The thesis also has relevance at a time when explorations of how landscape is experienced is of increasing interest to architects, scientists, environmentalists and to tourism (see Chapter Seven).

In establishing the parameters of this research project, it was first necessary to examine specific field sites for re-presentation and then to develop bodies of work to test the suitability of alternative modes of representation. In effect this research provides a significant case study from an artist's view of Magnetic Island.

1.3 Field Sites: Magnetic Island

The establishment of scope within this thesis was centred on place. The most suitable site available was Magnetic Island, the researcher's/artist's home and a place she loves and knows; it provided the locations to represent a complex perception of landscape. Magnetic Island is a large granite main land island situated at 19° latitude and 148° longitude and located seven kilometres off the coast of Townsville. The island is approximately 518 hain area, rising to 493 mat Mount Cook.

I wished to show how I perceived Magnetic Island and that perception was grounded on:

- my love of the place (and so the aesthetics had to be beautiful);
- a wish to describe and re-present the specifics of the physical places (and so I needed several individual sites to distinguish the particularity);

- a desire to integrate a scientific aesthetic which combines beauty and curiosity/wonder;
- a desire to depict several distinct geographical locations in order to examine the full range of physical responses to the differing sensorial stimuli.

The decision about which parts of the island to depict came easily when I read a technical report on the *Vegetation of Magnetic Island* (Sandercoe 1990). This report divided the island into five major vegetation divisions (Figure 1), based primarily on geology and landform. These five areas are:

- mangroves and salt flats (foreshore unconsolidated sediments)
- coastal lowlands (coastal lowlands on sand piedmont deposits)
- lower granite hills (granite hills of lithosols and talus slopes)
- Mount Cook ridges (plateau and hills of Mt. Cook)
- West Point volcanics (agglomerate hills of West Point area)

These five distinctive geological areas helped me find the diversity of landscape which could be integrated into the one exhibition to try to represent the holistic nature of perception. To really come to know these distinct areas, I visited these sites over four years. I was fortunate enough to have the experience of Gethin Morgan, a geographer and landscape ecologist and Doug McConnell, a geographer who both lived on Magnetic Island and were very sensitive to the natural elements. As we walked across the terrain, we discussed the various landforms of Magnetic Island; and through their knowledge and insight I gained a greater understanding of the Island's geology and vegetation.

The five sites became the basis for my landscape depictions, but the reality of my perception of these areas was insufficient without the inclusion of the Coral Sea: the encompassing element of the island. The sea and particularly the beaches were powerful elements in my experience. Not only is the salt air pervasive, and the grit of sand ubiquitous, the liminal nature of beaches is itself a metaphor for the liminal nature of perception, where apprehension of a place seems to hover somewhere between physical sense and internal awareness. Thus, to the five locations I added a sixth site: The Coral Sea: Littoral.



These divisions are illustrated in Figure 1

Figure 1 Major landform divisions on Magnetic Island according to Sandercoe, 1990 (permission to copy and rework the aesthetics of the map).

Once I had a clear understanding of the sites from which to gather data to present in a multi-sensorial exhibition, and became aware of a sense of purpose to drive my practice, I was in a position to clarify the research question and structure the research around five key aims.

1.4 Research Question: Aims of the Study

To what degree it is possible to communicate a holistic re-presentation of the artist's 'reality' experienced in a specific place? This thesis aims to assess how successful a multi-sensorial approach to re-presenting landscape is in providing an artist with a deeper perception of place. In order to achieve this overarching aim, the following aims were delineated. I sought to:

- 1) represent the experience of place utilising data collected from Magnetic Island within the framework of an artist's book;
- determine how to present an artist's temporal experience of place in an art form;
- identify the range of artists' books that focus on flexible and multi-sensorial art frames;
- integrate cross-disciplinary technology to generate new multi-sensorial art forms;
- 5) extend the artist's book into a multi-sensorial art form of a natural place.

1.5 Organization of the Thesis

The first chapter provides the background to the choice of topic and location for the study and an outline of the overall aims and approach of the thesis.

Chapter Two analyses trends in artistic representation and describes how, despite the current interest in landscape, artistic representations have not yet provided the multi-sensorial experience of a place on the artist. The review of pictorial practice establishes a need to present an exhibition which would give justice to the totality of perceptual experience of place including the senses of sight, taste, touch and hearing, as well as intellectual and emotional engagement. *Chapter Three* reviews the literature of three areas explored within the thesis. The first part covers perception, in particular sense perception and phenomenology (Merleau-Ponty 1962). The second section describes the literature surrounding the perception of landscape and examines the concept of topophilia (Bachelard 1958, Tuan 1990), or love of place. Such discussions lead to an examination of aesthetics, and the role of scientific observation and microscopy as a means to extend both the aesthetic senses (Sepp & Embree 2009) and the intellectual involvement of the human and so to deepen awareness of experience and thus deepen perception of place. The third section reviews artist's books and exposes the gap which the final exhibition fills by providing an

interactive artist's book concerning the re-presentation of the reality of a place. *Chapter Four* presents the methodology underpinning the thesis and exhibitions. Practice-led research is the springboard from which this complex analysis of perception is examined so that suitable media and materials can be created to re-present the artist's experience.

Chapter Five analyses the first of the three exhibitions: a book installation which combined three senses (of sight, touch and hearing) to re-present the unique geographic character of Magnetic Island.

Chapter Six presents the second and third exhibition which engaged all the senses: sight, touch, hearing, taste and smell with the addition of balance. This fuller integration of the fourth dimension of space and time allowed for a more satisfying re-presentation and it was from reflecting on this that the final chapter emerged.

Chapter Seven shows how the development of the second exhibition, itself born out of the experience of the first exhibition, was necessary to fulfil the aims of the thesis. The more holistic sensorial involvement in the final exhibition more fully re-presented the artist's experience. The incorporation of artist's book techniques, combined with the scientific imagery and handmade brush work, elicited an aesthetic and visual reality which corresponded with the artist's own vision. The addition of sound, touch and smell allowed the artist to express the fullness of her experience of these distinctive places.

The creation of this exhibition, which involved multi-sensorial and cross disciplinary technology, deepened the artist's understanding of her own perception of place and lead to a deeper appreciation of landscape itself. The conceptual framework which produced the final exhibition emerged from an initial response to sensorial and affective apprehension, but also incorporated the extra dimension of time and space. From the first ideas to the second exhibition, then to the writing up of the thesis, there was a continuum into understanding the reality of those particular landscapes.

The appreciation of the landscapes was not possible only from a purely rational and visual perspective. In trying to re-present the sound, the smell and the feeling of the material to people traversing the gallery, the artist has to constantly reflect on the complex interweaving of factors involved in her own perception. In walking through the final installation, viewers were subjected to the very experience of a natural environment in which the factors are not chosen by the person but wherein the person is subject to the experience. Perception, although personal and unique, is subject to the external environment (Gibson 1979) and to the physical senses. By emphasising these facts the exhibition helped to heighten awareness of the very close interrelationship of humans to the environment. The exhibition also highlighted, in a physical and experiential way, the theoretical understanding of a phenomenological perception, in which the emotional senses, here of intimacy, protection and closeness, can be filtered through the senses. So, perception, although unique, is dependent to some extent on the environment, and is, to some extent, conveyable to others. If the exhibition showed that humans are intrinsically related to the environment, it also showed that we are connected to each other and can communicate our perceptions. Art can, therefore, be a meeting ground for this unity of the human and the aesthetic, of the physical and the metaphysical, and of individual and individual.

Limits of Visual Art in the Natural Landscape

This research seeks to reconceptualise how an artist can represent place through a holistic model. In order to establish a framework to develop an understanding of the issues associated with the representation of landscape, a review of literature associated with landscape in Art has been undertaken. What follows is a review of the history of landscape artwork to reveal different styles and trends. Although artists have approached the natural world in different ways, with different preconceptions and perceptions, and although the medium of artwork has shifted from painting to photography to artist's books and installations, there remains a strong privileging of the visual senses in the reproductions of landscape.

2.1 Two Dimensional Artworks: Privileging the Sense of Sight

Landscapes and the natural environment have always been depicted by artists; however the ways in which they have been depicted have varied. Broadly speaking, the history of landscape painting following the late Middle Ages falls into three main categories: Classicism, Romanticism and Naturalism. In Classicism, landscape is more often a stylised or idealised backdrop to illuminate human narratives. In Romanticism, however, landscape becomes more naturalistic but is still the expression of the artist's inner emotional response. Naturalism is particularly seen in the emerging art of traditional photography (Andrews 1999). However, despite these more recent naturalistic responses to specific places, artists were nevertheless rarely interested in depicting the landscape as it was in itself. The depiction tended to be the projection of the artist's inner conceptual idea and so landscape could be seen as solitude or brooding tyranny. In this aspect, landscapes were still constructed, and privileged sight above the other senses. I will argue that all three forms of landscape art did not attempt to convey the artist's holistic sensual response to a particular place but were a means for the artist to express an idea, and so were visual physical representations of an abstract concept.

2.1.1 Paintings

Landscape in classical painting became focused upon mimetic realism from the early Renaissance as distinct to landscape painting in the Middle Ages due to the introduction of linear perspective, however it was highly formulaic and idealised (Plate 1). The physical locations were rarely of interest in themselves, and although the artist may have drawn on real locations, these could be categorised as props to which the artist could recreate or underpin the point of the 'poetic landscape' he was attempting to produce. MacEvoy (2007) states:

At its purest, the poetic landscape presents the viewer with an imaginary place. For the artist, the genre provided an opportunity to give creativity free reign to transform the characteristic features of Italian geography and architecture into mythical or pastoral fantasy. Even when painting actual Roman ruins, for example, the poetic painter (much like a stage director) was free to exaggerate the shape and height of the mountains, delete or redesign buildings and objects, insert dramatically placed trees or human figures, and throw strongly contrasted lighting effects over it all (MacEvoy 2007:1).

For the artist, landscapes were like a set design, distilling the poetry of light and atmosphere into the paintings of pastoral fantasies and mythological stories. Nature became a backdrop for a theatre production and therefore landscape existed only to support the human drama and was not depicted as a thing-in-itself (MacEvoy, 2007).

For example, in Plate 1 trees are not meant to be *experienced* by the viewer as real trees but to be *understood* as an element of the allegory. The trees are neither oaks nor elms, the bark is unnatural and the unnatural juxtaposition of temperate trees and savannah grass means the landscape is even further contrived and cannot convey a particular sense of place. The physical components exist in the artist's imagination only. The landscape belongs to no particular place, but is idyllic and therefore of the world of the imagination (Andrews 1999).



Plate 1 Claude Lorrain Landscape with Narcissus and Echo, 1644

During the Classical period, artists did sketch and paint outside in the natural environment; however, most of this activity was confined to preliminary studies for reference. The artist had a portfolio of references of landscape backdrops which could then be selected from to create the desired landscape to support the human narrative in the foreground. According to Ralph (1999),

Lorrain ...was convinced that taking nature as he found it seldom produced beauty. His pictures are a composition of the various draughts which he had made from various beautiful scenes and prospects (Ralph 1999:21).

Therefore, scholars accept his final landscape may look more realistic than medieval depictions; however, it is not the artist's experience of a particular place that is represented but rather a means to an end.

The advent of 'Romanticism' did bring a greater personalised experience to landscape painting than was seen in Classicism. Nevertheless, Romanticism attempted to evoke an inner feeling or affect, rather than to depict particular places. As Baudelaire (1846:ll) stated "Romanticism is precisely situated neither in choice of subject nor exact truth, but in a way of feelings". The Romantic artists attempted to paint what the eye saw, but their vision was often subordinate to what Baudelaire called "feelings" for the place: the landscape may be named for a particular geographical place but the landscapes were often painted to depict a romantic or "felt" concept, not an artist's physical (sensorial) response to a place. In the early 1800s, Romantic artists reacted against the pedantic formulas of the contrived stage sets of classical landscape, and worked directly from the physical elements of nature for inspiration (Andrews 1999). For example, J.W.M. Turner certainly did go through harsh physical experiences to enhance his paintings. For *Snow Storm*, 1842, (Plate2) he gained first hand experience of what it felt like to be on a boat in a storm. And rews (1999) quotes Turner's account of the experience,

I did not paint it [the storm] to be understood, but I wished to show what such a scene was like: I got the sailors to lash me to the mast to observe it; I was lashed for four hours, and I did not expect to escape, but I felt bound to record it if I did (Andrews 1999:177)

The power of the painting is obvious, but the drama of the storm is conveyed to the viewer only visually. The painting relies on the viewer's own experience of storms to supplement the feeling of spray on the face, and the sound of the waves crashing on the side of the boat. So Turner is trying to put his perception onto the canvas but it is limited by being conveyed to the viewer only through sight.



Plate 2 J.M.W. Turner Snow Storm 1842

Part of the immense power which Turner's paintings evoke emerges because of his technique of painting. He uses the light and the energy created within the brush marks which blur the separate elements of wind and water into a threatening chaos. Yet here the blurring of the brushstrokes abstract the storm scene so that the landscape physically merges into the storm. The viewer is not seeing a particular geographical place at a particular time. The scene is constructed to evoke an emotion of the drama and power of the storm. It is not meant to evoke a specific storm in a particular place. Once again, the landscape is subordinate to the message of nature as a drama. As everything blurs into one, the emotion is conveyed to the viewer, but not the artist's experience of the specific place.

In the case of Turner's *Snow Storm* Andrew (1999:178)) states "Turner's concern [was] to embed himself in the experience of the play of natural forces".

Certainly Turner must have experienced the storm with all his senses. But for the viewer, seeing the painting in the security of a building, what is experienced is not the artist's sensual response to a storm, but the idea of nature as storm.

Nevertheless, Turner appears to have tried to create a full sensual experience for the viewer. He insisted that all his works and artistic paraphernalia should be gathered together and displayed in the Turner Gallery. Here, the viewer physically walks through the gallery and is surrounded by paintings and etchings to be engulfed by the artwork. Turner's presentation of his paintings in his own gallery space recognises the importance of future curatorial practices to give the audience context to encounter not just pictures but rather a conceptual framework for the experiences of nature represented in the works. However, again the cumulative effect is not to experience the artist's response to a particular place, but for the viewer to be able, at least at second hand, to experience the world of the painter's studio.

For Ruskin (1843) modern painters like Turner and James Duffield Harding (Ruskin's art tutor) showed a much more profound understanding of nature than the Classical painters like Lorrain, because they observed the 'truths' of water, air, clouds, stones, and vegetation (*Modern Painters*, in 1843, under the anonymous identity 'An Oxford Graduate'). However, it is unclear what these truths are. Is Plato correct that the representation of the truth of the stone is invariably not the truth of the stone but the artist's perception of truth, and so one step removed from the viewer's perception of the truth in the stone?

In the 1800s, European, American and Australian artists delighted in working outdoors, so that they could experience the elements of nature. For instance von Guerard, who represented the Australian landscape in the German Romantic tradition, as a real lived experience, meticulously observed the local plants. In *Ferntreegully in the Dandenong Ranges*, 1857, Plate 3 the natural landscape shows no signs of human interference, but is a dense bushland of temperate rainforests and cool fern gullies with two lyrebirds in the foreground. The particular mood of the environment is created through the artistic composition of the pool of light on the forest floor that leads to two male lyrebirds cast in shadow: one with its characteristic tail feathers raised – a natural mimic of the arch of the fern fronds. The landscape/place is known for its active bird life and cool green gullies. The work was exhibited in the 1862 *International Exhibition* in London where it was noted as an example of "the natural beauty and scenery of the colony" (Gralton 2007:56)
Yet one can question whether the painting is really one of purely natural beauty directly experienced. Although clearly of a particular place, the elements have been constructed according to the artist's concept of natural harmony. The identification of the lyrebird's tail with the ferns is a human conceptual classification. Only the human rational and classificatory powers would draw similarities between a bird's tail and a fern. By juxtaposing the two, the artist draws attention to his conceptual understandings, and his aesthetic sense of harmony, and of his concept of nature as one, but he does not convey his physical and sensual experience of the place. The viewer cannot hear the bird, and cannot smell the damp humus.



Plate 3 Eugene von Guerard, Ferntreegully in the Dandenong Ranges, 1857

The *Impressionist movement* would seem to be better able to produce the artist's experience of a place because it was liberated from purely visual depictions; that is, impressionists did not paint to a Classic or Romantic formula. The artists experienced the landscape directly, in the style known as *en plein air*. Morrell states, (2004:4) "Impressionism had engendered a refreshing phenomenological approach to the visual arts, both in terms of seeing and in terms of painting the world around us". Monet's impressions of haystacks under varying lighting conditions are some of his most famous works, *Haystack*, 1890-91 (Plate 4). Monet records in his letters that he worked with painful slowness 'on a series of different effects' of the haystacks. He was aiming for 'instantaneity'. Monet's letter (1890) states: "I'm increasingly obsessed by the need to render what I experience". The stacks stood in a field behind his house at Giverny and were therefore part of Monet's home environment. The artist lived with them, day after day, week after week, not in order to produce, by the end, one painting of this scene. Rather, he produced a series of paintings

of a sustained immersion in place to document the natural processes of change as well as the perceptual processes of the artist immersed in the motif.



Plate 4 Claude Monet Haystack (sunset), 1891

This result is a landscape, not of a particular place that is instantly recognisable, but an impressionistic representation of the look of light on the haystacks and then not necessarily of a particular light on any particular haystacks. The impressionist landscapes work well because they are only visual – they are calling on a mood – an internal response of identity to understand the beauty and the wonder of light on haystacks; that is, a cerebral and mental place and not a landscape.

Impressionist landscape painting differs from previous landscape painting approaches in that it involves a more subjective perception of the scene and is not constrained by the rules and formulae of classical painting. Morrell (2004) states:

This new form of art attempts not to project onto the visual world our innate assumptions and preconceptions about 'things,' but to take the visual world more or less on its own raw and flesh terms and to recreate portions of it in paint in a direct manner, or to mutate parts of it as required according to one's subjective perception and interpretation (Morrell 2004:5).

As the viewer sees what the painter saw, one could argue that impressionist painters therefore convey more vividly to the viewer the artist's response to a place. Nevertheless, although these paintings draw on the viewer's visual and perceptual responses to come to a new understanding of the power of light in the painting, they can only be presented to the visual senses. The end result of the painting is not to convey a feeling for a place, but an almost visceral feeling of the fragility of time. The changing effects of light on the haystacks over a period underline the ephemeral nature of time, as well as conveying something of the sheer beauty and metaphysical wonder of light itself.

Although landscape had become more realistic over the centuries, the early twentieth century saw the introduction of abstract painting and Cezanne, who was informed by impressionism, developed a new approach to landscape painting: that of 'Cubism'. Cezanne (in conversation 1902) commented that "Today our sight is a little weary, burdened by the memory of a thousand images... We no longer see nature, we see pictures over and over again" (Kendall 1926:296). Cezanne adopted a totally different approach to the motto 'Paint what you see'. Rather, Cezanne saw the landscape as a patchwork of textures (Andrews 1999); coloured shapes were worked into a picture, small abstract, controllable shapes to create a different language in painting (Cubism). The eye and mind rest and gradually unravel shapes and there is no separation of the visual and the cognitive. The painting is not understood sensually but rather cognitively. Abstract painting requires the mind to puzzle out the meaning; the interpretation of the painting must therefore be, to some extent, dependent on the viewer's knowledge, art education, abstract conceptual ability and many other factors involved in the 'decoding' (Mitchell 1994). Consequently, each viewer must surely see the painting in a different way and the art cannot convey to most viewers the artist's multi-sensorial response to a particular place. Cezanne's studies of *Mont St Victoire* (1902-06; Plate 5) were painted over and over again. The patches of colour created a semi-abstract image of place, a totally new approach to the idea of perspective in a landscape.



Plate 5 Paul Cezanne Le Mont Sainte-Victoire vu des Lauves, 1902-06

One modern Australian landscape painter, who followed to some extent the abstract tradition, is Fred Williams. For example, Williams (Plate 6) represents the character or essence of a particular Australian place by engaging the emotions more fully than had been previously accomplished. Rather than painting the landscape realistically as von Gerard had done, Williams expressed a personal visual language of the Australian landscape by finding an idiosyncratic pictorial grammar for the landscape elements which became his personal signature.

In Yellow Landscape 1968 (Plate 6), Williams painted intuitively to develop a new kind of pictorial space. Erratically, he dripped and splodged dark paint strokes onto the canvas to represent the trees after a bush fire. The trees are contrasted against the 'flattened perspective'; there is no background, middle ground or foreground, just a slight indication of a horizon line where the burnt trees finish. Therefore, unlike earlier landscapes, there is no horizon merging to the sky. The background colour of burnt ochre reinforces the feeling of heat. By evaporating the horizon line, he disturbs the organisation of the pictorial space and so creates the feeling of searing heat, and allows the trees to float in the heat and space. The gestural brush strokes, as stated by McCaughey (1987:161), are related to "his handwriting". These painted, gestural brush strokes represent the reality of the bush where the gum trees grow randomly in their natural environment. These dark skeletal marks of gum trees show that the bush fires have passed through the landscape and so capture the reality of the Lysterfield area in Victoria, Australia.



Plate 6 Fred Williams Yellow Landscape, 1968-1969

This is a powerful work and conveys an (inner, imaginative) sense of fire and heat. But it also still relies on the purely visual, and on the viewer's ability to decode clues about how to respond to the painting. It is interesting to question how much this modern work still owes to Turner's reduction of nature to drama for our (mental) cogitation about loss and destruction.

2.1.2 Photography and Film

In the mid 19th century painters began to paint directly out of doors, coinciding approximately with the invention of photography in 1837. Landscape was a frequent subject for the new art of photography. However, as with the earlier painters, the landscape was manipulated to create an artistic and personal expression, referred to as 'pictorialism' (impressionist style in painting). Other landscapes were photographed as they were, no manipulation was involved and this form of art work became known as 'straight' landscape photography (naturalism style in painting). Nevertheless, it can be argued that any purely visual representation must manipulate to some extent to create what is the framed idea of the artist.

The poetic quality of Steichen's, *The Pond Moonlight*, 1904, Plate7 created a subjective interpretation of the landscape to evoke an emotion, similar to that evoked in Turner's landscape paintings. The photo was taken on Long Island, New York, 1904, near Steichen's home and depicts a pond in a wooded area, with moonlight coming through the trees and reflected on the water. The colour is introduced by manually applying layers of pigmented, light-sensitive gums to the paper (the autochrome process, a true colour photographic process was not available in England until 1907). Steichen was amongst the first photographers to introduce colour into the landscape. The black and white photographs looked more harsh, but colour helped to soften the appearance, and introduce a more romantic tinge to the whole.

The imagination is fired by the tonal variations which evoke more traditional (coloured) paintings of landscape as allegory and so the coloured photographs of landscape opened up the possibility of more poetic interpretations of the scenery. The colour impression of the landscape was created by the experimental approach of 'The Gum Bichromate Process'. The idea of Pictoralism was to emulate the painting and etching of the time. Most of these pictures made were black and white or sepia toned. Among the methods used were soft focus, special filters and lens coatings, heavy manipulation in

the darkroom and non-silver printing processes including Gum Bichromate process. From 1898 rough-surface printing papers were added to the repertoire, to further break up a picture's sharpness. Eugene (1898) "etched" the surface of the negative with fine needles, just as an etcher would engrave metal plate. The aim of such techniques was to achieve what the 1911 *Encyclopaedia Britannica* termed, "personal artistic expression". Nevertheless, although colour landscape photography extended the range of responses to landscape, the viewer's perceptions were still limited to the purely visual.



Plate 7 Edward Steichen The Pond Moonlight, 1904

Ansell Adams (1931) reacted against the pictorialist approach which manipulated the landscape and photographed the landscape as he saw it with his eyes, referring to this form of photography as 'straight photography' or unmanipulated photography (Plate 8).

Adams is one of the best known photographers of landscape in the twentieth century and photographed the wild beauty of the American West. He tried to translate his experience of the landscape into his photographs, but stated he could not accomplish the subtleties. For example, Adams recalled his experience of selecting and photographing a scene at Tenaya Creek, Dogwood Rain, Yosemite National Park in 1948:

Spring – the time of roaring waterfalls and dogwood blossoms – is often graced with showers; it is a time for enjoyment of various subtleties of the natural scene, which are sometimes elusive and difficult to photograph (Andrews, 1999:11)



Plate 8 Ansell Adams Tenaya Creek, Dogwood Rain Yosemite National Park, 1948

Ostensibly, Adams photographed nature in itself, but his construction and composition nevertheless turned nature into an art form to make an artistic point about the artist's vision of the natural elements, not of the artist's physical experience of the elements.

Even though Adams claimed not to manipulate the image in the darkroom, he was in full control of his black and white process which was formalised into his *zone system.* He previsualised the landscape scene into nine tones of greys and processes to create the beautiful, tonal rendition of the natural landscape. This formula was Adam's signature to black and white photography of the natural landscape, comparable to the rules of the classical painters to create depth perceptionthrough light and shade, except Adam's landscapes are of reality, nature herself, and not of the imagination of place as that of the classical painter, Lorrain.

A dams does select the 'appropriate' lighting and timing of the day. This selection process is, probably, unavoidable in any art form, but does mean that the choice is made by the artist. The final landscape is still taken at a time and in conditions which he chose and is then further constructed by being framed and hung on a wall so the viewer is several times removed from the original experience. The viewer then sees, not just the landscape, but how Adams wants the viewer to see it. The awe, the wonder and the beauty which Adams experienced is luminously conveyed; but his sensorial reaction, and how he smelt the Dogwood, is not. In 1997, a form of landscape photography revitalised an older technique and tried to manifest the idea that nature itself can become a camera. In this method, the photographer omits the camera, but retains the flash. An aspect of the natural world - a wave for instance, is recorded on photographic paper at night under a flashlight. The natural landscape becomes the camera to record nature in real time, referred to by Nankin (1996) as a 'shadowgram'. This technique was traditionally referred to as photograms (camera-less image).

Harry Nankin's *The Wave*, 1997 was a mixed-media work, it comprised an installation in a gallery space of huge shadowgrams which recorded at life-scale an image of an ocean wave breaking on a wild Victorian seashore at night. Nankin immersed a 24 square metre raft of black and white photographic paper into the sea at night at Bushrangers Bay and exposed it to moonlight and flash to produce *The Wave* shadowgrams. Again, the artist's experience of engagement with nature is intense and similar to *en plein air* painters experiencing nature directly. However, although the intention was to recreate the intensity and power of the size and the movement of a wave in action, this intensity is not transferred to the spectator, as the body does not touch any part of the exhibit even though Nankin represents his experience in an installation mode. The roaring sound of the waves and shadowgrams moving in a breeze in the installation would probably have evoked a more intense interpretation of *The Wave*.

New technologies have always been applied by artists to re-present landscape, and film offered a new medium to capture different aspects of landscape, and of light over time. It has the potential to be realistic but like any medium it is subject to control and direction by the artist. Michael Snow's film, *La Region Centrale* (1971), Plate 9, expresses the theme of cosmic relationships of space and time, as Andrews states (1999:221), "provoking a new perceptual experience". The camera oscillates randomly from the sky to the earth and the spectator loses all sense of perspective and balance and becomes disorientated. The perspective of the landscape is as it is: foreground, middleground and background as it would be photographed. Although the continuing, moving viewpoint of the camera disorients the spectator so that the experience may initially appear holistic, in reality the experience of landscape is limited to sight alone. The coldness of the snow is not felt, and the spectator is more than likely watching the film sitting down in a comfortable chair indoors.

Snow extended the recording of natural landscape through a specialised camera to record moving images of the deserted mountain top in Quebec

in 1969. He recorded the wilderness on a grand scale, stating, "I wanted to make a gigantic landscape film equal in terms of film to the great landscape paintings of Cezanne, Poussin, Corot, Monet, Matisse" (Dompierre 1994:53). He constructed an intricate camera apparatus which enabled the camera eye to rotate vertically and horizontally a full 360 degrees, and was automatically controlled by a programmed robot. Thus, Snow did not have his eye behind the viewfinder as photographers normally do. Bellbour states (1994:281) that this kind of incorporeal seeing, which is "beyond all subjective finality", reminds one of automatic recording and viewing machines that engage in viewing without seeing. But Snow edited the sixty hours of robotic controlled views of the wilderness down to three hours. Because of the unconventional camera movement, the result was more than merely a film that documented the location of the mountains in Quebec, but became a film expressing the theme of cosmic relationships of space and time. The camera's eye rotated from the sky to earth, not the normal orientation. As Snow (1971) stated in his catalogue:

The raw images of a mountain existence, plunged (at the time) in its distance from civilization, embedded in cosmic cycles of light and darkness, warmth and cold felt by the images of the sun and snow. This film work stimulates the sense of gravity, disorientation, as the landscape oscillates, the sky is on the bottom and the earth is on the top, not where you would normally expect it to be (Snow 1971: 1).



Plate 9 Michael Snow's Film, La Region Centrale, 1971

Snow is concerned with the humanizing of the planet as the natural landscape disappears. He presents his film to defamiliarise the viewer from the usual perception of the planet; rather, one should be able to see the film as an alien would view the planet. The defamiliarisation works effectively but it is a concept which requires the viewers' artistic and philosophical education to be engaged in making meaning of it. The work needs to be decoded by viewers with the right training. Perceptions of landscape, I maintain, should be more readily accessible and apprehended by anyone, educated or not.

2.1.3 Collage/Assemblage Artists

A relatively recent phenomenon in landscape history is assemblage art, which incorporates aspects of the environment directly into the painting itself. The integration of bark or grass into paintings provides a more holistic experience of the landscape depicted, and certainly must convey to the viewer more of the artist's particular perceptions of place. However, most of these creations are nevertheless framed and positioned in a gallery beyond the reach of viewers. Thus, they still privilege sight and cannot reproduce in the viewer a more holistic perception of the reality of the particular place which the artist experienced.

Some artists have been motivated by an intense engagement with the natural world and environmental matters, and have operated more as topographers and naturalists. They see landscape as the 'lived world' and wish to integrate their experience and the land into one. Elements of the natural world are affixed to the human construct of painting to convey the sense of human embeddeness in the natural. Many paintings have been prompted by fears at the rapid deforestation and assault on the natural world. Wolseley states (1991,np) "I paint what I care about, what I love and feel is in danger". For example his collage, 1994, Plate 10, is concerned with deforestation in Tasmania. The image still involves a story but it is as explicit as his earlier landscapes, either a photograph or a stage production of a pictorial image. Wolseley's collage represents plants and trees destroyed in the landscape. The woodchip processing machinery is symbolised by the herringbone patterns to indicate the tyre tracks. He also shows the delicate ferns, eucalyptus cups, seeds and spores being squashed into the mud. Wolseley recalled in 1996 "I feel that I am witnessing a landscape in decline" He also states "this puts a different perspective on being a landscape artist. I sometime think that I'm a war artist surrounded by weapons of destruction – giant bulldozers, woodchip machines and trenched and churned up hills" (Carter 2004:19).



Plate 10 John Wolseley Coupe X Rainforest, Tasmania, 1994

Wolseley breaks with the tradition of the relatively flat, painted surface, either canvas or paper, by making his own paper which incorporates fragments and plant material from the landscape site itself. His surface then is very tactile and related to the surface painting. It literally underlines and underpins the surface meaning. He felt that this collection of fragments enhanced his experience of the natural landscape because through the selection and the integration of these materials into his work, he has integrated the natural and the man-made; as an artist, he is absorbing the landscape through the medium of his creation.

One distinctive aspect of Wolsley's artwork is that the botanical inscriptions are in Latin and in various Aboriginal languages and so he makes subtle comments about the extinction of species, people and cultures. The art works well as a wry comment on the capitalist exploitation and degradation of the fragile human and natural systems. Certainly the artist's point of view is clearly conveyed to the viewer, who can see this imaginative and clever work only behind glass, even if his total physical response to the place is not conveyed.

2.2 Artist's Book: Privileging the Sense of Touch

An extension of collage and painting is the artist's book. This name is a relatively recent term, although the concept has been around longer than the term. A simple definition may be: "An artist's book is an artwork created by the artist/ artists in a book form". It may have one or multiple creators; it may involve one or multiple copies, depending on the artist's intentions (Beube 2003, Bury 1995, Drucker 1995, Smith 2003, Vanderlip 1973). The physical form of the artist's book often includes some of the following, although they can be produced in very different ways: the binding, the pages, text and/or pictures, turning pages and display. The particular varieties of artists' books can be placed in the following categories: codex, folded, altered, sculptured and installation (Smith 2003). Nevertheless, one of the principle parts of the artist's book is that it

makes meaning of the whole through the particular. As Smith (2003) writes:

Like the formal elements within the single picture, the elements of the book function to work in union to create the book. Each element must be conceived as part of and helps determine the other elements (2003:323).

Thus, because it aims meaning out of the component to create it also kind of parts, aims to create а different reading will (Carrión 1975), and these elements be explored below.

The book form is a physical object which is predominately held in the hand and although it clearly engages the visual senses, is also experienced through the sense of touch. The addition of the sense of touch allows the viewer to interact with the structure of the book form, and therefore the viewer/reader is more actively involved in experiencing the art work.

A book traditionally has both words and pictures or symbols, but although it may be a work of art it is not necessarily an artist's book. Nevertheless, text and picture may work together to produce a response in the 'viewer' that is more than purely ratiocinative. For instance, the glorious illuminated religious manuscripts of the early and high Middle Ages were a means for the devout viewer to look into the Word of God. Image complemented text to provide different visual stimuli to arouse response to the sacred. Thus sight was a means to transcendent experience. However, these books, although engaging spiritual as well as visual faculties, were not artist books as such: they normally had more than one compiler (monk and nuns in Scriptoria) and they certainly did not intentionally engage more of the physical senses than sight.

William Blake (1757-1827) has been described by Antonetti (2007) and Hoffberg (1996) as the first artist's book maker. He created both the text, the etching and also bound each one of his books. He had total control over the end product, as well as producing what many consider beautiful and effective artist's books. They were individual artworks of his own making. Blake's work was considered unique in his life time (Lyons 1985) and he was also far ahead of his time in both literary and artistic approaches (Verheyen, 1998) as he created a painterly union between the image and the text and, more importantly, self-published and distributed his artworks. For example, in *The Songs of Innocence*, 1789, Blake wrote the text, made the etchings of the text and illustrations, printed, and then hand-coloured the pages and bound the book. An artist's book is concerned to evoke a particular internal response in the viewer. Blake's books seem to do so. The Songs of Innocence represent poetry in a new way which is more authentic to the experience of humans (Drucker 1995:23). Blake's poems tried to describe a deep spirituality that was nevertheless profoundly simple. He rejected the current cultural mores of bourgeois society and the current Church structures to revel in the ability of the individual to experience God directly. This approach to the poetry was mirrored in his handcoloured etchings which were both realistic, and in some sense naïve. The etching and the poetry were meant to be absorbed together, to be simultaneously seen/ read/experienced and so they imitated or reflected the complex way a person could see and read (that is interpret/experience) God in a spiritual encounter. The artist's book of Blake was meant to be experienced spiritually as much as understood rationally or emotionally. Drucker (1995) wrote that, "Blake believed that each individual had their own vision of the world, sense of values, and structure of belief" (Drucker 1995:23). Nevertheless, it can be also argued that Blake attempted to reach out, through his artist's book, to the viewer who may have a different world view and to persuade her to a new vision of the world.

The union of image and text and the idea of self-publishing are both key components of what is considered an artist's book. Blake may have begun the form, but the Futurists, Dadaists, Surrealists and the Constructivists enthusiastically adopted it in the early 20th century. The effect of the artist's book on the art world was significant. Drucker (1995) argues:

That the artist's book is **the** quintessential 20th-century artform. Artists' books appear in every major movement in art and literature...at the same time, artists' books have developed as a separate field (Drucker 1995:1).

While the other movements created work that evolved the artist's book form in some capacity, the Surrealists' contributed significantly to the sensory explorations and the reading of artist's book (Hubert 1988). For example *Prière de Touch (Please Touch),* Marcel Duchamp's collaboration, 1947 (Plate 11).

Please Touch was designed for the catalogue cover of *Le Surréalisme au*, for the *Exposition International du Surréalisme*, — the first post-war Surrealist art exhibition staged in Europe, 1947; and conceived by André Breton and Marcel Duchamp. The cover of the catalogue was a collaboration between Marcel Duchamp and Enrico Donati, an Italian painter. Duchamp designed a three-dimensional foam rubber breast, Donati purchased pre-fabricated foam and rubber "falses" and they painted each readymade to more naturally resemble the female anatomy. Poignantly, Donati recalled a conversation between himself and

Duchamp: "I remarked that I had never thought I would get tired of handling so many breasts, and Marcel said, "Maybe that's the whole idea" (Gough-Cooper and Caumont, 1993). The two were concerned with the idea that the readers would engage with the work in a visceral sense and would have to handle/touch the breast (set on a plush velvet background) in order to get at the text. To further point the reader/audience to the extra dimension of touch in the audiences' experience, the artists added a sticker to the back of the volume, Please Touch.



Plate 11 Prière de Touch (Please Touch), Marcel Duchamp's collaboration, 1947.

Simultaneously, Joseph Cornell, the American pioneer of collage and assemblage, created 'box constructions' of sculpture, collage and assemble from found objects. These 'box constructions' relied on the surrealists' use of irrational juxtaposition of images, text and or words which involved a different way of reading (as detailed in 2.2.1). The reading, akin to *Preire de Touch*, was accomplished through the sense of sight and touch. Hubert (1988:335) refers to Cornell's boxes as "three-dimensional collages or subverted books". For example Cornell's box construction *Mémoires inédits de Madame la Contesse de G.*, 1939 (Plate 12). The round box shows an assemblage of disconnected printed words and letters held together in a small tin. The heteroclite collection of *objets trouves* (found objects) became a new version of the Madame de Genlis memoirs. In deconstructing the printed memoir, Hubert notes that Cornell randomly threw the words on top of each other, "defying all our reading habits" creating "objects rather than words" (1988:335). Cornell's intention of the box construction was intended to be interactive and handled/touched, opened, discovered and interpreted.



Plate 12 Joseph Cornell Mémoires inédits de Madame la Contesse de G., 1939

Nevertheless, although the artist's book had been around for a considerable time, the term 'artist's book' was not codified until the 1970s when it emerged as a recognizable genre. Stefan Klima's (1998:7) *Artists Books: a critical survey of the literature,* presents a critical debate of the definition since the late 1970s. Several other terms are also used to embody the same concept: book as artwork, (Celant 1972); bookness, (Smith 1973); bookwork, (Carrión 1975); book art, (Phillpot 1982); artists' bookworks, (Phillpot 1982); book objects, (Phillpot, 1982); artists books [no apostrophe] (Klima, 1998) Bookscape (Port Jackson Press uses the term). The term artist's book predominates. While Klima, (1998) does not use the apostrophe in the term artists books, Drucker (1995) does and this is the preferred option for this research.

The debate about artist's books became public when Germano Celant, in 1972, curated the first major exhibition of artist's books in London, *Book as Artwork 1960/1970*. The opening sentence of his Catalogue Essay acknowledges that "This essay and list are necessarily incomplete, as they attempt to be a first analysis of books as artworks". Celant (1972) did not, at that time, use the term artist's books, although his entire essay explored the territory. The term was introduced subsequently by Vanderlip (1973), Gallery Director of Moore College of Art in Philadelphia, in the following year. In curating an exhibition of 250 Artist's Books, she stated her criterion for selection in the foreword: "if the artist conceived his work as a book I ...generally accepted his position". Bury (1995) reiterates succinctly the two main points: the book-like object and that the artwork is intended to be art in itself.

Artist's books are books or book-like objects over the final appearance of which an artist has had a high degree of control; where the book is intended as a work of art in itself (1995:1).

The settlement of artist's books into the artworld's consciousness is evidenced by the survey/exhibition: *A Century of Artists Books* held at The Museum of Modern Art, 1995 curated by Riva Castleman which broaden the experience of the book (Castleman 1995). The exhibition reflected an understanding of the diversity of sensory perception involved in the reading of artist's books.

In the catalogue Castleman states the creative bookwork of the artists provided that:

...the book form has become a symbol of a turning point in our culture. Just when electronics have called into question the privacy of possession, these multidimensional creations reaffirm the human need to embrace objects worthy of dedicated attention, admiration and affection (Castleman 1995).

In the 21st century the definition of an artist's book is still debated (Antonetti 2007). On the one hand, Smith (2003:55) declares rather simply "It depends upon intention. If that person declares it a book, it is a book! If they do not, it is not". On the other hand, Ford (1993:4) seems a little less hopeful: "There will never be one precise definition". Hubert (1991:120) thinks that "any definition of an artist's book...becomes irrelevant". Perhaps Tousley (1990:5) offers the best compromise: "There are as many definitions of an artist's book as there are innovative extensions of its flexible form... This mercurial condition... defines the nature of the artist's book".

For the purpose of this thesis I will use the term artist's book to refer to the small installations of Exhibition One, which are small objects held in the hand and turned over.

2.2.1 Reading Artist's Books

A reader uses both eyes (to read the words) and hands to turn the pages of a book. The most ordinary book thus engages at least two senses. An artist's book employs these senses and more to stimulate not only the viewer's engagement but to also encourage the viewer to think about the very means of how we read and so what reading itself might mean. The way the book is presented and structured affects how it is read. The reading itself affects how the structure is seen.

It is generally agreed that an artist's book is neither a book of reproductions of an artist's work nor a book about an artist, but an artwork produced by the artist in bookform with the aim of creating a different kind of reading. Carrión (1975), states "In the new art every book requires a different reading". Carrión (1975) was writing about a new kind of activity involved in reading an artist's book and insisted that, for a complete and accurate reading of the new kind of book, it was vital to understand the book as "a structure, identifying its elements and understanding their function". Carrión wanted readers to be aware of the complete form and structure of the book; a marriage of the external form and an internal text. Drucker (1995:3) described this holistic approach as a selfconsciousness about the book, "which interrogates the conceptual or material form of abook as part of its intention, thematic interests, or production activities".

Exploring the new ways in which artists' books have expanded the notion of the process of reading a book, Phillpot (1988) differentiated between two kinds of reading: 'linear' and 'random'. He sub-divided these into retinal and tactile reading. The former dominates the reading experience (where, readers are accustomed to experiencing text and image in a chronological way with the eye); the latter refers to the sculptural qualities of books, (artistic form and shape), which require both hand and eye for the full experience (Phillpot 1988).

Verheyen (2002) states "The structure determines how the 'book' is read, and influences how the 'reader' interacts with it". Beube (2003) divides the artists' book genre into, 'paginated artist's books' or 'sculptural bookworks' which supports Verheyen's importance of the structure of the book and extends Phillpot's two kinds of readings, linear and random.

The term 'paginated' refers to the act of turning the pages with the fingers. Although the physical book form follows the traditional literary/documentary book, the reading of the paginated artist's book is different. The traditional book is read sequentially from the front to the back cover in a process referred to as linear reading. All the numbered pages are attached to the central spine, the pages are always a rectangle shape of the same size known as 'codex' binding. The content of the pages consist of text or images or a combination of text and images but, whatever the layout of the book pages, the book must be read in sequence, from the beginning to the end, for the story to be understood.

The paginated artist's book is different from the traditional book, which is usually more a container of information. The concept of the paginated book, rather, is driven by the 'physicality' of the tactile values of the different materials to evoke an emotion by the sense of touch. The pages may be textured, folded, decorated, coloured and of different sizes and different materials, from soft delicate tissue, to perspex through to heavy metal. They may also contain visual images and/or text. The page aesthetics are driven by the artist's concept and so will vary tremendously.

One paginated artist's book is Kiefer's *March Sand V*, 1977, which seeks to highlight the tactile texture of the landscape through the gradations of sand glued to the various pages (Plate 11). The artist's concept, which appears to be to highlight the destruction of Brandenburg and the surrounding landscape by Hitler's army, is particularly evoked through the use of local sand.

The book consists of pages of photographs of varying view points of the road along which the army marches, contrasted against the grasses of the local landscape. The twenty-five pages are covered in sand to varying degrees. The sand is densely covered on the front and back pages and decreases towards the centre of the book, where the photographs are more or less sand-free. As the viewer turns the pages, she is connected to the landscape by the rough gradations of sand through the gloved fingers. The change in quantity of sand can evoke the changing landscape as wind blows the sand particles about. The sense of touch, even if muted through gloves, can then assist the viewer to read time and change through the tactile senses stimulated through page turning. Kiefer uses the sand as a physical presence of the landscape, to emphasise the primacy of the land. Nevertheless, the artist's concept is conveyed not only physically but through the mental faculties which are alerted to complex ideas about destruction. The book form is adopted as a metaphor of knowledge and Kiefer hopes that humans will learn from past mistakes and not destroy the landscape (Rosenthal 1987).



Plate 13 Anselm Kiefer March Sand V, 1977: Paginated artist's book

An extension of the codex pagination is the concertina folded book. The concertina folded book pages expand out so that the image is viewed as a whole. The eyes move along the whole image while the hands move in and out to view all the information at the same time. Alternatively, the viewer can select only one part of the image to view. In this way, the concertina folded book highlights the fluidity of time and space; the selective perception of events according to selected framings of time and space are evident when the viewer has control over the total or partial view of the concept. An Australian book artist, Cooper, utilised this concertina folding to emphasise the fluidity of water over space in *Aquabatics* (Plate 12). She employed various media: microscopy (SEM), digital fine prints and the concertina folded book. Even though the concertina fold reflected the water movement, the story was limited because other senses

were not involved. The sound of water playing while the viewer interacted with the artist's book would have enhanced the experience of the water story.



Plate 14 Victoria Cooper Aquabatics 2004: Folded artist's book

Another form of artist's book, but which does not involve turning pages, is sculptural bookwork. These works come in many shapes and forms which can be viewed and experienced through touch. For example, Outteridge's *Territory Markings 1*, 2002 (Plate 13) does not have text but only earth coloured paper shaped into an anthill which reflects the artist's impression of the natural landscape of the Northern Territory of Australia.

Describing *Territory Markings I-I V*, Outteridge (2009) states:

In the Northern Territory, the landscape is punctuated everywhere by termite mounds and ant nests (the locals call them all ant hills). The materials for these castles of clay and sand have been excavated and carried to the surface, particle by particle, by countless thousands of insect workers (2009).

The anthills were a metaphor for the power of nature and landscape, seen in the incredibleorganisationalskillandstrengthoftheinsectworkers, and theiramazing architectural achievements. The sense of power and skill were represented in the strength of colour of the artwork and the complexity of the ripped paper. The spherical pages of the sculpted book were torn from rusted tracing paper which reflected the rugged texture, colour and curved shape of the ant hills.



Plate 15 Adele Outteridge Territory Markings I, 2002: Sculptural bookwork

Whereas Outteridge's bookwork actually took on the form of the landscape, Scottish artist, Lotte Glob took elements of the landscape and formed them together to make a book-shaped object. In an untitled work from 2008, she created a sculptural bookwork from found local materials of the highlands of Scotland to reflect the spirit of place. The found materials: rocks, sediment, pebbles, glass and bones, were fused in a hot kiln and transformed into a sculptural bookwork which reflected the shape of the book referred to by Smith (1973) as the 'bookness' of the artwork.

2.2.2 Artist's Book as Installation

Artist's books involve tactile and spatial responses as well as visual. When they are placed on the wall or constructed in the gallery floor space, however, they can be seen as installations. The artist's book as an installation is a fairly recent evolution.

One such installation was Beube's *Inflorescence: Etymology* 2002 (Plates 14a and 14b). This work of landscape was original in that it tried to involve the viewer in reflection about the ideas of time, and how our understanding of

words (mental concepts) changed and was dependent on the material forces of nature (aging, awareness, and physical limitations). Copies of Webster's Dictionary formed the basis of the boxes which had grass growing in them. The use of the dictionary as the base of the growth was a visual metaphor for the interrelationship of the material and the mental. As Brumer (2002) suggested about the installation, "the roots of all human knowledge have an earthy origin in the tactility of material things". Touch and thought produce new knowledge in the viewer. Here landscape was particular, but changed through time.

The bottom of the boxes had eight one inch pages cut from Webster's College Dictionary placed there. Then earth was poured between the pages. Wheatgrass seeds were planted in the earth. The wheat grass grew to ten inches after being watered each day at the gallery. However, as the wheat grass died it drooped, and the once hidden book pages became apparent. The viewer was invited to push the grass aside by hand to read the dictionary pages. However, the grass only died down periodically, and not every visitor to the exhibition could see the pages. The changing nature of the exhibition, the growth and the decline, is vividly evident and the viewer is reminded that nature is not to be controlled, but that understanding it, and what is 'underneath' it requires time. Time and space are thus central concepts in this landscape installation.



Plate 16a Doug Beube, Inflorescence: Etymology 2002 wall installation



Plate 16b Doug Beube Inflorescence: Etymology 2002: Detail

Artist's books with reference to landscape have been displayed in galleries, but there have also been bookworks located in the landscape itself. For example, Beube's, *Books of Knowledge Standing Up Against the Elements* (1983), was positioned in the back yard where he lived, and allowed the elements to interact and to change the installation itself. Several encyclopedias were hung by rope from a wooden 'A' frame. Buebe states (1983) "These scholarly works, composed of both text and pictures, are metaphorically shaken from their binding by the wind and are blown into the environment". This installation drew on the elements of nature - the wind and the air to arouse the sense of touch in the viewer so that the viewer has a fuller experience of the art work.

A further type of bookwork is installation bookwork, which has similarities to contemporary installations. An installation bookwork involves more than just the sight and touch of hands; it integrates the response of the whole human body as the body moves through the space which surrounds, and is a part of, the installation.

The bodily experience of the artist's book is extended by Fluxus artist, Knowles. For example, *The Big Book*, 1967 (Plate 15), is a 'walk-through' book, an eight foot tall construction moving around a central spine allows the viewer to walk into the pages of the installation to experience the space of the lived world of the artist. Knowles built *The Big Book* as a work of art to be 'lived in' physically and mentally, "a place to contemplate useful and changing relationships" (1968).

The book installation had a front cover and several pages, and a stove, telephone, chemical toilet, art gallery, electric fan, books and other necessities of life. Blurring the boundaries of assemblage, artist's book and installation engages more senses but *The Big Book* experiences the 'lived world' not the natural elements of the earth. To the best of my knowledge an equivalent artist's book of a natural place has not been represented in a 'walk through book' in a gallery, and certainly there has been no artist's book which focuses on the whole sense experience as well as the sense of orientation of the viewer. My bookscape installation, Exhibition Two, therefore, fills this gap as part of this research.



Plate 17 Alison Knowles The Big Book, 1967: Walk though book

In Knowles *The Big Book,* the choice of an artist's book form was made to enhance the viewer's sense involvement. However, many traditional book forms engaged only sight and touch. Indeed, in many galleries the sense of touch was further limited by the imposition of white gloves which must be worn if the viewer wants to make contact with the artwork. Protection of the art is necessary; however, such impositions do impinge on the full sensual exploration, and therefore perception, of a work of art.

2.3 Installation: Privileging the Sense of Balance

In the later 20th century, the development of installation art allowed artists and viewers alike to explore artistic concepts multi-sensorially. The architectural space of the gallery became an important part of the artwork and allowed more senses to be involved; in particular the sense of balance. Balance here refers to the position and movement of the body itself as it walks through and/or around the artwork, rather than standing in one position in front of paintings and/or photographs. Wolseley extended his purely visual artworks by utilising the whole gallery space at the Australian Galleries in his work titled, *Deep time shallow time: Journey from Ewaninga to Gosses Bluff*, 1991 (Plate16). Spectators entered the gallery to make their own discoveries, rather than encounter it as a finite statement of intent. As the spectator entered the room a large, distinctive, blue area was observed at the end of the room. A choice has to be made to turn either left or right. Each wall contained collaged artwork of drawings, paintings, and field work notes pinned directly onto the wall so that the wall acts as the canvas. Physical elements from the landscape site were included on the floor beneath selected artworks. However, although the physical elements were present, they could not be touched and so the tactile senses were not engaged, nor, indeed, were sound or smell.



Plate 18 John Woseley Deep time shallow time: Journey from Ewaninga to Gosses Bluff, 1991

On the other hand, Lloyd Godman exhibited a large (8mx4m) installation, *Planet 1* 1998, which formed in the shape of an elliptical map of the earth. The land area was represented by fragmented C type photographs from various prior projects on photosynthesis. The ocean was represented by fragmented blue text drawn from relevant sources read over the period of the project. The installation was in the middle of the gallery space so the spectator could walk around the art. Here, the gaze was centred downward to the floor and not along the wall as in Wolseley's installation. Again, even though more senses were used that incorporated the body and the eyes, a holistic, sensorial response to place was not achieved.

However, the experience of landscape can be exhibited in the landscape itself instead of the architecture of the gallery. Andrews (1999) describes this later experience of landscape as 'Landscape into Land' otherwise referred to as Earth art, Land art and /or Environmental art. The land itself becomes the artist's canvas or sculpture as the art process moves directly into nature. Robert Smithson moved tons of earth and rock in the American West to create a massive earth sculpture, the *Spiral Jetty*, (1970), involving an expensive team effort (generally termed earth art).

On the other hand, a more ecologically sensitive land work of an individual artist was made by Richard Long. He made art out of walking and so integrated time, place, and the human body as the experiencer (generally termed land art). For example in the artwork, *Walking a Line in Peru*, 1972, he carved a line in the grass by walking repeatedly across a wet field and photographing the track he made.

Both these approaches to 'landscape into land' are a radical departure from making formal objects situated in a gallery setting. If material is brought into the gallery from the natural environment, the installation is called 'non site'. If, however, the viewer has to go outside to the installation, the art work is called 'site specific'. Smithson produced an installation entitled, *Non-Site*, as early as 1968. He collected slate chips from a quarry site in Pennsylvania, to exhibit inside the gallery on the floor space as a 'non-site' installation. The work consisted of a shallow trapezoidal in which the site-specific slates (earth's raw material) were deposited at random. Smithson felt overwhelmed with vertigo at the original quarry site and hoped spectators would respond viscerally and not intellectually to the artist's sense of disorientation which he felt on the original site. The 3D stimulated not only vertiginous responses, but also drew the eyes into random and kaleidoscopic paths of movement and so the response was far more intense than that from a more static and ordered painting or artwork.

For viewers to be able to contextualize and understand the installation, they need to be able to see the original location. Gallery installations and 'landscape in to land' artworks are normally photographically documented and the photographs are exhibited in the gallery. These photographs are essential because of the ephemerality of the land work (Long) and also because of the remoteness of location (Smithson). Photographs, of course, offer a purely visual and two-dimensional focus privileging one sense only: sight. Walkthrough artworks rely on body orientation as an extra sense to holistically experience the work. As Andrews (1999:204) states "Earth art needs to be experienced *in situ*," but because of earth art remoteness and land art ephemerality, this is not the case. The experience is represented in photographs or photographs with text, or sometimes just

text. The spectator is short changed again as sight is privileged and so neither Long or Smithson holistically represent their experiences of the landscape.

Long enjoyed walking for days in the wilderness in all weather conditions, just as Wolseley did. Like the Romantic painter, Turner, who experienced being tied to the mast of the boat to gain realistic experience before he painted *The Snow Storm*, Long also wanted to experience the landscape sensorially and directly. Nevertheless, Long's physical experience was obliterated in the final photographs which reproduced only the visible lines in the ground.

2.4 Summary

This chapter has traced the history of artistic sensorial responses to natural landscapes. Classicism tended to draw on remembered landscapes to recreate them as a backdrop to allegorical studies. Romanticism manipulated the landscapes to convey to the viewer the inner conceptual idea of the artist. Impressionism introduced *en plein air* painting and encouraged artists to paint outside and to convey more vividly the elements of nature which they experienced first hand. The language of painting changed in Modern landscapes to abstract areas and marks of colour; landscapes were portrayed conceptually and two dimensionally but do not convey the specifics of a physical experience of a particular site. Although photography, unlike abstract art, concentrated again on the accuracy of the physical location, it is still restricted to a two dimensional presentation. Collages of landscapes have the potential to visually create an extra sense of depth and texture in the layered artworks but the two dimensional artworks nevertheless privilege sight only.

There is a place, then, for landscape art which tries to represent the reality of the experience of the particular place. A purely visual approach is clearly insufficient, hence there is a need to develop an art exhibition of landscape that renders the individual sense perceptions of the artist. As perceptions involve far more than the merely physical senses, and more than the sense of balance and movement, there is a need to incorporate analysis into the exhibition and focus awareness on the inner subjective responses to reality seen by the artist. In this way the artist is seen to be responding to nature/landscape and nature is not merely a visual expression of a human concept such as a dramatic backdrop. The reflection on that analysis will itself form part of the creative impetus to represent landscape as a thing-in-itself, not merely as a construct of the human.

Landscape and Perception

An analysis of how the artist perceives and then re-presents landscape requires an understanding of perception, of phenomenology, and an examination of the interconnectedness of the individual with the environment. That perception of an object involves far more than the five physical senses has been described by phenomenologists such as Merleau-Ponty (1962) and Rodaway (1994). Phenomenology is useful in explicating the complex interrelationship of the external senses (sight, sense, feeling, touch and taste) and the internal faculties of memory, culture bias and aesthetics. However, it is necessary to look not only at the internal phenomenological interrelationships, but the interrelationship of embodied viewer and landscape. Rodaway (1994) employs the term 'sensuous geography' to express the notion of landscape as something experienced through the senses, but the term also has echoes of the attraction and allure of the place to the individual viewer. The attraction connects and binds the viewer to the location through embodied senses. That experience of connectedness can also be usefully described by Tuan's (1990) term of topophilia (love of place).

This chapter will firstly explore the notion of the inter-relationship of internal and external faculties from a phenomenological perspective and will then look at how that is involved in an embodied perception of the environment which can best be described as sensuous geography.

3.1 Interrelationship of Senses

The interrelationship of senses and internal faculties (memory, imagination, aesthetic judgments, moral values etc.) can be understood through the prism of phenomenology. The phenomenological approach (Heidegger 1927, Merleau-Ponty 1962, Rodaway 1994) refers to the way in which the researcher/artist experiences and understands the world. In this study, phenomenology refers to the intimate connectedness between a person and the world, to form a oneness wherein body and mind are not separate (Merleau-Ponty 1962). Phenomenology involves the understanding and description of external things, such as the geology of the land, as they are experienced internally by the researcher (Rodaway 1994). However, it also acknowledges that perception is not merely cerebral but filtered through a sensual experience (Merleau-Ponty 1962). It focuses not on elements, but on the sensual aspects (sound, smell, touch, taste) of a particular location, to try to understand the gestalt of the place; that is how all parts make the whole (Rodaway 1994). This approach also concentrates on the feeling, character, and ambiance of a place; it considers the richness of mental constructs and associations, and the ability of the place to be remembered over time (Heidegger 1927).

Kant (1760) proposed that human knowledge of the outside world depends on the modes of perception. Perception is normally considered to be based on the senses. The five commonly recognised physical senses; sight, hearing, touch, smell and taste are attributed to Aristotle (350BC). Each of the senses consists of specialized cells that have receptors for specific stimuli. These cells have links to the nervous system and thus to the brain. Sensing is done at primitive levels in the cells and integrated into sensations in the nervous system. Sight is the most developed sense in humans, followed closely by hearing (Mather 2006). To the remaining senses Mather added balance. The following table by Mather (2006) shows the various classification of the senses and how they operate in the human body.

Sense	Stimulus	Receptor	Sensory structure	Cortex
Vision	Electromag- netic energy	Photoreceptors	Eye	Primary visual cortex
Hearing	Air pressure waves	Mechanoreceptors	Ear	Auditory cortex
Taste/smell	Chemical composition	Chemoreceptors	Nose, mouth	Primary taste cortex, olfactory cortex
Touch	Tissue distor- tion	Mechanoreceptors thermoreceptors	Skin, muscle, etc.	Somatosensory cortex
Balance	Gravity, accel- eration	Mechanoreceptors	Vestibular organs	Temporal cortex

Table 1 Classification of the senses: balance isolated as a major sense (Mather2006)

In order to lay groundwork for this study it was crucial to establish parameters to determine sensual responses that could contribute to a greater understanding of landscape.

3.1.1 Sight

Sight is normally considered the preeminent sense for identifying our environment, but it does not operate in isolation. As Rodaway (1994) states:

Sight gives us a synthetic view of the environment as a whole, as a view or a scene, and allows us to differentiate objects in terms of their colour, and texture, shape and form, relative size and arrangement in space (Rodaway 1994:117).

Sightisalways dependent on the physical aspect of the environment; therefraction of light and shade from physical objects, the light from the sun, and of course the subjective visual strength of the viewer. The degree of light and shade can also influence the mood and therefore the attitude of the viewer to the environment.

As darkness increases, sight diminishes and so the perception of a place can alter. The ambience shifts from the cheerful brightness of noon, to a romantic sunset, to the gloom and potentially threatening darkness of evening. This ambience is a product of both the physical sense of sight, but interpreted through the inner faculties which attribute to the darkness concepts of fear and threat. So sight is never a neutral objective reporting but is subject to internal interpretation, but that interpretation is also subject to the elements of time and light.

Moreover, sight is not always reliable. It is not unusual for people to see what they want to see. Confronted by an unclear image the brain composes the factors into something that is known. Thus one can see, often, only what is familiar. The brain constructs, to some extent, what it ostensibly sees objectively. "Sight is therefore both abstract and synthetic. It not only records light sensations but, in conjunction with the brain, composes them" (Rodaway 1994:118).

Sight is affected by proximity of the viewer but also by balance. When the balance is disturbed, vision becomes blurred. For example, if a person sits on a fast 'Merry Go Round', the surrounding landscape is seen as blurred depending on how fast the machine is moving. So sight is connected to balance and also to time and space.

The sense of sight, then, although it seems initially to be a straightforward objective marker of 'reality', is indeed a complex sense. It interacts with the other senses, and with the inner faculties.

3.1.2 Hearing

Hearing has, of course, a largely physical component and requires the vibration of sound waves travelling down the ear canal to strike the eardrum, causing it to vibrate and move the hammer, anvil and stirrup in the middle ear. The stirrup vibrates against the cochlea, causing ripples to travel through the fluid inside. The hair cells detect the movement and send signals along the auditory nerve and into the brain. The brain then makes sense of the signals (Mather 2006). The 'sense' that it makes is, again, like sight, dependent on the complex individual history of the person. Hearing is interrelated not only to individual human psychology, but also to the human's sense of place in the world (Malpas 1999, Rodaway 1994).

Hearing evokes different response in different people. The sound of a crying baby may stimulate milk in the mother, or it may cause a bereaved mother anguish. The cry itself is not neutral but evokes a response in the person which will accord with the individual's history and experience. The sound of waves on a shore may be soothing to the tourist but terrifying to the shipwrecked mariner. Hearing, however, is important for a person's sense of balance and concept of location. Although the human sense of hearing is not as developed as a bat's, humans can identify to some extent where they are because of the distance or closeness of sounds. Hearing is binaural; that is there is one ear on each side of the head. Unlike forward facing eyes, the ears can perceive an all-around sound. This ability to hear 'in the round' is a part of how humans estimate space, distance and therefore their position and relationship to the outer world. The understanding of the world and our relationship to it; that is, the sense of space and embodiment, is intimately related to hearing (Rodaway 1994).

3.1.3 Smell and Taste

These two senses, like the others, are experienced in a wider interrelationship with other faculties. However, they are also closely interdependent and are often discussed together in the technical literature (Gibson 1966, Mather 2006, Rodaway 1994). Taste and smell are interrelated physiologically, and because they function together they are often thought of as a single sense response. As Rodaway states:

Taste always seems to also be implicative of smell, and olfaction plays a key role in finding and differentiating foods. Just as taste always seems to have a smell behind it, so to speak, so smell seems, on closer reflection, to more often than not have a taste dimension (Rodaway 1994: 62).

Taste and smell are interconnected but smell often seems to dominate and the blocking of a sense of smell can block the sense of taste. When walking through a landscape, one is more likely to experience the sense of smell than taste. This dominance is understandable because smell is 10,000 times more sensitive than taste and because the human body can inhale far more air (which is smelt) than the tongue can experience liquid (which tastes). The volumes of molecules are greater for smell than for taste (Moncrieff 1967). Ninety percent of what is perceived as taste is actually smell (Hirsch 2003). That is why the sense of taste is lost when the nose is blocked by mucus from a cold. Like sight and hearing, smell and taste are also triggers for memories, emotions and complexhuman responses. Smellis specifically linked to parts of the brain that deal with emotion. The olfactory bulb (the part of the brain that changes sensation into perception) is part of the brain's limbic system, which is closely associated with memory and feelings, and sometimes referred to as the 'emotional brain'.

Smell evokes memories and odour memory lasts a long time. Odour is associated with experience and a smell can recall the memory; smell is better at this memory

cueeffect(trigger)thanothersenses(ChuandDownes,2000).The'Prousteffect',or 'Proustian memory'is the effect of smell in triggering a memory. The epithet comes from the novelist whose critically acclaimed novel of his past, *The Remembrance of Things Past*, was prompted by the taste and smell of a madeleine biscuit.

When nothing else subsists from the past, after the people are dead, after the things are broken and scattered...the smell and taste of things remain poised a long time, like soul...bearing resiliently, on tiny and almost impalpable drops of their essence, the immense edifice of memory (Proust 1913: 36).

Again, with the other senses, neither smell nor taste are 'neutral' senses but are experienced in accordance with the previous experience, memories, value judgments etc. of the person concerned.

3.1.4 Touch

The sense of touch involves not only the fingers but the entire body. (Montagu 1971). The sense of touch is found all over the body through the organ of the skin which has been referred to as the 'external nervous system' (Montagu (1971:2). The skin experiences sensations such as heat, cold, pain or pressure. These sensations are activated by the nerve endings which are also called touch receptors. The touch receptors send signals to the brain, which registers and then analyses the signals. The brain's role in touch is of primary importance. Although the touch receptors are 'neutral' in discerning particular things as hot, cold etc, the final experience of touch depends on the person's previous experiences, attitudes and associations with the thing touched. We would all jump away instinctively from something that is burning, but individual experience will determine whether the person finds the touch of less dangerous things as pleasant, unpleasant, good or bad. These perceptions therefore affect the aesthetic decisions about how to portray the thing touched. Normally, people think of touch as something that occurs between one's own skin and the external world, but there is also the experience of touch within the human body. Proprioceptors "are mechanoreceptors in muscles, tendons and joints mediating perception of the body position and movement" (Mather 2006:57-8). This perception may be of internal touch as muscles contract or extend, organs suffer inflammation etc. More commonly the perception involves the movement of the external body through space. As one walks, one feels the ground beneath one, the movement itself (see the section on balance below) and the wind, temperature etc. on the whole body. The perception of the elements touching one will obviously vary and change as the conditions change over space and time.

Touch of course, is never something that is purely internal to the person; it is necessarily related to the thing being touched. 'Touching and being Touched' is a termed used by Merleau-Ponty in the Phenomenology of Perception (1962). The hand is always present (touching) but the book is the object that is consciously felt (touched), not the hand. The depth of sensitivity to touch reflects Merleau-Ponty's philosophy that perception is embodied; the lived body and the lived world are all integrated. His phenomenological approach is therefore predicated on the notion of that body-mind integration and not as Descartes (1641) argued, that the mind and body are separate parts (dualism). Consequently, touch is not just concerned with how I feel, but with a person's relationship with the object. The very fact that we touch something reminds the person that we are part of a world, we are interconnected and there can be no distinct subject-object duality.

3.1.5 Balance

It is this understanding of touch as concerned with the embodied person in space that became important for the thesis. Balance is stated as the sixth sense (Gibson 1968, Rodaway 1994). In the sense of balance (also termed equilibrioception), the receptors are sensitive to the forces of gravity (orientation) and acceleration (movement) of the body in the environment which allows humans to walk upright withoutfalling over. The sense of balance is a physical sensory system known as the vestibular system located in the vestibular organ in each inner ear (Mather 2006).

The vestibular system works with the visual system to keep objects in focus when the head is moving, and is called the vestibulo-ocular reflex (VOR). Mismatches between vestibular information and the visual information induce motion sickness, feelings of disorientation, dizziness and nausea.

The sense of balance is holistic because of the complex interaction of several senses or body systems working together; the eyes (visual system), ears (vestibular system), the body's sense of where it is in space (proprioception) and the central nervous system. Thus, balance is not only an 'extra' sense but involves all the other senses; eyes in judging distance and height, skin pressure to 'feel' solidity or space, muscles and proprior ceptors as arms are extended or foreshortened as they feel forward in the dark, and the central nervous system which carries information from all the senses to the brain which then interprets the data. The response to imbalance or balance will, of course also depend in the individual psychology and history. A trained trapeze artist will not find swinging through air daunting, whereas the average person feels fear in mid flight without support.

Perception clearly involves all the traditional five physical senses but balance provides the sense of space, distance and equilibrium/orientation. The sense of balance allows a person to judge distance. Distance is essential in conceiving and framing landscape into a final art work. Any landscape is complex but also extensive; it has no boundaries and literally extends beyond the furthest horizon. To make sense of where one is, the human needs a sense of the overarching distance in order to be able to place limits on what she chooses to concentrate on. The final 'landscape' is a selection from many alternative possibilities.

Part of understanding distance is the ability to see the overall 'view' and thus a general, overall 'mood', which is itself made up of many interrelated aspects. This mood incorporates such things as colour (dominant colours and light patterns), shape (the patterns of hills, trees etc. which make up the overall picture) and textures (themovements across the landscape such as branches and leaves blowing in the wind, light patterns which can create sharp boundaries or dappled effects).

The sense of space is also an aspect of balance. Landscapes are not always static. For instance, on the sea shore the constant movement of the waves creates different spaces between the artist and the sea. New elements in the shore are revealed as the sea retracts or advances towards the person on the shore. As trees wave and bow in the breeze, new perspectives are revealed which may attract the viewer. The eyesight and the body have to adjust slightly to take in these new objects and to focus on them. The sense of balance has to constantly adapt to the environment as it changes (Gibson 1968).

Orientation of the physical body depends on balance. As one moves through a landscape the body has to adjust to prevent falling. Climbing hills requires continual repositioning of the body. The repositioning of the body opens up new ways of seeing, and new ways of experiencing a landscape.

These new experiences also draw on more senses and internal faculties. On one level, reorientation such as bending down to fossick in the sand, for instance, allows a much better awareness of the complex life forms and driftwood on the shore. The mind may then be stimulated to wonder at the glory of the world, or to extended curiosity about a certain aspect of that life. So the physical reorientation develops and enhances the senses of sight and touch. Turning to face or avoid wind opens up new vistas and tactile responses. But, on a deeper level, the re-positioning of the body can make a person far more aware of her own interconnectedness with the landscape. Sitting on the granite boulders literally brings the body into contact with the earth-moulded rocks and enables the body to experience the energy which vibrates through the warm rough contours into the human body. Similarly, wading through water brings an experience of closeness to the elements as one feels the sun on the face and the coolness of the water or the foaming of the waves. Such physical, tactile experiences make one more aware not only of the environment but also of one's own lived experience and therefore of one's own life. The orientation of the body, the progressions through space and through time, brings an experiential awareness and sensitivity to the fact of Being itself.

A concentrated attention to the interrelatedness of senses and faculties in perception can lead to a greater awareness of the person herself as embodied, and so to further reflect on perception but also of one's position in and with the environment. The objective and neutral observer disappears.

3.2 Sensuous Geography

Whatever we call the physical world: geography, environment or landscape, it is clear that any individual's involvement with it cannot be described simply. A person interacts with any environment in a complex way. Rodaway (1994) refers to 'sensuous geography' to describe the complicated but embodied interaction to place. "Sensuous experience is ... often a complex of senses working together offeringarange of 'clues' about the environment through which the body is passing" (Rodaway 1994:25). Rodaway sees perception of a landscape or geography as being understood in two ways: perception as sensation and perception as cognition.

- 1) *Perception as sensation*, and therefore a relationship between person and world, both kinetic and biochemical (here perception is grounded in the environmental stimuli collected and mediated by senses); and
- *2) Perception as cognition,* and therefore as a mental process (here perception involves remembering, recognition, association, and other thinking processes which are culturally mediated.

The consequences of understanding perception as a complex of both these dimensions is really to recognize that we do not perceive naively. Our perception is influenced both by efficiency of our sense organs (which differ from individual to individual) and by our mental preconceptions (individual training, cultural conditioning). In this formulation perception is grounded in sensations which
are a series of environmental stimuli and involves cumulative, analytical and synthetic, processes of the brain, each working together to give us a sense of a world, or geographical understanding. *Perception is therefore a relationship to the world and a decision-making process with respect to that world* (Rodaway 1994:11).

Perception is more than observation and the thing observed, the landscape is already interpreted by the preconceived if unconscious attitudes of the person viewing the landscape. Meinig described this observer bias in his book: "The Beholding Eye: Ten Versions of the Same Scene" (1979:33-43). He states that "any landscape is composed not only of what lies before our eyes, but also what lies within our heads". Different groups both from city and countryside were asked to describe the landscape, and to identify its elements, composition, and meaning. Meinig's ten versions of the same scene (that "stretch of country as seen from a single point" present a comprehensive overview of the range of landscape interpretations that people/humans perceive. There are ten ways he categorises perceptions of landscape: nature, habitat, artifact, system, problem, wealth, ideology, history, aesthetic and place.

'Nature' refers to the romantic understanding from the 18th century, when nature was seen as dominant and pristine and humans were subordinate to its glories; a view which is sometimes still seen in modern Green movements which seek to preserve landscape even at the expense of the human inhabitants. 'Habitat' refers to people working with nature to create a harmonious but domestic environment where humans work with the land to produce crops and farms. In a landscape of 'artifact', technology dominates the world; humans no longer follow natural patterns because they have replaced the world with artifacts. Landscape as 'system' is a modern holistic understanding of humans and nature in a dynamic equilibrium. Landscape as 'problem' refers to the apocalyptic vision where landscape is contaminated and dangerous. Landscape as 'wealth' is the view that land exists as a commodity for the real estate marketplace. 'Ideology' describes how particular landscapes form part of the narratives of peoples: the wild west is emblematic of the freedom of repressed peoples fleeing old Europe to a new life. 'History' sees an environment as a record of human culture. The 'aesthetic' understanding of landscape is of it as merely the cover for an underlying essence of, perhaps, beauty and truth or whatever that particular aesthetic maybe. Landscape as 'place' sees each location as unique with a particular atmosphere which influences those who live there; landscape reflects the community and the culture emerges from that place.

These ten views are not a complete list of observer biases. Indeed, Meinig seems to be writing before the outpouring of literature on the environment as biosystem and self sustaining system as in the Gaia hypothesis (Lovelock 2002). These approaches do, however, provide a comprehensive overview and reveal the complexity of landscape interpretation. This complexity becomes more evident when it is realised that these concepts do not occur individually. The observer usually is influenced by more than one bias simultaneously. The individual's interpretation of landscape is usually a complex synergism of several of these (and other) views.

However, of the most important inner aspects which affects how a place is perceived is the emotional response.

3.3 Phenomenology: Place and Embodied Being

All places and landscapes are experienced individually for we alone see them through the lens of our attitudes, experiences, and intentions, and from our own unique circumstances (Tuan 1990). Indeed Wright (1947) has suggested that "the entire earth is an immense patchwork of miniature *terrae incognitae*" – the private geographies of individuals (Wright, 1947: 3-4). Of more significance are those private places that are set apart from the public world either physically or because of their particular meaning for us. These places may be remembered rather than immediately present. In particular the places of childhood constitute vital reference points for many individuals (Bachelard 1964). They may be special locations and settings which serve to recall particular personal experiences, even though the setting itself may be no part of that experience; thus Dubos (1972:87) writes: "I remember the mood of places better than their precise features because places evoke for me life situations rather than geographical sites".

Or there may be personal places which, in themselves, are the source of some "peak experience" as Maslow (1968) has termed it – that is, an ecstatic experience of pure individuality and identity that stems from some encounter with place. What is important is the sense that this place is uniquely and privately one's own because the idiosyncratic experience of it is distinctively personal. Camus (1959) wrote of his experience of the view from the Boboli Gardens in Florence:

Millions of eyes, I knew, had looked on this landscape and it was still, for me, the first smile of the sky. It put me outside myself in the most profound sense of the word (Camus 1959:70).

Clearly individual preconceptions are important in any view of a place or landscape but there is another aspect of human response to place which is uniquely human: topophilia. Topophilia is an encounter with place that is intensely personal and profoundly significant (Tuan,1990:93). The word is made up of two concepts, *topos*, or place, and *philia*, love. As the name implies, love of place refers much more than merely a response. It includes the internal emotional attachment which people can feel, for instance, to their childhood home.

The chief proponent of topophilia has been Tuan (1990) who described it as:

... specific manifestations of the human love of place, [it] takes many forms and varies greatly in emotional range and intensity, visual pleasure; the fondness for place because it is familiar, because it is home and incarnates the past, because it evokes pride of ownership or of creation; joy in things because of animal health and vitality (Tuan1990:92).

This notion of love of a place and of the special connection between a person and a place leads to further consideration of the intimate relationship of a person and that place. A phenomenological comprehension of place requires an understanding that there is no complete separation between place and person. Humans may think of themselves as unique individuals enclosed and distinct from environment, but humans are interconnected to the natural world through the link in Being. As Norberg Schulz (1980:23) states: "To be able to dwell between heaven and earth, man has to 'understand' these two elements, as well as their interaction". The word 'understand' here does not mean scientific knowledge; it is rather an existential concept which denotes the experience of *meanings.* 'Place' exists in that I can see it, but also as I define myself against it. I am inextricably involved with place by my very being.

Norberg-Schulz (1971:25) states that "to be inside is the primary intention behind the place concept; that is to be somewhere, away from what is outside". In a similar vein Lyndon (1962: 34-35) has suggested that basic to place is the creation of an inside that is separate from the outside: "Being inside is knowing where you are". From the outside one looks upon a place as a traveller might look upon a town from a distance: from the inside one experiences a place, is surrounded by it and is a part of it. The inside – outside division thus presents a simple but basic dualism, one that is fundamental in the experience of lived– space and one that provides the essence of place.

In this regard Cosgrove (1984) has demonstrated that the painterly or scenic sense of landscape fails to comprehend adequately the subjective experience of landscape because it is the view of a detached outsider, devoid of the perspective of what Relph (1976) referred to as the "existential insider". Relph (1976) described existential insideness as that form of insideness "in which a place is experienced without deliberate and selfconscious reflection yet is full with significances" (Relph, 1976:55).

3.4 Scientific and Aesthetic Observation of Place

The preceding discourse has shown how a phenomenological approach tends to blur the distinctions between object and subject, between inside and outside and so collapse the dualities between observer and observed. A scientific understanding may initially be thought to re-establish quite firm boundaries of subject and object: the objective scientist conducts experiments and observes results neutrally. Thus a scientific observation of place would be neutral as opposed to an aesthetic depiction which relies on internal subjective responses. However, few scientists today would maintain such a simplistic distinction. Indeed, a scientific examination of an object can produce the wonder, joy and sense of beauty which is part of an aesthetic response. In this section, I examine the traditional notion of scientific observation, and then explore the interrelationship of science and aesthetics so that I can establish the parameters which guided my choice of aesthetic judgments in the exhibitions. Beauty and truth are not from separate disciplines of art and science, but integral to the complex human experience of place.

One of the earliest scientific views of place has been created by cartographers. Maps aim to represent the exact contours of land or sea masses and the precise distances between them. On the other hand, artists paint landscape to convey the sensuous aspects of the environment. As Alpers (1983) states:

Maps give us the measure of a place and the relationship between places, quantifiable data, while landscape pictures are evocative, and aim rather to give us the quality of a place or of the viewer's sense of it. One is closer to science, the other to art (Alpers 1983:124).

The distinction between the two frameworks can be vividly discerned in the differing approaches of the geologist, Clarke and the painter, von Guérard, both of whom observed the landscapes of colonial Australia in the nineteenth century. Both were captivated by the new science of geology and the uniqueness of the unexplored Australian landscape. Clarke fossicked through the landscape with a geologist's hammer while Guérard expressed the geology and botany of the earth through a paint brush. Both experienced the natural landscape first hand. The fruit of Clarke's observations were written down in scientific journals whereas von Guérard visually painted landscapes which were exhibited at art galleries. Through Clarke and von Guérard the observation of place, scientific and aesthetic introduced the 'unwritten' land of Terra Australis to the rest of the 19th century world (Bluett 2008).

The exploration of a scientific understanding of a landscape which also attracted aesthetically was part of my deepening attachment to a place, and extended my concept of topophilia. The scientific framework views the world as a place of wonder, of curiosity, yet also seeks to analyse the things that are seen. Traditionally, the scientific worldview sees, and then reflects (analyses) what it sees. I saw, was attracted to the landscape and then reflected on why and how I was attracted to that landscape.

The Scanning Electron Microscope (SEM) was a satisfying way of recording and representing landscape for several reasons. First, it was a refreshing departure from traditional observation with the naked eye which could only perceive the external structure. Second, I found my wonder and curiosity deepened and stretched by the new beauties revealed. The geological and plant materials of the landscape placed under the SEM showed a structure invisible to human eyes but which provoked my imagination on a hidden journey into the recesses of the landscape.

Experience remains memorable because it engages the emotions and feelings, and one of these feelings is amazement, awe or curiosity (Heidegger 1927, Inan 2012). When these faculties are involved in an experience, the experience is more likely to be powerful. A simple two dimensional representation of the external bark of a tree, for instance, cannot evoke the intensity of wonder at the glorious richness of living things which is exposed through the microscope. The detailed exposure of the inner structure of the trees by the SEM, I believe, evoked something more than mere external beauty; it aroused that visceral response of wonder which is part of the spiritual and transcendent aspect of humans, and which imprints experiences so forcefully in the memory.

The SEM, rather than the light microscope, was chosen specifically for its aesthetic image qualities. The images produced from the light microscope were two-dimensional, and therefore lacked the depth of perspective that was created by the scanning electrons. The light microscope's magnification

factor was limited by the physics of the light wave length. On the other hand the SEM images, produced by electrons, showed very detailed three-dimensional images at much higher magnification. The SEM produced a variety of beautiful images which created a deeper layer of complexity and this multi-layered complexity reproduced, I thought, the holistic sense of place I experienced.

The study then integrated both a scientific and aesthetic approach of the environment. The scientific incorporated the factual information which was reflected by the map of Magnetic Island. Yet in the SEM photographic images both came to fruition. The application of scientific technology and visualisation via the SEM unveiled a window into a hidden world of beauty and of the more numinous senses of wonder and awe at creation itself. As a physical human being, as part of creation itself, I found that the more I observed the depth and complexity of creation, the more deeply I responded positively to that creation. That response, although mediated through science and external observation, nevertheless drew on the inner faculties, the imagination and the metaphysical faculties which are involved in the formation of aesthetic judgements. A holistic sensorial response to place was created.

3.4.1 SEM and Aesthetics

SEM photography has been used by creative artists such as Fisher, who made black and white images of human biology. Scarf and Gschmeisser hand coloured black and white SEM images of insects and plants. The use of this form of photography has nearly always been confined to pictures on the wall, which privileges the sense of sight only. The photos of the objects had been chosen for their individual aesthetic appeal, and were not distinctive of any particular natural landscape, but rather to attract by their mystery, wonder and symmetry.

However, *Rose Petal* 2007 by Huyett was inspired by the SEM of a rose. The structure of the rose petal visualised through the SEM showed what is normally unseen by the human eye. The rose petal installation was made up of red pipe cleaners from which the 2D SEM was transformed into 3D form. The viewer had to walk down the length of the wall to see the full installation, so the sense of space and time were incorporated, and no other senses were activated. SEM photography by itself is only another technique for the landscape artist, but it can open up new views of nature to enable the viewer to reflect on the beauty and wonder of the natural world.

SEM has been used to a limited extent in the Visual Arts installations involving natural landscape; for instance, the collaboration of Queensland artists, Cooper and Spowart, 2008, *Interior through an Open Door, Bundanoon*. This installation bookwork was the artists' response to the human and natural environment of Bundanoon and the Shoalhaven River. Microscopic images from the river were projected onto the walls of Arthur Boyd's studio. The viewer was encouraged to walk through the space in order to observe the scanning electron micrographs which were transmitted onto the walls. Such a reading followed Phillpot's notion of random reading (chapter 2.2.1). However, the only physical senses involved were sight and balance. It was not clear that the installation was trying to evoke an artist's particular response to landscape.

3.5 Aesthetics: Beauty & Truth

In the last century, academics (Kuspit, Lyotard) considered the idea of aesthetics as beauty to be 'old fashioned'. In particular, Lyotard (1979) thought that art had matured to incorporate political, social and moral comments rather than simply being concerned with an aesthetic of beauty. He considered that concepts of art and beauty were outdated and thought that it was more meaningful for art to make statements about the political and social reality of the day, even if those realities were uncomfortable and unpleasurable. Lyotard saw aesthetics as a negative sign of the immense power of ideas. Art worked on the intellectual and moral level rather than moving the viewer through a spiritual or emotional experience prompted by the affects of beauty.

The term 'aesthetics' was first coined in 1735 by Baumgarten. Aesthetics is the branch of philosophy which deals with the nature of art and of artistic judgement. There are two traditional views about aesthetic judgment; one considers assessment of beauty to be objective, the other subjective. An objective view is inherent in the existence of the material object itself. Objective judgements are concerned with the empirical and mathematical, with things that can be seen and independently verified such as a high tide on a full moon or that two and three make five. Objective truth should produce a univocal truth, one to which all rational people will assent. For example, the objective truth of a mathematical equation, two and two make four, has only one right answer, anything else is wrong or a mistake. Subjective truth has no explicitly right or wrong answers but can draw rationally supported conclusions. The flexible nature of subjective truth allows for personal response and therefore encourages a creativity which is consistent with, and desirable in, artistic endeavour. An objective stance 'sees' the universe exactly for what is visible on the surface, and is a viewpoint free from human emotions, human cultural interventions, past experience and expectations of any result (observable facts). The difficulty with an objective theory of aesthetics is that not everyone agrees on what is beautiful and there are limited commonly-agreed principles for determining beauty. Red roses and picturesque sunsets may be seen by many as beautiful, but certainly not by all people. There is no agreed upon notion of beauty.

Nevertheless, Dutton, in *Art as Instinct* (2010) does maintain that beauty is an objective 'fact'. He rejected the notions that beauty is in the eye of the beholder and is therefore individualistic. Rather, he believed that concepts of beauty are an evolutionary trait inherited from prehistoric times. Consequently, for him beauty is an objective and almost genetically determined 'fact'.

A subjective view, on the other hand, sees beauty as depending on the attitude of the observer/subject. The judgment of taste is based on a feeling of pleasure or displeasure (Kant 1790). People's sense of pleasure is bound by their own experiences of things and their personalities. One way of trying to understand the subjective and varying experience of beauty is through the notion of qualia. Qualia is the quality or the essence of a thing; that which makes it what it is. For instance, the qualia of a classic lover's rose is red or redness. The qualia is not only the 'redness' of red, but the way that redness makes people feel. Qualia goes beyond the purely physical or visually stimulated sense to incorporates other things than sight - such as the scent of the rose and the memory associated with it by the individual. Someone who has been stung by a bee while sniffing red roses may respond quite differently from someone who has only pleasant associations with the flowers. Qualia are, in essence, unique and personal perceptions of the environment (Block 1995, Lyan 1996, Tye 2000). And qualia again indicate the importance of the interrelationship of inner faculties in any perception of aesthetics. Aesthetics is not a simple objective stance but underpinned by complex psychological processes.

Aesthetic judgment of taste also appears to be based on complex psychological relationships. Plato and many following him would consider aesthetics to be predicated on beauty and truth; a metaphysical qualia which is integral to taste and choice. Yet some modern artists would disagree that beauty is essential to aesthetics. They describe what they call an 'ugly aesthetic' (Williams 2010): a representation in art which seeks to evoke in the viewer feelings of repulsion or, at least, uneasiness and discomfort.

For example Hirst's, *Home Sweet Home*, 1996 created a mini sculpture of cigarette butts in a clear glass ashtray, which not only assailed the sight with its ugliness but also the nostrils which were repelled by the stale smell of smoke. Another ugly aesthetic was produced by Kane and Lynch's photographs for a multi media game, titled: *Real Ain't Pretty*, 2010. This was a video which was largely concerned to show in vivid and realistic detail the mauled and beaten face of a person covered in blood. Kane and Lynch were trying to show that the world is a brutal and bloody place. To be true to that understanding, their art had to be visually ugly. Their aesthetic then, was based on their perception of truth, but seemed to firmly reject beauty (Williams 2010).

Nevertheless, I wanted to evoke a pleasant (positive) emotion from the representation of the natural elements of earth as discussed in Milton's book (2006), *Loving Nature Toward an Ecology of Emotion*, and not a negative view of how humans have destroyed/mistreated the natural elements. As I wished to portray my experience, which was positive, so my aesthetic had to have both beauty (a pleasurable experience) to be truthful to my artistic judgment.

This truthfulness, of how accurately and realistically the art corresponds to that which is portrayed, is essential to most artists and underpins their sense of integrity in art. Truthfulness seems to be an essential component of aesthetics even if beauty is not always accepted. Truthfulness in art seems to require both an objective and a subjective component. As Neuber (2009) writes:

The beautiful is not a 'thing' or an 'object' opposing a 'subject' but is the happening of truth; as such, it is not an 'other' but the appearing of the grounding of all (Neuber 2009:36).

What emerges when the dualism of objective/subjective is removed is truth which is in itself an holistic understanding. Partial views can never encompass truth, and truth resides in the intersubjective shadowlands between absolutes of black and white. A recognition of beauty 'out there' by me 'in here' involves transcending dualism into a higher order understanding of being which is part of, and not excluded from, the other. Kierkegaard (1844) in *Concluding Unscientific Postscript to Philosophical Fragments*, argues that 'subjectivity is truth' and 'truth is subjectivity' which means that this is not a matter of discovering objective facts. Although for Kierkegaard the most important element of truth involves how the individual relates to the objective truth (Hong 1975). Subjectivity here refers to what is personal to the individual - what makes the individual who he is as distinct from others. It is what is 'inside', what the individual can see, feel, think imagine, dream, etc, rather than that which is 'outside' the individual, which the individual and others around can feel, see, measure, and think about.

There is thus an overlap between the interrelatedness of senses, of inner faculties, phenomenology and aesthetics, and of an understanding of landscape as topophilia - or sensuous geography. And that overlap is perhaps best described in the term phenomenological aesthetics (Sepp & Embree 2009). Phenomenology refers to nearby things in the world that are experienced in every day life and shaped in action. The world near us, this 'lifeworld', incorporates an aesthetic sense (judgement of taste). Sepp & Embree (2009) state:

Phenomenology analyses phenomena of the lifeworld and the artistic relation to that world; hence phenomenological and artistic reflection are connected insofar as both 'neutralize' the original attitude of experience and practical action in order to focus on its explicity (Sepp & Embree 2009:xv).

The distinguishing factor for phenomenological aesthetics is the inclusion of the human body into the theory of art and aesthetic (Sepp & Embree 2009).

Merleau-Ponty, in *The Eye and the Spirit* (1961), discusses a reversibility between artist and artwork, a network of exchange between body and world. This reversibility seems to refer to an interconnectedness between artist and object wherebythe experience of the object on the artist generates the creative effort which is the experience of oneness and produces the artwork. The artwork is not just an object, but an expression of an experience of being and an experience of affection.

Dufrenne's *Phenomenology of Aesthetic Experience* (1953) is also of fundamental significance for phenomenological aesthetics. Sepp and Embree (2009) state that a person:

analyses aesthetic experiencing and the close intertwining of the aesthetic object and artwork: through its bodily affection, the aesthetic experiencing 'liberates' the motion implied in the work and facilitates the genesis of the aesthetic object (Sepp and Embree 2009: xxiv).

Aesthetic experience, then, involves the bodily response of pleasure (bodily affection) and the rational analysis of this response to an object. It is in the processing through the mind and the body of this relationship to the art work that another genesis of creativity is produced. The viewer's response and awareness of that response is itself an aesthetic experience produced by the artist's initial aesthetic experience which produced the artwork. The generative effect of aestheticaffectthus has a motion of itself and is part of the continuing creative flux.

The pleasurable response from an aesthetic experience seems to be part of this continuing creativity. According to Greenberg (1999), aesthetic experience is a heightened sense experience, separated from all other experience. It is inherently beautiful and affords pure pleasure. This was also the view of antiquity. In Plato's *Philebus*, Socrates states:

True pleasures are those which arise from the colours we call beautiful and from shapes; and most of the pleasures of smell and sound...such sounds as are pure and smooth and yield a single pure tone are not beautiful relative to anything else but in their own proper nature, and produce their proper pleasures (Socrates 360-347 BC).

The concept of beauty also seems to involve the concept of truth. Plato saw it as a means to truth. The apprehension of something as truly beautiful would mean the apprehension of something in its ideal form, and therefore that one had been able to experience something of perfection which, by definition, must be true.

Like Plato, Baumgarten seemed to understand beauty as more than simply a visually appealing thing, but rather as a means to knowledge on a higher plane. However, he did not confine his notions of truth and beauty to the purely mental and abstract level. Rather, in his *Aesthetica* (1750-1758), he described the aim of aesthetics as the perfection of our sensual cognition as such. Baumgarten related the beautiful to the sensuous (non-conceptual) understanding. For Baumgarten

Aesthetics is the science of the sense experiences, a younger sister of logic, and beauty is thus the most perfect kind of knowledge that sense experience can have (Baumgarten p3).

An analysis of how people perceive a landscape involves far more than the five senses. The choices an artist makes when depicting a landscape are based on complex interactions of sensorial responses, psychological predilections, ideological concepts and aesthetic judgments which are themselves based on ideological preferences.

This chapter has explored how the senses are interrelated, and how perception depends on far more the external senses, but also involved the inner faculties and the sense of balance. Movement through time is part of how humans experience place. Humans know landscape through their senses, and their experience then is based on that place; as they are embodied in place so the place becomes part of them. The more we come to know of a place, the deeper our experience of it. The phenomenological approach to perception is not antithetical to scientific observation because the scientific also has an aesthetic which arouses concepts of awe, wonder and beauty which are the human existential response to place. The re-presentation of any individual's experience of place must incorporate these aspects to be adequate to the holistic experience, and how that re-presentation is thought through and understood, will be explored in the next chapter.

Methodology

4.1 Practice-led Research

The review of the literature of the landscape discussed in Chapter Two clearly showed that most artworks privilege sight, even when they are attempting to incorporate more sensorial responses. Yet Chapter Three demonstrated the complexity of the sense involvement in how landscape is perceived. A place, a landscape, is never simply 'out there' to the viewer but is understood by the viewer's physical and imaginative interrelationship with it. Rodaway (1999) refers to Geography as 'sensuous' and to understand that sensuous response requires a phenomenological approach that extends beyond empirical observation to the subtleties of the interaction of physical senses, internal faculties and external places. Phenomenology accepts that perception is not just visual and or objective but a complexity of experience (Rodaway 1999) that involves sensorial experience (sight, hearing taste/ smell, touch and balance) as well as inner faculties (cognition, imagination and curiosity) and emotions (pleasure, awe and wonder) as detailed in Figure 3.

The challenge, then, was to develop a methodology that could explore this intimate connectivity, and to investigate the effect, and therefore the affect, of a multi-sensorial approach to render the landscape of Magnetic Island. A practice-led approach provided the theoretical substructure that had the flexibility and responsivity to allow the construction of a physical methodology that adequately reflected the internal experience of the artist. Practice-led research is compatible with arts-based studies which Leavy (2007) claims is:

... about fusion, affinity, resonance, and above all *holistic approaches to research* from the point of view of the knowledge-building process and the researcher who is able to merge an artist-scientist identity (2007:253).

Practice-led research (also termed 'Action Based' research) has emerged in the social sciences as a qualitative rather than a quantitative paradigm for evaluating what is under analysis (Barrett 2007, Bolt 2007, Leavy 2007 and Sullivan 2010). Rather than gathering concrete numerical data about an object, or creating reproducible experiments as in the positivist methodology, qualitative methods can incorporate subjective responses, nuances of mood and complex individual responses to the thing under observation or study. This methodology is also of use in the arts fields because they can both be considered 'crafts'. As Leavy, in discussion with Janesick (2007) notes:

Qualitative researchers do not simply gather and write; they *compose*, *orchestrate*, and *weave*... moreover, both practices are holistic and dynamic, involving reflection, description, problem formulation and solving, and the ability to identify and explain intuition and creativity in the research process. Therefore Janesick refers to qualitative researchers as 'artist-scientists' (2007:10)

The artist-scientist identity is constructive in this research because it fuses these frameworks that are normally considered antithetical. If the methodology can dismantle dichotomies of science/art; rational/emotional; subject/object then it can more effectively underpin the project that seeks to re-present to viewers the complex interrelationship of internal individual sensorial and facultative responses to an external landscape.

According to Leavy (2007) practice-led research allows the dissolution of boundaries, it privileges neither the positivist, epistemological approach (science) or the intuitive emotional one (art). Yet it can rehabilitate the (in academia) sometime-derided artistic response because it acknowledges the embedding of the observer in the creation of the material observed (or data collected). In addition, a scientific/objective distancing and analysis of the artist's intuitive methods can also enhance understanding of that intuitive approach and lead to a deeper perception and reflection on the interaction of the artist and the environment.

The interpenetration of scientific method (collecting) and artistic interaction with the environment is encapsulated by Sullivan (2010) who claims:

The meanings that artists make from their imaginative investigations are not only *collected* from their encounters with things around them but they are also *created* in response to their experiences (2010 xii).

If this is so then it is really not possible to separate the scientific and the artistic methodologies (Barrett 2007). Arts-based practices are especially useful for "research projects that aim to *describe, explore,* or *discover*"

(Leavy 2009:12). The projects discussed here are described and explored and through that exploration and analysis of the creative enterprise, discoveries made both for myself (of how I understand and perceive the world around me) but also for the wider artistic world were made.

The basic methodological approach used here followed O'Leary's (2004:141) cycles of research (Figure 2) which involved four cycles: observing, reflecting planning and acting and is reiterated through an exegesis/method approach to data collection to present the project.



Figure 2 Diagram of Practice-Led research for exhibitions informed by O'Leary's cycles of research (2004: 141)

4.2 Data Collection: Interpretation and Reflection

Data for the projects were collected from six geographic sites on Magnetic Island (see Chapter One for further explanation of the choice of sites). The six sites provided a variety of types of landscape against which to test a multi-sensorial response of the artist. How do different triggers affect the internal appreciation of a place? What are the similarities and differences of aesthetic choice of representations of different triggers? The data collected included photographs, but also found objects. The reasons for the choice of data can perhaps be best explained by a description of the process whereby I selected photographic views and objects from the *Mangrove and Salt Flat* site.

When I first entered this site, I was overwhelmed by a positive sense of connectivity to nature. My body was physically in contact with three essential elements: the rich mud of the earth, the cleansing salt tang of the water, the delicate but evident feeling of air in the breeze on the skin. To document that location I chose to frame the photograph to include an area of sky, the earth and the sea. I had never previously been in a mangrove, and there was a definite feeling of awe and wonder at the huge aerial roots. That roots grew out of the sea, sometimes covered and sometimes uncovered by the tide was, to me, extraordinary. I became aware of the emotional internal sense of awe and the immensity of the natural phenomenon was part of what made me focus more intently on the mangroves. I looked more closely. The visual senses were profoundly activated by my awareness of this unusual natural phenomenon. Thus after photographing the general scene to record the three elements, I zoomed in to take close-ups of the roots and then the leaves whose inner physiological workings provoked such wonder. I visited the location at different times of the day to photograph the site under changing tidal and light conditions.

However, it was not simply the sense of sight that determined the data collection. All the senses had been stimulated: hearing was activated by the sussuration of the waves, and the sucking sounds of water in mud; the taste buds tingled with the tang of salt. The skin felt stimulated on many levels: the sun, the salt and the air on the skin, the gritty sand squelching beneath feet and between toes, the lapping of water around the ankles. Everywhere there was movement; of wind in the trees and the ebbing of the tide. The latter was most evident from the bobbing of nuts and twigs along the water. I was reminded of the sense of balance as I moved through the site and observed

things moving against, towards and away from me. My emotional responses to these physical stimuli were extrinsically involved in choosing data.

In order to capture the essence of these physical responses, I gathered several different nuts and leaves from the site. The different textures and shapes elicited thattactile sense as well as having iconic representative meaning for the site itself. However, the selection of data to be used in the exhibitions was a long process. Not everything taken on the day was utilised. Between collection and selection I read several botanical books on mangroves and deepened my knowledge, and my wonder, at the ability of these trees to flourish in such seemingly difficult environments. I also took many SEM photographs of the leaves to further explore their mystery and beauty. As I experienced the sensations of beauty and mystery, I found again in myself that sense of oneness and deep peace with nature that I had experienced immediately on the first visit to the site. This heightened experience of unity was, for me, what I could describe as a spiritual experience.

Thus my aesthetic and spiritual sensibilities were stimulated by the deepening of intellectual or rational knowledge. The final choice of leaves for the exhibition was based, then, not only on their ability to evoke a tactile response, or on their iconic and representative appearance as standing for 'mangrove' but also because of what touched me deeply and gave me a similar experience of unity or oneness that I first experienced when I visited the site. The final choice was not objectively determined, but was made subjectively. I would also assert that the final choice of objects to re-present the experience were not made purely from aesthetic reasons, although decisions about positions of objects, framing of photos etc. were made, in part, for aesthetic reasons. Rather, there was a selection process going on which involved an inner response to something, and that inner response brought together the present response to the object, but also the memory of physical sense response, and aesthetic and spiritual response to the place. When those two responses, the present and the remembered, matched, I selected the object that elicited that conjunction.

The methodology involved more than simply identifying sensory stimuli and the complexity of perception; it involved a careful reflective practice of observing myself as observer, and of theorising these responses as the installation was developed. The very juxtaposition of objects in the studio (a practice) was itself an essential element in the creativity of the process, and that reflection on the creative process produced the structure that underpinned the project. As the exhibitions unfurled, new knowledge was produced which was instrumental in the production of design for the next exhibition. The transformation of the disparate materials, through the interdisciplinary lens of scientific and artistic approaches, inner faculties, emotions, and experience led also to a transformation in the artist herself so that I emerged with new knowledge about my own experience of place as detailed below in Figure 3.



Figure 3 Process of the artist's new knowledge gained from a phenomenological perspective

New knowledge was discovered though ponderances of perception; and how it intersects with the frameworks of experience over time, emotions and inner faculties within the boundaries of landscape and sensorial experience. Perception of landscape is a sensorial experience in which all the senses are interrelated as discussed in Chapter Three. The interconnection of the artist with the natural landscape is analysed by breaking down personal perceptions into three frameworks; experience over time (objectivity), emotions (subjectivity) and inner faculties (in between objectivity and subjectivity) as illustrated in Figure 3.

Experience unfolds over time and brings about new objective knowledge in both art and science. Art knowledge was experimented with using a variety of media to represent the different geographic landforms through the following workshops:

- artist's book making;
- photogravure, polymer plates which included additional skills in intaglio etching;
- digital fine printing;
- rusting, a surfacing process;
- ceramic techniques;
- sound recording.

New scientific knowledge was gained through exploration of the SEM. The SEM was used for the intellectual exploration of the microscopic world that created a deeper understanding of nature by the visualisation of the internal structure of plants. Also, botanical literature by Jackes (2003) and Sandercoe (1990) and long walks with geologists Morgin and McConnell, extended the knowledge of plants and geographic landforms on Magnetic Island. Experience over time increased the familiarity of the art and scientific knowledge, which deepened the artist's intimacy to the landscape. The detail of the new art and scientific knowledge are detailed in the Appendices A and B.

The emotions are subjective experiences in perception as discussed by Milton (2006). The subjective emotions experienced by the artist were pleasure, awe and wonder, which created my topophilia - an intense involvement and love of a place, Magnetic Island.

The inner faculties' framework is in between objectivity and subjectivity. The inner faculties consist of the thinking processes mediated through culture that includes cognition (knowledge acquired), imagination (creative part of the mind, aesthetic judgement) and curiosity (desire to know something).

The phenomenological approach blurs the boundaries between objectivity and subjectivity as discussed in Chapter Three. Figure 3 shows how the artist is connected to the landscape and the importance of experience over time to develop new knowledge. The innterconectivity of the artist with Magnetic Island is reflected in Merleau-Ponty's (1962) statement "I belong to myself while belonging to the world". The individuality of the artist is represented by the small dark triangle encompassing all the complexities of perception that created the new knowledge.

The exhibition process sought to show how time and space were necessary constituents on the body moving through a landscape and that time altered

the perceptions. Time allowed reflection on the practice, and on the initial experience. The methodology for the whole thesis therefore had to reflect the intrinsic nature of time in this process. For this reason three exhibitions were held to convey the differing perspectives that reflection produced.

The continual review of the practice, which in turn produced reflection and new practice, was itself analogous to the interaction of the artist and the environment; the engagement with the landscape produced a creative practice that was examined and meditated upon to create a new practice. The cyclical nature of the process indicated also how the subjective and objective interwove. The human viewer is both an integral part of the landscape but is also, through reflection, able to consider and ruminate on engagement with the landscape. There is a blurring of boundaries as the subjective/objective line dissolves, as shown in Figure3.

The artist's book medium, with its diverse opportunities were chosen to present the data because they allowed an holistic sensorial perception – touch, smell, time etc. They incorporated the scientific SEM and Type C photos as well as the personal artistic paintings, etchings, and creations. The fusing of techniques, processes and media was an integral part of the point of the overall exhibition. But each artist's book installation was different and so the process involved in each will be described and analysed separately in the following chapters through exegesis discussion.

The highlighting of detail in the creative process emphasised the reflexive nature of practice-led research. Whilst this process may appear tedious it teases out the emerging structure of an artist's response to a multisensorial artistic method.

Exhibition One: Sculptural Bookwork Installation

Titled: Encapsulating an Environment: Magnetising the Isle

As a consequence of my project methodology, this chapter describes and analyses the first exhibition. The choice of location and the catalogue and invitation are provided, and then an analysis of the success and shortcomings of the exhibition are outlined. This first exhibition was not intended as the end product, but as a means to explore and verify the hypothesis that a multisensorial re-presentation could be achieved through visual means. As has been expressed in Chapter One, analysis of the exhibition lead to two further exhibitions. The reasons for the shortcomings of the first will be explored through a close examination and comparison of two installations. For full information about the description and processes of the whole exhibition, see Appendix A.

5.1 Sculptural Bookwork Installation Overview

The geographic character of Magnetic Island as shown in Figure 1 was represented by six sculptural bookwork installations, titled as per location; *MountCookRidges,LowerGraniteHills,WestVolcanics,CoastalLowlands,Mangrove and Salt Flats,* and *Coral Sea Fringing the Shoreline.* Initially, the aim was to assess the sensorial specificities of the place and re-present them to the viewer. Accordingly, I identified the following characteristics. The visual experience of the Mount Cook Ridge's location was dominated by a diversity and clarity of colours; the blue tones of the sky and sea, and the green tones of the vegetation. In the Mangroves and Salt Flat's location the dominant experience was tactile with the gritty texture of the muddy-sand felt through the fingers and bare feet. While neither sight nor touch were dominant at particular locations, both senses were stimulated as described in Table 2. Additionally the sense of hearing was strongly stimulated in some locations by ocean sounds and wind in the trees, while the senses of smell and taste were also notable in various locations.

Each sculptural bookwork installation consisted of two parts: a 'wall picture' and a 'sculptural bookwork'. The first part, 'wall picture', consisted of one component, hung on the gallery wall and the second part, 'sculptural bookwork' was made up of two components: an artist's book and a container. This 'sculptural bookwork' was placed on a plinth, distanced away from the 'wall picture' to form the installation.

While the 'wall picture' privileged sight and the 'sculptural bookwork' privileged touch, and though touch is important, the immediate response to a place was nevertheless visual (Andrews 1999, Cosgrove1984, Porteous 1990, and Rodaway 1994). One was initially attracted by the appearance of the landscape and so the installations were dominated by the large wall pictures. These pictures, along with the artist's books, were mosaics of scenes of the locations, and the individual pictures were developed through microscopy, photography, print making and painting to reflect the variety of locations on Magnetic Island. The images on the wall, removed from the viewer's touch, could only be experienced visually and spatially or, as Rodaway (1994:130) states, through "the eye of the detached observer". Thus, the viewer is separate from the artwork on the wall as with, for example, the artworks of Turner(1842), Snow Storm, Williams (1968-1969), Yellow Landscape, Snow's film, La Region Central, Steichen (1904), The Pond Moonlight, (1971)Wolseley (1994), *Coupe X Rainforest*, as previously discussed in Chapter Two. The 'wall picture' varied with the number of images. For example the *Mangroves* and Salt Flats (Plate 20) displayed a complexity of 36 images which covered a wall space of 180 x 200 cm as compared to *West Point Volcanics* (Plate 19) which contained three images and covered a wall space of 28 x 27 cm. As the 'wall pictures' varied so, too, did the shapes and complexity of the artist's books and containers. For example, the artist's book in *Mount Cook Ridges* (Plate 15) was sewn with a complex stitch, 'Coptic' binding, onto perspex pages as compared to unsewn paper pages in *Mangrove and Salt Flats* and *Lower Granite Hills* (Plate 18).

Fully accessible to touch, the artist's books encouraged the viewer to participate and interact with the pages of the book just as one fossicks in the landscape itself. The sense of touch is experienced all over the body through the skin organ referred to by Montagu (1971:2) as the "external nervous system" but the strongest sense of touch is experienced through the fingers because they have the highest number of receptor cells (Mather 2006). The differing sizes shapes and textures of books stimulated a more conscious awareness of the sense of touch in the viewer, as in the artists'

books by Kiefer (1977); *March Sand V*, Outteridge (2002), *Territory Marking* 1, and Cooper (2004), *Aquabatics*, as previously discussed in Chapter Two.

The sculptured boxed container of *Coral Sea Fringing the Shoreline* (Plate 22) was a complex, precisioned, perspex box with compartments connected to the lid. In contrast to the perspex box, the fabric container wrapped around the artist's books in the *Mangroves and Salt Flats* sculptural bookwork was flexible. The fabric container was not a pre-determined form and the form changed as it was handled by different viewers; the flexibility and protean shape-changing nature of this book was meant to evoke notions of the plasticity of experience, and of how location affected individuals and individuals were affected by the location.

The 'wall picture' extended and interconnected with the images in the 'sculptural bookwork'. For example, non-tactile image content within the 'wall pictures' was reflected in tactile images within the sculptural bookwork. It was intended that the contrast of the untouchable wall hanging would elicit a greater awareness of the touchable artist's book and so enhance the viewer's conscious awareness of two senses involved in perception; the visual and the tactile. When choice and inclination are encouraged, the perception of something is likely to be more memorable (Chu and Downes 2000).

Table 2 summarises the components and materials used in each of the installations and the affect on the senses as perceived at each Magnetic Island location. The table also provides a summary of the fundamental processes used to develop each installation while details of specific processes and materials used are provided in Appendix A.

Geographic Locations of Magnetic Island	Sense Emphasis	Installation Components	Materials	Processes
Mount Cook Ridges	Clarity of colours, blue & green. Duller colours in shadow sheoaks.	<i>Wall picture</i> 2 sections	Paper: Smooth- photographic Textured-inkjet	35mm film photography Type C prints - Digital prints
	Juxtaposition of ground & sky on the steep walk	<i>Artist's books</i> 1 artist's book Codex: coptic binding	Transparent perspex	35mm film photography Type C prints Collage
	Reflected the height & clarity of Mt Cook ridges	<i>Container</i> with lid	Transparent & mirrored perspex	Sculpted & carved
Lower Granite Hills	Heavy granite boulders Cool & warm browns Wind swept hoop pines: Images curled of wall	<i>Wall picture</i> 1 section	Paper: smooth, medium & rough texture	Liquid light Van dyke brown Painted with sand, black ink & Kapok flower
	Reinforces comments above but the images were touched.	<i>Artist's books</i> 4 Loose pages	Same as above plus Hoop pine needle & granite flakes	Same processes as above
	Feel heaviness of the granite boulders Green colour-hoop pine	<i>Container</i> Box with a lid	Bottom: clay Lid: hoop pine wood & a granite handle	Bottom: copper oxide: Incised drawn lines Impressions from hoop pine needles & nuts Lid - sculpted
West Point Volcanics	Sense of motion, lightness & air	<i>Wall picture</i> 3 sections	Paper: inkjet medium texture	35mm film photography Digital prints- Photoshop
	Yellow-green colour of Helicopter trees & Broad leaf bottle Grey- volcanic stones	<i>Artist's books</i> 9 folded 5 single pages	weathered stones & sticks thread	Same as above but printed on both sides of the paper
	The open vessel structure of airiness	Container Basket/vessel shape with no lid	Wattle wood	Carved- sculpted
Mangrove and Salt Flats	Inner structure of the red & grey mangrove leave. Curiosity of what the eye cannot see	<i>Wall picture</i> 2 sections	Paper: smooth, medium & rough texture	Etching: polymer plates intaglio & relief SEM-digital photography Rusting
	Muddiness & saltiness Movement of nuts & flowers amongst the mangrove roots.	<i>Artist's books</i> 3 Folded 1 wrap around codex 16 Loose single pages	As above: plus Tracing paper	As above: plus Lustre ink Copper plate: crackling, marbling, spirit aquatint
	Sand & rust of mangrove roots	<i>Container</i> Wrap around	Cheese cloth	Rusting
Coastal Lowlands	Sunset colours: mauves, magentas & ochres of Bloodwoods & Morton Bay ash trees	<i>Wall picture</i> 2 sections	Paper: inkjet smooth medium & rough texture	35mm film photography Digital prints-via Photoshop
	As above: plus the atmosphere of the full moon-soft blues & green	<i>Artist's books</i> 1 loose pages 1 with covers	Clay covers -2	Same as above but printed both sides Raku glaze
	Broken vision seen by walking through the trees.	<i>Container</i> Box with a lid	Gum wood	Sculptured wooden slates
Coral Sea Fringing the Shoreline	Glare of the sun	<i>Wall picture</i> 1 section	Canvas	None: natural texture
	Forceful movement of tidal water. Blue colour of the sea and sky	<i>Artist's books</i> 2 codex, exposed sewn bindings	Paper Shells, seaweed & coral	Cyanotype Photograms Vandyke brown
	Movement: box sides fell down as the lid was lifted	<i>Container</i> All in one. The lid and bottom attached	Transparent perspex	Sculpted

Table 2Overview of the six 'sculptural bookwork' installations of MagneticIsland's research locations

5.1.1 Installation Photographs



Plate 19 Mount Cook Ridges: Sculptural Bookwork Installation and detail



Plate 20 Lower Granite Hills: Sculptural Bookwork Installation and detail



Plate 21 West Point Volcanics: Sculptural Bookwork Installation and detail



Plate 22 Mangrove and Salt Flats: Sculptural Bookwork Installation and detail



Plate 23 Coastal Lowlands: Sculptural Bookwork Installation and detail



Plate 24 Coral Sea Fringing the Shoreline: Sculptural Bookwork Installation and detail

5.2 Presentation and Choice of Gallery

The exhibition of six places on Magnetic Island was displayed in Pinnacles Gallery, in 2004, Townsville. There were six installations around the room, and on one wall was a map of Magnetic Island (Figure 1) which showed the six different landforms which the artist represented in the 'sculptural bookwork' installations. The map was visually manipulated in Photoshop from Sandercoe's (1990) scientific study of the vegetation of Magnetic Island. Sandercoe's scientific division of landforms was reinterpreted phenomenologically by the artist.

This particular gallery venue was chosen because it was a small room with a single entrance. As there was a single entry point, the viewer's attention and perception was immediately centred on the installations. The smallness of the room was intended to focus the viewers' senses: sight, touch, hearing, smell and taste. The viewer's sense of sight was stimulated by the 'wall picture' which lead the eyes down to the 'sculptural bookwork' to trigger the sense of touch. Even though all 'sculptural bookworks' were different it was assumed that, out of curiosity, the viewer would explore the contents with fingers and then fossick through the 'sculptural bookwork' as one does in the natural landscape. The sense of hearing was stimulated by the sound of ocean waves played in the background to re-create the aural atmosphere of Magnetic Island.

In order to activate the sense of touch, the viewers had to be encouraged to do so. The very first thing the viewers saw was a sign (Plate 23) describing the intention of the exhibition, and instructions that urged viewers to wash their hands so that they could handle the exhibits. Many visitors to galleries are hesitant to touch exhibits and, indeed, are strongly discouraged from doing so. In places where they are supposed to handle material, they are normally required to wear white gloves. These gloves insert a thick barrier between the item and the tactile senses. Therefore the sensory input to the individual is reduced.



Plate 25 The sign

Inorder to overcome that difficulty, this exhibition actively encouraged viewers to touch by giving them the opportunity to wash their hands in an almost ceremonial manner (Plate 24). This rite intended to help the viewer to feel 'purified' and therefore more able to touch what is, under other circumstances, forbidden.



Plate 26 The ritual table to wash hands

The table on which the elements for hand washing were placed was covered in cyanotype tablecloth which reflected the different tonal patterns of the waves of the sea. On the table were two bowls, two jugs, a larger glass vase and paper towels. The two jugs contained clean water which could then be poured into the bowls which were periodically emptied by the gallery staff. A supply of paper towels was available for drying hands. The gallery staff monitored and maintained the table.

This ritual washing had a strong advantage because people did handle the exhibits, not simply touching them, but opening, closing, turning things around and folding the books. Such intense physical manipulation would be impossible were the viewers restricted by white gloves.

5.2.1 Invitation and Catalogue

The invitation (Plate 25) and the catalogue (Plate 26) intended to reflect the atmosphere of the island and to encourage the viewers to come to an experience rather than simply to a viewing of landscape. In order to create such a unique invitation, the artist collaborated with a Townsville graphic designer Cerutti. The artist made the overall design and Cerutti translated this design into the graphic language as detailed in Appendix A. Both the catalogue and the invitation were designed to encourage the curiosity of the viewer as well as their sense of touch. Both had to be physically unfolded to find the information. Both had external representations of the landscape of the island to unfold the attractive wrappings. As the 'wall pictures' extended into the sculptural installations, so the concept of the exhibition extended into the appearance and the format of the invitation and catalogue. If perception is a holistic experience of the individual, then this thematic continuity and holistic appeal to the viewer was an essential element in the design of these products (Merleau-Ponty 1962).



Plate 27a Front (left) and back (right) of the small invitation



Plate 27b Invitation opened : The sense of curiosity

The catalogue was a single sheet of A3 paper, printed on both sides and folded down to A4. The outside of the catalogue was a composite of colourful photographs from the Mount Cook location which contrasted against the inside which contained black text on white and small SEM images from the mangrove location (as detailed in Appendix A). The Mount Cook pictures were chosen above the pictures from the other five because the clarity of blues, greens and gold were stunningly visually attractive and so were thought to entice the viewer.



Plate 28a Front (left) and back (right) of the catalogue



Plate 28b Catalogue opened

5.3 Comparison of *Mangroves and Salt Flat* and *West Point Volcanics* Installations

The exhibition was successful in many ways, and certainly enabled a more involved engagement by the viewer than a merely visual presentation would have achieved. However, there were limitations and those limitations only emerged, or could only be articulated, after the exhibition was set up.

Perhaps the easiest way to define my sense of incompleteness of experience is to contrast two of the installations: the *Mangroves and Salt Flats* (Plate 20) and the *West Point Volcanics* (Plate 19). Although the *West Point Volcanics* installation presented a tactile display of the rugged volcanic area, it was not as complete or as accurate an expression of my sense, my experience of the place as was the *Mangrove Salt Flat* installation.

5.3.1 The Mangrove and Salt Flats Installation

Of all the installations, this was the most satisfying to me as far as reproducing the complex involvement of my senses and mind. When I came to analyse why it was satisfying, it became clear that this installation involved the complexity of perception as illustrated in Figure 3. However, this involvement could be characterised by several different things: the period of time involved in participation in the environment, the time engaged in study of the site, and the use of SEM technology to investigate the internal structure and beauty of the mangroves. These three areas can be explained in connection to the wall work.

5.3.2 Mangrove and Salt Flats Wall Picture

This wall picture was, in comparison to *West Point Volcanics*, clearly more complex and abstract. This complexity arises not only from the extensive amount of time I spent there, but also the detailed investigation of the site which I revisited over three years and under many different lights, seasons and times of day. When I came to portray the visual I was not restricted to one image, but had a host of images in mind. The mangroves had become a harlequin of images which engaged and intrigued me by their tonal variety of colours and shapes.

My understanding of what I was looking at also deepened considerably over time because of the study in which I engaged. I read Betsy Jacke's, *Plants of Magnetic Island*, and so my understanding of the science which underlay these fascinating plants grew. This academic knowledge, rather than killing the sensual appreciation, actually stimulated and encouraged a deeper appreciation of the wonder for these plants and thus of my affection for them. Study over time lent a closer love of the specific site.

In addition, the use of SEM technology to photograph the parts of the plant that were invisible to the naked eye produced a surprisingly deep and visceral delight in the beauty and, again, curiosity or wonder, of the plant. This sense of wonder was part of what the engagement evoked.

What engaged me so much? First, the sheer physical manipulation of the technology involved an integration of intellect and art. The scientific mind is not antithetical to the artistic, but the integration of the two requires activation of both hemispheres of the brain. That in itself is a fuller stimulation of the person. The photography produced through SEM revealed the secret inside world of the plants which I found beautiful and stimulating. This stimulation was created through the aesthetic senses, but also something akin to wonder.

Wonder, or curiosity, is defined by Inan (2012) as a desire to know, discovery into the unknown. The word 'discovery' highlights the motion into, the involvement of the mind (and therefore the senses) in the unknown subject. Curiosity stimulates a 'desire' to know further, to engage more deeply and so is integral to deep experience. For me, this curiosity was stimulated even further by the use of SEM technology which allowed the discovery of both the inner and the outer domain of the plants. Thomas McFarlane (1997) describes how experience of an object involves both the inner domain "through our inner faculties of apprehension ... conceptual cognition, imagination, and intuition" and the outer domain: "our sensory faculties of apprehension, i.e., vision, hearing, touch taste and smell". This dual engagement of my domains was more stimulated by the conscious awareness of the two domains in the living, physical organism I was trying to re-present.

5.3.3 West Point Volcanics Wall Picture

By contrast to the abstract design of the mangrove wall picture, which tried to express the complexity of the sensual and facultative engagement, the *West Point Volcanics* wall picture was purely naturalistic. Although there are three images printed at three different densities to evoke the lightness of the Helicopter Tree, (*Gyrocarpus americanus*), I found that the final result was not

as involving as that of the mangroves. Although several shots of the tree had been taken over a few sessions, only one was used for the final wall picture. Thus what was shown was a snapshot in time, and thus it lacked the detail and the depth of something that had been closely observed over many years.

In addition, the naturalism of the image seems to me to be less engaging. Whereas the almost abstract SEM images entice the eye to investigate what it may be, this image is so readily identifiable that it is easily seen and dismissed. The familiar can be forgettable or taken for granted. Thus the more abstract, rather than the more naturalistic, appears to have some involvement in a more multi-sensorial and facultative response.

5.3.4 West Point Volcanics Sculptural Bookwork

The wooden sculpted vessel contained a conglomeration of small rocks/ stones/coral and sticks collected from the West Point Volcanics location and were inter-mixed with numerous miniature artist's books. The miniature artist's books, made of paper, were intended to represent the light leaves of the trees which overshadowed the rocky environment. The fifteen books were printed with naturalistic pictures of either leaves or rocks from West Point Volcanics location. The number of pages and the size of the books and stones varied to reflect the different-sized elements in nature.

This bookwork was clearly tactile and naturalistic. It sought to portray the sharp roughness of the volcanic area and I believe it does so. The use of found objects, agglomerate stones and burnt or petrified wattle, gave a visual and tactile experience. The heaviness of the objects (which people were encouraged to handle) was a very distinct difference to the softer cloth and paintings of the other sculptures. The very tactility of the work would seem to evoke a very accurate sense of the location. However, although the perception of sensation was evoked, there was no perception of cognition and, as Rodaway (1994:p11) claims, both these perceptions are necessary for a deeper perception of the world.

5.3.5 *The Mangroves and Salt Flats* Sculptural Bookwork

The flexible, ochre coloured cheesecloth container consisted of two pieces. The cloth was coloured by the rusting process and intended to evoke the sand and rust of the roots of the mangroves. Shapes could be discerned beneath the fabric
but were not clearly visible. The viewer's curiosity was essential to provoke the viewer to unwrap the bundle and touch and move the objects within it.

The fabric container consisted of a concertina book, two folded artist's books, a wrap-around book and fifteen loose pages. The visual images varied from SEM images of the Red and Grey mangroves at different magnifications similar to the 'wall picture' with the addition of abstract images produced from copper etching plate as detailed in Appendix A.

In comparison to the *West Point Volcanics* sculpture, this bookwork was not at all realistic. Nevertheless, I believe it represented a more truthful reflection of my fuller experience. Thistruthfulness or adequation to the felt experience came about because, I surmise, it was not naturalistic. As with the abstract wall picture, this sculptural bookwork aroused both domains of perception because of its relative lack of familiarity and because it was not immediately apparent what it was. The viewer had to handle, unwrap and examine the SEM images. The SEM images referred the viewer back to the wall picture, and so involved the viewer more clearly in tracking patterns, making connections and so stimulating the mind.

In conclusion, the naturalism of *West Point Volcanics* does not seem as successful in deepening perception of place. Although there is a wealth of literature about abstract and naturalism in landscape, there is little about these distinctions in representing place. Abstract expressions of experience, viz Rothko (Stella 2004), have shown the power of this art to re-present inner states. Fred Williams,' *Yellow Landscape* (Chapter Two) is an abstract evocation of the heat of fire as it sweeps through and obliterates landscape. The intensity of the experience can be perceived in a meditative viewing, and this experience is arguably deeper than a purely naturalistic display would have been.

This sculptural bookwork draws on that tradition of abstract 'truthfulness' to experience, butbecause it also involved the engagement of the tactile and olfactory senses, I argue it provided an extra dimension of truthfulness to the experience.

5.4 Conclusions of Exhibition One

Exhibition One was never intended to be complete in itself, but to be an exploratory work to assess, through practice-led methodology, the degree of adequacy it provided for the re-presentation of the artist's experience.

Although the tactile senses were clearly included, by washing the hands and being able to finger the sculptural bookworks, and the inner senses were evoked through the curiosity aroused by having to unpack some of the sculptures, I nevertheless felt the exhibition was not totally satisfactory.

The comparison of the two bookworks: *Mangroves* and *West Point Volcanics*, revealed that the more pictorial and realistic images were less able to re-present my sense of curiosity and wonder which I experienced. Rather, the more abstract depiction seemed to convey more closely those inner responses as far as I could see.

In addition, the positioning of the artworks on the walls relied too much on the purely visual senses, and it seemed to me that the sense of movement through the landscape was not strong. In essence, there remained a subject/object feel about the whole exhibition which I found unsatisfactory for my aims. Examination and reflection over time lead me to design the next stages in the exhibition, and to those I now turn.

Exhibition Two and Three: Bookscape Installations

Titled: Magnetic Island: Aesthetic Pleasure and Scientific Curiosity

The previous chapter dealt with sculptural bookwork installations of Exhibition One which represented Magnetic Island through the combined senses of sight, touch and hearing. However, these three senses alone did not fully represent a multi-sensorial experience of landscape. Thus, Exhibitions Two and Three were created to activate all the senses, with the addition of the sense of balance (Rodaway 1994), to engage the whole body into the artwork to deepen perception of place. Exhibitions Two and Three represented the natural location of the coastal Casuarina trees on the foreshore of Magnetic Island through 'Bookscape Installations'. Both Bookscape Installations consisted of a walk through an artist's book which emphasised a wholebody experience as detailed in Appendix B. Exhibitions Two and Three were similar, but held in different gallery locations; Exhibition Two in a small confined space as compared to Exhibitions is discussed in chapter 6.2.

6.1 Exhibition Two: Bookscape Installation Overview

The artist's book structure was set up as a bookscape installation to better express the experience of the coastal Casuarina location as a multi-sensorial art form. Artist's books traditionally were hand held and experienced through the eyes and fingers and so did allow a more tactile response than the purely visual. However, I found this insufficient to convey the holistic perception of a place. Nevertheless, I believed that Artist's book's could provide a medium that allowed a physical representation of the internal understanding of perception.

As has been described earlier, perception involves not only physical senses but the inner faculties of imagination, emotion and feeling over time. A book involves the reader in an exploration of the world, through the inner faculties, over time. For booklovers, the very smell and feel of the pages is also a part of the journey into the author's mind. Exhibition Two, then, was designed to imitate, in some ways how the reader walks through and explores the ideas page by page. In this exhibition, the art works were hung on giant canvases to allow the movement of the viewer through the 'pages'. The viewer physically became involved or integrated into the text, through the senses of balance, stimulation of the physical senses and the evocation of the sense of curiosity and wonder. This exhibition sought to show that reading could be done through the body, not just through the eyes. The very notion of what constitutes reading, therefore, was extended from the visual and rational to the existential and phenomenological.

The perception of the art was dependent to some extent on the body's movement through the works themselves, and the whole exhibition was constructed to help the viewer reflect on the experience of visual perception as an act of reading. The floor space, walls and ceiling were part of the artist's book experience, and became the container of the whole. The structure of the bookscape reflects the 'Codex' style of the traditional book making process: the ceiling symbolised the spine where the pages, in this case 'hanging pages' (Plate 28), were attached. The end walls contained pale blue images and became the end papers of a book. The floor became the 'foredge' of a codex book; that is, the pages opposite the spine which the reader must open to read the book. In the installation, the viewer stands on the floor (foredge) and decides whether to turn right or left into the room. By walking into the artist's book the viewer is then inserted into the book as a finger is inserted into a real book (Plate 27). Traditionally a codex book is placed into a slipcase to protect it. In this exhibition, the physical boundaries of the room, floor, walls and ceiling provided the slipcase for the 'hanging pages'. The very act of walking bodily through the artist's book helped to deepen the perceptions of the works, and in some ways mirrored the way we read: the experience of the book relies not only on the visual perception, but the attention of the whole body (often in stillness rather than motion) but also the engagement of the internal faculties of memory, imagination, reasoning and wonder. The intensity of the involvement of these inner faculties correlates to the intensity of the experience of reading.

Exhibition Two intended to increase the involvement of the inner faculties of wonder, curiosity and imagination by integrating images from a Scanning Electron Microscope, (SEM) with a Digital Fine Print process. Thus the exhibition integrated a scientific and an aesthetic (see chapter 3.4) response to the coastal Casuarina trees. The SEM produced delicate, three dimensional, tonal, abstract images of the Casuarina bark, while revealing the individual structure of the species. The digital fine print process reproduced the clarity of the delicate tonal qualities recorded by SEM onto textured watercolour paper which was not possible through the traditional photographic process. The visual images were digitally manipulated repeatedly, printed vertically and flipped through Photoshop onto six composite pages which hung from floor to ceiling and were referred to as 'hanging pages' as detailed in Appendix B.

Each 'hanging page' consisted of twelve separate sheets of paper, constructed four across and three down. The images were printed on both sides of the paper but always interconnected to the one above, below and adjacent which created a pattern as a whole but a single image also had its own importance. The viewer walked through the 'hanging pages' and was exposed to the visual diversity and the abrasive texture of the hangings which imaged an experience of walking through a grove of trees on the foreshore. Unlike artist's book exhibitions which engage only the visual sense and which can only be touched with white, gloved fingers, this was a holistic experience of a natural environment; but it was also based on vivifying the artist's book into a mock living organism. The viewer thus walked through a book that was a picture of a living tree, and was encouraged to perceive that virtual experience by 'reading' the response of her own multiple senses.



Plate 29 Exhibition Two: Bookscape Installation: Walk through artist's book



Plate 30 Exhibition Two: Bookscape Installation: Moving hanging pages



Plate 31 Discovery (curiosity): Looking through the symmetrical images.

The tactile senses were evoked through not only touch but feeling. Sand was spread over the floor and people were encouraged to take off their shoes and walk on it. The grittiness of the sand underfoot helped stimulate awareness of the body, and a fan circulating air helped to create waves of coolish breeze on the viewer's skin. Ungloved hands were free to touch, unwrap and explore the items on display. The sense of smell was aroused by the air wafting through the dampish sand-sea smells that evoked the ocean.

As the viewer moved bodily through the hangings, feeling sand under feet, smelling the scent, feeling the brush of air, the inner sense of curiosity, wonder, and awe were also, I hoped, stimulated. I had tried to present a bodily integration for the viewer, an integration of the viewer's internal and external senses as she/he explored the exhibition. This integration could only be achieved through a bodily walking through the exhibition; that is, by the movement of a body through time. That in itself mirrors the experience of life, as the human body moves through life. Curiosity, I discovered, was one of the means to explore this worldview. If curiosity is the 'discovery of the unknown', a journey into the unknown, then curiosity is here more deeply simulated by the physical journey, the stepping into the inner workings of the plant visibly detailed in the hanging pages.

So, body, place, time and space are integrated and are all involved in the integration of perception. Merleau-Ponty writes:

I am not the spectator, I am involved, and it is my involvement in a point of view which makes possible both the fitness of my perception and its opening out upon the complete world as a horizon of every perception (1962: 303-4).

This second exhibition, I believe, allowed this widening of perception because it allowed the involvement of the viewer holistically in the exhibition. The importance of the viewer in that perception becomes, however, even clearer, in the analysis of Exhibition Three.

6.1.1 Presentation and Choice of Gallery

The exhibition took place in Umbrella Studio Contemporary Arts in Townsville in August, 2006. The gallery space was a small room (3m x 3m), to enhance the senses (Plate 30). The construction aimed to make the viewer feel engulfed and part of the installation rather than viewing the art from a distance. All the senses were engaged: visually, the blue painted walls reflected the colour and texture of the sky while the blue micro images, 'hanging pages', reflected the colour and texture of the sea. The sea was also heard through the sound of the cross currents of the ocean while the 'hanging pages' moved and fluttered in the breeze produced by a fan.

The floor was covered with natural elements collected from the Casuarina's seashore location of Horseshoe Bay to enhance the experience of feeling the sandy shore. The floor consisted of wet, tidal sand to stimulate the sense of smell; Casuarina bark, nuts and needles were mixed together with SEM images of varied sizes to enhance the tactile quality of elements found while fossicking in the sand at the foreshore. Viewers were asked to leave their shoes outside the gallery space to allow them to feel the different textures through the feet as well as through the hands. The ceiling reflected a soft white light, to symbolise the cloudy effect when the sun passes under a cloud and creates soft shadows. A white scrim was constructed to the height of the ceiling which diffused the light throughout gallery (Plate 31). All senses were thus engaged in the representation of the experience of the coastal Casuarina environment, to create a multisensorial artwork.



Plate 32 Exhibition Two: Gallery venue



Plate 33 Exhibition Two: Support structure for the hanging pages and speaker

6.1.1.1 Invitation and Catalogue

Invitations and catalogues were individually created by the artist to extend the holistic experience of the bookscape exhibition. Most invitations to gallery openings are commercially produced. This mass production means that there is less affinity with the artwork. Indeed, the standard size of invitations and their envelopes reflects the fact that it is merely a vehicle for information and not a medium to evoke responses and sensorial reactions to a specific exhibition. The invitations to this exhibit, however, were individually made and so each invitation was unique and encouraged the viewer to begin to respond individually to the installation even before arriving at the gallery.

The visual images for both invitations and catalogues were printed on the same A3 inkjet paper used for the 'hanging pages' in the bookscape installation. The paper was printed on both sides. 1000 invitations and 100 catalogues were patiently doubled printed, hand cut and folded into three by the artist. This tactile involvement also deepened my sense of the interconnectivity of my ideas, thoughts, and bodily re-presentations of the art works which enhanced the feeling of the interconnectivity between the artist's whole experiences of involvement. The aesthetics of the bookscape installation extended to the invitations and catalogue through blue hues, the texture of the different papers, and the design elements of the flaky bark and Casuarina nuts (as detailed in Appendix B) that were all part of the bookscape installation experience.



Plate 34a Numerous designs created in blue tones



Plate 34b Invitation: Sense of curiosity

The catalogue had six different SEM images cut into three strips to make eighteen different variations of the catalogue. The SEM images were the same images exhibited in the installation. The text about the artwork was printed on the back of the image in the same colours as the invitation: three hues of blue and the capital letters were made in drop shadow at the commencement of a new paragraph.





BooksBookscape Installation

Magnetic Island: Karen Landt-Isley Aesthetic Pleasure

> This exhibition is designed to challenge both our expectations and our senses. Traditionally we have expected that a book, even an artist's book, will offer a linear experience; we have expected it to engage primarily our sense of the visual. Karen Landt-Isley tilts at the boundaries of these expectations in creating this

Her dominant artistic focus is on the complete sensory experience; for her, the involvement of each

exhibition.

and Scientific Curiosity

Plate 35 Catalogue

6.2 Exhibition Three: Analytical Comparison to Exhibition Two

The third exhibition took place in Vincent Gallery at James Cook University in 2007, see Plates 34a and 34b. It arose out of a request from a viewer who wanted to see it in a larger space. Consequently the 'hanging pages' were moved to one part of a large room in the gallery. This exhibition was primarily a replication of the preceding one except for the different factor of space. This larger space opened out the 'hangings pages' so that the viewer could walk between them without crowding at all. Some viewers told me that they found this third display better than Exhibition Two. However, I found that the larger space was disappointing in that I do not believe it adequately re-presented the experience of the place.

The six 'hanging pages' were suspended from the ceiling and were placed 1.5 metres apart. The floor was covered with wet sand and with Casuarina nuts and small SEM images. However, due to the enhanced room size, the area of sand was diminished and in fact only covered certain parts of the gallery space under the hangings. Because there was so much 'other' floor space available, people had a tendency to avoid the sand entirely and walk only on the clear floor space. As the room was open, there was no encouragement, as there had been when people were forced to enter through the door of the space in Exhibition Two and to remove shoes. Thus, the viewer had less chance to walk on the sand and so to experience the feeling of sand underfoot, or even the smell of sand created from the disturbance of it by people walking. In addition, there was no place to position the fan (which had been used in Exhibition Two) and so there was not the strong tactile sense of breeze on the skin, or anything to move the scents in the room about the place. Nevertheless there was some limited movement in the hangings because of the air conditioning and people moving within the space.

The larger space of the gallery required a change in lighting. Now there was directional and strong lighting which created shadows on the floor and seemed to convey accurately the moving pattern of light on the sand.

One interesting observation was that, because the hanging pages were more spread out, people seemed not to go up close to them. Indeed, some stood back and viewed the whole exhibition at a distance, and did not engage with it at all. This distance to the artworks meant that the intricacy of the detail in the SEM images was lost. Without the visual enticement of the abstract images, it is not clear that the viewers could explore the curiosity and wonder of the works. The wider distance people gave to the art works seemed to reduce the entire sensorial reception to the visual again. I speculated that the sense of perception of an object was actually diminished when a viewer had an opportunity to survey and apprehend the entire work. By contrast, in Exhibition Two the viewer had only an initial sectional view of the artworks through the frame of the doorway. To perceive further, to really engage, one had to enter the door and walk through into the exhibition which then assailed the senses in many ways. Thus, it would seem, that the partial perception actually stimulates some of the curiosity that encourages a deeper engagement with the object. At a distance, possibly convinced that one has 'seen it all' the viewer is less inclined to delve further. So perhaps one could argue that, when the visual perception is fully privileged (clarity of light, overall apprehension of the object) then the fullness of perception is diminished.

In a purely visual appreciation, there seems to be a greater sense of subject/ object. The object was glanced at, and then more quickly dismissed. Judgments based on little but visual evidence may not pierce to the full understanding of the object at all. Perhaps it is only when the subject/object distinction is collapsed that the object can become better known. Humans may need to bodily engage with a physical other in order to actually 'know' in any meaningful sense of the word, what that object is. The question then remains whether that object is really an object or is, at least in part, a projection of my bodily perception. These questions will be pursued in the conclusions.



Plate 36a Exhibition Three: Bookscape Installation at Vincent gallery in a larger space



Plate 36b Exhibition Three: Bookscape Installation with the artist at Vincent gallery

Conclusions

This research intended to explore whether a multi-sensorial re-presentation of the natural landscape provides the artist with a deeper perception of place. The project endured over many years and one of the main advantages of this length of time was that it permitted reflection and reconsideration of the underlying concepts which premised the art work. The importance of the fourth dimension of time into the three dimensional art works cannot be over emphasised. The experience of a place deepened with time, and that experience could only deepen because time allowed reflection and analysis of the component parts.

The research aimed to explore whether a holistic sensorial approach was helpful in deepening the experience of place. The outcome suggests this is so; and that the analysis of the distinctive components of perceptions (physical and facultative) was an essential first step in being able to find meaning in the whole experience. Yet this meaning emerged not only from the analysis itself but is also a product of time. If human beings are meaning-making creatures then it appears, from this research, that time itself is an integral part of that meaning. The meaning of an experience, these exhibitions showed, cannot be perceived or apprehended immediately and completely, but the meaning emerges over time.

Meaning is produced when patterns are formed out of fragments. The putting together of the exhibitions was a putting together of fragments of sensorially-perceived objects, shaped and framed by responses to them at the first time of seeing, but also formed, sculpted and re-touched by the reflection and reconsideration of the experience. The reflection on the various experiences, sculpted into the single shape of the exhibition provided 'a' meaning. However, there is not one experience but a series of experiences over time. The three exhibitions were then three meanings, three ways to render this artist's response to natural landscape. This thesis, then, is another drawing together of these component parts of the exhibitions to find a fourth meaning of the experience of that initial engagement with landscape. Indeed the thesis is a holistic drawing together of physical senses, inner faculties and emotions experienced over time (as detailed in Figure 3) to provide a far deeper perception of place than I would have otherwise had from any individual exhibition. Certainly then, if multi-sensorial representations of landscape are taken to mean all the senses and human faculties, then just such a re-presentation did deepen this artist's perception of place.

In some ways, I see the landscape more clearly because of knowing it and naming it. The botanical and geographical study allowed an identification of what I saw. The naming of something involves a relationship; a direct contact with something and so the sense of connectedness is deeper.

However, I see the landscape more clearly because I am conscious of the complexity of ways I see: how the quality of air accentuates colour, how distance is altered by atmosphere, how the position of my body affects the framework through which I even see the landscape. So the sense of sight is enhanced, but because I am so aware of the integral nature of the senses in perception, then sight, although heightened, does not dominate my view of landscape.

The long study of the senses has heightened my consciousness of how I experience landscape. Although I was always engulfed in, and enjoyed, the immersion in the landscape, it was an inchoate perception, and therefore one I could not articulate. However, awareness of how smell, taste and touch are part of perception actually allows me to be more interconnected to these senses when I am in landscape, and so my response to landscape is deeper because I realize I am connected to it in many more ways than I had previously imagined.

The analysis of the plants and trees by name, by electronic microscopy, by the feel of them, and the scent and the shape of them, brought about a profoundly deeper knowledge of them in their individuality. As I became more aware of the diverse ways of knowing about that individuality in my single person (my individuality), then I (as artist and individual) seemed to connect and merge with the landscape (the perception involves, then, the artist, the individual and the landscape). The physical sensing then leads to a more profound metaphysical understanding of landscape and viewer as ontologically one. The metaphysical awareness, the mental cognition then, in turn, provokes a stronger awareness of the physical similarity in being. It seems to me that the most effective way of re-presenting my ever deepening understanding and experience of the landscape on Magnetic Island was to use an artist's book rather than a 2-dimensional painting.

Artists' books, because of their flexibility and fluidity, allowed the representation of a holistic sensorial response. The literature review of other artist's works in this area inspired me (Aim 3), but also revealed the limitations of many of these works. Artist's books cover an enormous spectrum of artworks, from variations on codex and paginated forms to living installations. Yet, although these art works aimed to extend the viewer's involvement beyond the purely visual, the full inclusion of senses was rare. Although touch was encouraged, most galleries insisted on white gloves so that the tactile response was diminished. Few involved other tactile senses, such as wind on skin, let alone the sense of smell or hearing. Most artist's books to date have not necessarily been related to a specific landscape, even less to the fully sensorial response to that landscape. Marching Sand V (1977) by Kiefer for instance, although referencing a specific location was primarily concerned to utilize the place to present the artist's ideological understandings of the historical events which occurred in that place. In that way, it was a response to the idea of history in a place rather than a response to the physical landscape as such. Following the research, I determined it was necessary to extend the artist's book into installations, which I have termed Bookscapes, because traditional artists' books, as stated above, had limited sensorial re-presentation. These bookscapes allowed the penetration of the body, movement over time, to enter 'text' and so to read the landscape in a way that the 'author'/artist had seen it.

In Exhibition One the reader/viewer could wash hands to allow the fingers direct contact with the different textures of the landscape presented in the six installations. The smallness of space tried to re-create the sense of intimacy and connectedness. The hearing was stimulated by the sound of waves. The separation of wall and plinth in each installation encouraged the viewer to move physically through the space, encouraging a more existential relationship with the space over the time taken to view the exhibition.

The second exhibition was in a confined space which forced viewers to walk through the re-presented coastal Casuarina trees of Magnetic Island (Aim 5). The artist experienced the closeness of the branches against skin, the scent of the trees and the feelings of breeze, the sound of waves. This was reproduced as fully as possible. The closeness of the reader to the artworks and the ability to leaf through the 'pages' physically with the whole body, allowed the viewer to enter into what could be described as the 'headspace' of the artist. Perception, this research showed, involves the complex rational, imaginative and sensorial experiences. Reading, which makes meaning of the experience of another, also involves this complexity. I believe then that this exhibition most fully extended the possibilities of bookscapes into a deeper re-presentation of the artist's view, and also helped viewers become more aware of their own existential responses to an environment.

The subjectivity of individual response to an experience cannot be univocally replicated, but it can be helpful to enable people to become more aware of the role of subjectivity in their perceptions of landscape. The third exhibition was not as successful, from my point of view, in re-presenting my experience because it did not replicate some of the subjective experiences which were an essential part of my perception of landscape as a positive encounter. My perception and experience of Magnetic Island was one of beauty, security, well-being. These positive responses had to be replicated in the aesthetic choices made in the artworks. By and large this was achieved.

However, in the third exhibition, this sense of security, or closeness and integration was absent because of the much larger gallery space. The opening up of the artwork, encouraged by a viewer, meant that the hanging screens were presented at a distance to the viewer and so failed to reproduce my perception of connectedness and integration. It seemed to me that I became again an external viewer of the work and not a participant in the landscape.

However, several people have commented that they thought the third exhibition was "more successful". They had felt 'claustrophobic' in the second exhibition, and they could appreciate the beauty of the hangings better at a distance.

Now, perceptions are neither right nor wrong, but it would seem that space, whether cramped or open, can be identified as an integral component in the response to landscape. As I said, I felt that the third did not adequately represent my experience. The others thought otherwise. However it is not clear whether they were basing their assessment on concepts purely of aesthetics, (the cleaner lines of the third exhibition had a more classical aesthetic which is more appealing and therefore 'more successful' to some people). Possibly, they were basing their sense of claustrophobia on their own level of comfort. Appreciation of anything is surely greater when one is comfortable and not feeling claustrophobic and constrained.

It was not clear to me whether they had appreciated that my aim was to represent *my* experience, and not *an* experience. My experience required, for authenticity, that the viewer was surrounded by hangings which were literally in one's face. But what I could not convey in the physical medium was that this closeness is, to me, profoundly comforting, intimate, peaceful and wholesome. Certainly this research has shown me that my concepts of a 'beautiful' landscape involved a sense of physical integration and oneness. The truth of my experience of beauty is then, a dissolution of the subject/object division and an awareness of the holistic nature of all senses.

Those internal responses which are the deepest level of responses cannot be conveyed, as far as I am aware, through physical media. At the most, some viewers who have already had similar experiences of positive feeling in the close embrace of a forest, may respond in a similar way to me. However, I doubt whether I could invoke my response in others, particularly if for that individual claustrophobia was particularly strong.

The third exhibition did, however, confirm my initial hypothesis that purely visual depictions could not evoke a multi-sensorial response. In the wider space, viewers kept a greater distance and did not approach the hangings, walk on the sand, experience the scent, feeling, or crush of the hanging. Nor could they see clearly the SEM images. Without the detailed vision, seen only in part as the body moved through the hangings, I believe the viewer could not have a grasp of the totality of the experience I tried to re-present. The fuller, panoramic vision which allowed an overall snapshot in a single glance was, to my mind, less representative of the object. By contrast the second exhibition, which provided only partial views at different stages, aroused the inner sense of curiosity and reasoning to work through the meaning of the whole for the viewer at different stages of the viewer's experience. Perception, it seems to me, is not something that can be immediately grasped through the faculty of sight, but is only fully known through an active engagement of the inner and outer senses over a period of time.

Art, nevertheless, although a representation of the artist's inner landscape, can never impose on all viewers a particular experience. The perception of anyone is influenced by too many diverse inner faculties of memory, taste, and experience. The responses of viewers to the third exhibition, which differed from the artist's, seemed to confirm that any re-presentation will be only partially perceived by the viewer. The re-presentation of landscape is of the artist's perception, and so in that sense the landscape is personal and therefore to some extent not perfectly communicable. The landscape is never an object in itself, transparently available to all. Nature/landscape is not 'out there' but to some extent is what our inner senses project onto it. Nature/landscape is part of us and we of it.

This inner connectedness with nature was portrayed most effectively through the use of Bookscapes as installation, through which the viewer physically walked. Moreover, I believe the interconnectedness of viewer and nature was also well re-presented through the adaptation of SEM photos. The use of cross disciplinary technology (Aim 4) was validated. The hangings which exposed the inner structure of the bark stimulated not only the sight, but aroused the inner faculties of wonder and curiosity at this rare glimpse into the unknown aspects of a commonly seen object. And the sheer physical beauty of the photographs was, to me, a further cause of wonder and delight in the glories of creation of which I was a part. The view of nature could not be seen without the adoption of scientific technology. The technology is itself the external physical expression of human inner vision. It allowed me to portray physically the innerness of a plant and so stimulate the inner faculties of the human viewer. The cross-disciplinary media thus highlighted the interconnectedness of outer and inner, the holistic nature of perception and underlined the oneness of creation, which is my fundamental response to landscape. Another layer of this internal experience was attained, I believe through the SEM technology.

The three exhibitions showed that space, time and reflection are essential to provide the artist with a deeper perception of place. Space is also clearly important to how we perceive, but again individual responses to it cannot always be anticipated, and the artist may try to persuade viewers to see something through an artist's eyes, but art will only ever be able to persuade and not to impose ideas on another. Thus this thesis has clearly shown to me that art is limited in depicting perception. My exhibitions and the thesis deepened my perception of landscape, but also showed that what I could re-present was not universally understood in the way that I experienced it.

Time, I discovered, was essential in understanding and deepening a perception of place (Aim 2). And so the final decision to present three exhibitions allowed me to show the transition of ideas about landscape as my own understanding deepened. Although I attempted to re-present an experience known at one time in the past, that experience was never hermetically sealed in an inner room in my mind. It was subject to the ebb and flow of other ideas and learnings. The experience itself does not change, but the understanding of it does.

The three exhibitions were necessary for the project as they physically depicted this inner process of change. They also gave me the physical space and time in which to reconsider, and therefore look at more deeply, how I even responded to place. Although the initial response when I first went to the island was positive, this initial response could not be articulated. It took physical time to think through how I experience things in order to be able to name that experience. And again, naming experiences and naming what I could actually see, was helpful in deepening that experience. Reflection on what worked and did not work in the first exhibition allowed the construction of a new and then a third exhibition.

Time changes things, and perceptions. Time is fluid, and in some ways the change and the growth as the exhibitions looked at the landscape in different ways mirrors this fluid and artistic process itself. Art is a process, the weaving of media together to reflect an inner vision of an external something. Art is a reflective process, and in seeking to reproduce an internal experience, it seemed appropriate that the exhibitions did vary. Experience itself is not static but memories can be plastic as they are buffed and shaped by time and experience. So, the thesis as a whole, which included the three exhibitions, has manifested to me the necessity for reflection and time in deepening awareness. It has also physically then portrayed or depicted the very process by which art is produced.

7.1 Ways Forward

This project has implications for future research, for the development of artist's books and for curating protocols. This thesis, which has made manifest the practice-led research method of reflecting over time, is itself continuing to influence the present and therefore this artist is more aware of the present perceptions. Artistic experience is not just aesthetic response but is the response of a body in a place, over time.

This project has already had practical outcomes and impact. I was asked to give a presentation at the 7th International Small Island Cultures Conference at Whitsunday Islands in June 2011. I maintained that repeat tourism cannot occur if the tourists are not engaged with the landscape. Tourists' appreciation

can be enhanced through a phenomenological perspective; art which engages holistically can deepen experience, and so, from the tourism perspective, it can lead to enhanced quality of visits. It is not just the art works themselves that are the result of the research - although they could also function as part of the tourist's engagement in the landscape, but it is the principles which have emerged from this project which are of value to the tourism industry: if people have their senses engaged fully in a landscape then their awareness and experience is enhanced. If the quality of the tourism experience can be enhanced, then there is room for the expansion of the tourism industry.

I was also invited to give a presentation to an international conference of scientists and medical imagers, entitled, *Celebrating the Diversity of Photographic Imaging* in Melbourne 2005, whereby I showed how an artist used a scientific tool for creative purposes. Yet the results of such photography, I maintained, were not purely aesthetic but a way of enhancing understanding and finding meaning in the image. The interdisciplinary fertilization of science and artist formed a more holistic awareness of the object and so deepened the interaction of viewer with it through the engagement of the senses.

This thesis, then, has contributed to the literature of art by providing an analysis of a lived experience of perception over time in a certain location. The emphasis on the multi-sensorial nature of the re-presentation has provided added insight into how the artist perceives, how this perception may be expressed better to others, and how this perception may have benefits for other industries and people involved with dealing with landscapes. The writing of the thesis/exegesis has lead to a re-reading of landscape, a rereading of the artist's books as installations, and a re-reading of my own understanding of my senses and of perception. The thesis has, I believe, more than achieved its aims; it has shown how these three- dimensional works require involvement of all the senses including the sense of balance and, more importantly, require the fourth dimension of time. A landscape is a lived place. It is not simply seen and recorded; it is an existential experience.

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Appendices

Appendix A.

Exhibition One: Sculptural Bookwork Installation

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A1 Mount Cook Ridges



Plate A1 Mount Cook Ridges: Sculptural Bookwork Installation

A1.1 Location

The vegetation of the Mount Cook ridges is typical cool climate vegetation which grows 300m above sea level and consists of Cabbage Tree Palms (*Livistona Austrails*), Forest Casuarina (*Allocasuarina torulosa*) and Grass Trees (*Xanthorrhoea johnsonii*). Cooler temperatures provide a favourable location for Cabbage Tree Palm and Forest Casuarina (Sandercoe 1990).

The photographic images of Mount Cook ridges (Plates A2 and A3) were visually powerful because of the strong contrasting colours created by the tropical sun at an elevated height. The piercing light of the higher plateaus provides clarity of colours: the blue of the sky, the myriad greens of the grasses and vegetation and the turquoise blue of the sea. The colours in the landscape were striking and dominated the artist's perception.



Plate A2 Mount Cook Ridges: Visual sense data



Plate A3 Mount Cook Ridges: Visual sense data
A1.2 Wall Picture: Visual Sense



Plate A4 Mount Cook Ridges: Wall Picture: Visual sense

The 'wall picture' (Plate A4) consisted of eleven images which were separated into two sections. The first large section on the left contained seven images of brightly coloured and realistic representations of the vegetation on Mount Cook collaged together to form one composite image. The second section, to the right, was composed of four separate, horizontal images in sombre brown tones, which depicted the view in the shade but looking up through the Forest Casuarinas. The two sections illustrated the full experience of the sun and the shade in this particular location. The darker browns of the understory also enhanced the startling colours of the sun-filled landscape.

The composite image on the left was composed intentionally of inverted images. Vertical views were placed on their side and some images were even placed upside down. This arrangement was chosen to provide the viewer with the disorientated perception of scenery which arises from walking up and down ridges. The eyes are drawn to the ground, but glimpse parts of the sky and the tops of the trees at times as well. The sense of movement inherent in walking through a landscape was enhanced by the composition of the large section on the left of the wall picture. The clear turquoise blue of the sky formed a dominant compositional factor which drew the viewer's eye with a 'V' shape. The eye is first drawn to blue at the top of the image, then down through the brightly coloured scenes and then right to the darker Forest Casuarina. The sky which dominates the scene on the island therefore dominated this composition.

The second section, to the right of the 'wall picture', consisted of the four separate, horizontal images which were very similar in composition. The images showed the viewpoint looking up through the flowering male Forest Casuarina needled leaves and orange flowers. The colour was relieved by a touch of the blue sky which mirrored the blue sky in the adjacent composite. The muted darker colours: greens, brown and orange specks reflected the coolness of the shaded viewpoint from underneath the tree looking straight up to the sky. The composition of the series of four small images balanced the compositional structure of the same-sized images on the far left of the larger section.

The vegetation was photographed with an SLR camera including a polarising filter with colour negative film and the film was then processed in a photographic laboratory. The film was placed in a Nikon film scanner to convert it to a digital file, 300dpi, and the digital file was manipulated in Photoshop at 5%. The method and processes highlighted the intensity and clarity of the colour that I experienced from the location of the Mount Cook ridges.



Plate A5 Mount Cook Ridges: Sculptural Bookwork: Visual and touch senses

A1.3 Sculptural Bookwork: Visual and Touch Senses

The transparent container (Plate A5) sculpted by Brisbane artist, Wim de Vos, was more than twice the size of the artist's book to allow space for the open page to rest on the mirror base. The reflection of the mirror base changed as the viewer altered the angle of view to the sculptural bookwork (Plate A6). The deep lid of the box was lifted on and off the base by a carved handle in the shape of a ridge. The handle symbolised the ridges of Mount Cook and the transparent container reflected the sense of openness/spaciousness experienced 'being there' at the top of the ridge.



Plate A6 Mount Cook Ridges: Wall Picture reflection onto sculptural bookwork base

Unlike the remaining installations, the Mount Cook Ridges artist's book was made of transparent perspex rather than paper (Plate A7). In the natural world, no view is self-contained or sealed off. The viewer/participant walking through a landscape always catches a glimpse of yet a further vista, another tree. There is no artificial frame. The transparent pages in the artist's book represented this sense of the continuity and continuing nature of perception; there is always more beyond one's immediate surroundings. The transparent view through the pages varied from ½ cm to 9 cm wide. The front and back covers of the artist's book were lightly sandpapered which created a frosted, random transparent effect.



Plate A7 Mount Cook Ridges: Sculptural Bookwork: Transparent pages

The images of the artist's book juxtaposed different magnifications of coloured, photographs of Mount Cook's location (Plate A7). The juxtaposition of images reflected the up and down movement of the head, as I walked up and down the ridges, seeing the sky and then the ground. The juxtaposed photographic composites were achieved from two different enlargement sizes of the same image. Rhythm was emphasised by the repetition of the same shapes and colours across the two opened pages which added to the flow of movement throughout the artist's book.



Plate A8 Mount Cook Ridges: Sculptural Bookwork: Juxtaposition of images

The artist's book consisted of 26 transparent perspex, single sheet pages, 14 x 19cm with numerous collaged photographs of Mount Cook's location. The different sized photographs were juxtaposed to each other and glued onto the transparent perspex. The spine of the codex book was 6.5 cm high with the long vivid blue linen thread, which extended from the Coptic binding stitch, specifically designed to turn the ridged pages over easily. The holes were carefully drilled, 4 cm apart, 1 cm in from the spine's edge to facilitate the turning.

The vivid blue linen thread of the Coptic binding reflected the intensity of the blue sky and complemented the clarity of the blues, greens and browns of the colour palette in the photographs. The height of the spine and the rigid, solid structure of the artist's book were intended to reflect the solid earth structure of the Mount Cook ridges (Plate A5).

The collaged photographs for the artist's book were produced by the traditional chromogenic C-print process because of the print's surface durability. The durable print surface allowed the images to be glued onto transparent perspex pages for the construction of the artist's book. Digital C-print was not used because it showed up fingerprints during the collage process. The digital inkjet print was found to be too fragile as the ink surface dissolved in contact with the glue and the paper disintegrated.

A2 Lower Granite Hills



Plate A9 Lower Granite Hills: Sculptural Bookwork Installation

A2.1 Location

The Lower Granite Hills landform division covers the greater part of the island and gives the island its characteristic, Hoop Pines (*Araucaria cunninghamii*) wedged amongst granite boulders (Plates A10 & A11). The most common vegetation type of the granite hillsides is a diverse array of mixed eucalypt and native Kapok (*Cochlospermum gillivraei*), scattered on the lower rocky slopes (Sandercoe 1990).

The perception experienced in this location was the feeling of the heavy massive, granite boulders and the air of the windswept Hoop Pine. The colours were dominated by the tones of browns of the granite boulders including the darker tones of the deep crevices from which the green hoop pines emerged with the addition of yellow with Kapok flowers dotted about the landscape.



Plate A10 Lower Granite Hills: Visual sense data



Plate A11 Lower Granite Hills: Visual sense data

A2.2 Wall Picture: Visual Sense



Plate A12 Lower Granite Hills: Wall Picture; Visual sense

The 'wall picture' (Plate A12) consisted' of 18 abstracted black-brown images which formed a grid pattern. The composition of three horizontal images across and six down, in black-brown gestural marks and yellow-ochre washes, depicted the view of the windswept, granite boulders. The black-brown marks emphasised the heaviness of the rough textured, weathered, massive granite boulders while the subtle yellow washes represented the kapok trees. This heaviness and sense of movement was recreated in the 'wall picture' by forming shadows in the rough curled paper to emphasise a 3D effect of the boulders and also to imitate the motion of the wind through the hoop pines.

The landscape here affected the emotional response far more strongly than most other landscapes. Therefore the perception of the scene was different, and required a different means to represent this to the viewer. Traditional realistic photography did not seem to produce the appropriate atmosphere. Therefore I chose to make artwork utilising methods which involved my own tactile involvement and so chose to combine a photographic and a painting approach, 'Alchemy Painting'. The physical handling of paint brush, emulsion, dipping the pages into developer allowed a more individual, sensual and personal development of the artwork than would photography alone. Edwards (1986) in her book *Drawing on the Artist Within* referred to the notion of "Drawing Out Insight". That is, the physical manipulation of the paint brush becomes an extension and expression of the inner emotional landscape.

Reflection on the practice revealed how multilayered was the understanding of perception. Photographs alone could not have conveyed these levels of subtlety which emerged from the combination of two photographic processes: Liquid Light and Vandyke Brown. These methods created a far deeper layering and density than either method individually and so better represented the layered, but fragile nature of the hanging boulders.

Four processes were involved to represent the perception of the Lower Granite hills which were represented by painted abstract, gestural marks on both sides of the paper. Firstly, front side of the paper, the black-brown gestural marks were created by a variation of the 'liquid light' photographic process. Secondly, the reverse side, the warm soft brown tones were created from the Vandyke brown alternative photographic process. Thirdly, the yellow-ochre washes were produced by painting with a solution of the kapok flower itself and fourthly, the matt black painted marks were created by ink.

A2.2.1 Interaction of Processes

Process One: Liquid Light - Front of the Image

The first process applied to the paper.

- Three textures of paper (smooth, medium and rough) were chosen to again mirror the variety of textures on the granite boulders.
- The papers were then coated unevenly with a broad brush and liquid light emulsion, (a photographic light sensitive emulsion commercially purchased). They were then left to dry in the low light of the darkroom.
- After the images were dried, they were exposed to white light for 10 seconds.
- The individual pages were then placed on a sheet of glass in a tray in dark room conditions.
- Using either a thick or a thin brush and paper developer, the artist painted directly onto the sheet of paper. The choice of brush and timing followed the artist's aesthetic judgment about how to best recreate the massive rounded volume of the boulders. The density of the blackness was greater if it was applied at the beginning of the process rather later.
- The page was then rinsed in water, placed in a tray of fixer and then washed for 20 minutes to remove the chemicals.

Process Two: Vandyke Brown - Reverse-side of the Image:

The Vandyke brown process was applied after the liquid light images had dried. The artist mixed the colour according to the following measures:

Vandyke part A

100ml distilled water at room temperature

27g ferric ammonium citrate

Vandyke part B

100ml distilled water at room temperature

4.5g Tartaric acid

Vandyke part C

100ml distilled water at room temperature

12g silver nitrate

- When the Vandyke parts A, B and C had been separately mixed , they were combined to make the light sensitive emulsion.
- Part C was added to parts A and B and the combined solution poured into a dark bottle. The colour matures with age unlike cyanotype which degrades after a period of time.
- The resultant liquid light images were turned over and the Vandyke photographic emulsion was applied, either completely over the paper surface or selectively with a brush. Total coverage created a tonal result, while selective brush marks produced distinctive defined abstract marks.
- After the images were dried, they were exposed to white light for 10 seconds.
- The individual pages were then placed on a sheet of glass in a tray in dark room conditions.
- The exposed paper was dipped unevenly into a tray of paper developer which created variations in the warm brown tones. The longer the developer stayed on the surface, the darker the brown tones were. The uneven movement of developer created transition densities of tones.
- The tray dipping and timing was the artist's aesthetic judgment about how to best recreate the sense of silence encountered amongst the depth of the granite boulders.
- The page was then rinsed in water, placed in a tray of fixer and then washed for 20 minutes to remove the chemicals.

Process Three: Flower Essence Wash

The yellow-ochre painted washes from the kapok flower depicted the yellow flower of kapok trees scattered about the vegetation. The yellow flower was mixed with alcohol in a pestle and mortar and rubbed onto the paper surface which previously had a layer of liquid light and van dyke brown.

Process Four: Black Painted Marks

The matt black painted marks reflected the depth of the dark crevices between the granite boulders. The areas of matt black were small and mainly on the reverse side of the dominant liquid light process. The ink was dropped on to the page from a sumi brush. The brush held a large amount of ink and when dropped from 20cms away, formed an irregular splash effect of ink, similar technique was used with the liquid light emulsion on the front of the page.

A2.3 Sculptural Bookwork: Visual and Touch Senses



Plate A13 Lower Granite Hills: Sculptural Bookwork Container: Visual and touch senses

The book container (Plate A13) consisted of a heavy clay box with a hoop pine lid with a granite handle. The clay box was inscribed with images created by a combination of impressed and incised drawing techniques. Natural objects from the location, such as hoop pine leaves were embedded into the clay and then removed to leave fossil-like images which recalled the natural world. These images were combined with abstract lines, inciseley drawn into the clay to create the feeling of movement and texture. Incised lines are active and since they are hollow, are subject to direct interaction with light. This direct confrontation of the clay edges, interior space and light has the ability to produce powerful abstracted marks, an effect not possible with flat drawings. Incision has the added advantage of producing texture. One immediately becomes aware of the edges, the lines, the raised burrs and the tearing of the clay. Copper oxide glaze was rubbed into the impressions to produce a matt green which reflected the colour of the hoop pine trees. The impressed and incised techniques were completed on flat slabs of clay before they were moulded into the rectangle shape of the container. The flat pieces of clay were rolled out between two pieces of wood 2cm high to allow for an even thickness of clay; base 35 x 27cm, two long sides 35 x 12cm, two short sides 27 x 12cm. These shapes were larger than

the final ceramic container sizes because the clays shrinks as it dries.

Copper oxide glaze produced a matt green to reflect the colour of the hoop pine trees. After the container was bone dry and fired, a wash of copper oxide (ratio of 5gm to 125mm of water) was applied with a damp sponge. The excess wash was removed with a damp cloth. The depth of the textured areas allowed for the different densities of the copper oxide wash which created a variation in the green colour. The copper oxide cloth was lightly rubbed over the rest of the container which gave it a hint of green colour and the whole was then placed in the kiln to finalise the glazing process.

The lid (Plate A13) was constructed from hoop pine sticks with a granite knob to lift the lid. The hoop pine sticks were cut in half along the length and varied from 30cm to 32cm. The diameter of the sticks also varied from 4cm to 6cm to depict the natural variation in growth of the hoop pines. The hoop pine sticks were joined parallel to the length of the clay container. A longer bent stick was added to the lid near the granite knob to break the straight line pattern of the sticks. Also a stick was placed at the base of the container on the plinth to add to the composition as well as to be seen after the lid was removed (Plate A14). The outside or top of the lid was a flaky texture from the natural bark while the inside was smooth sawn wood and only seen when the viewer lifted the lid to investigate what was inside the container.



Plate A14 Lower Granite Hills: Loose pages

The four visual images of the artist's book (Plate A14) were developed following the same process as the layered photographic paintings in the 'wall picture' but varied in sizes from 24 x 25 to 18 x 19cm. The paintings employed the same palette of colours as in the 'wall picture': cool and warm browns, yellow ochres with black ink with textured sand. The pages were left unbound to represent the loose flakes of granite which were constantly flaking off the boulders as the wind, rain and salt continued to erode them.

A3 West Point Volcanics



Plate A15 West Point Volcanics: Sculptural Bookwork Installation

A3.1 Location

The West Point volcanics geographic landform (Figure 1.1.1) formed from cooled magma millions of years ago, and now worn smooth into small rocks. 'Volcanics' is the name that Getham Morgan, landscape ecologist, and I chose to describe the particular location. Although volcanics is not a precise geological term for landscape, we found it the most useful name to convey the notion of a landscape imbued with a long, violent and disruptive history of natural forces. The present day landscape is dominated by agglomerate rocks: the rounded, angular fragments fused together after magma has cooled (Plate A16). The earth is therefore hilly with granite boulders, and the landscape features Kurrajong trees (*Brachychiton populneus*) (Plate A17) not found elsewhere on the island, and Helicopter trees (*Gyrocarpus americanu*).

The dominant visual sense experienced in this location was yellow-green colour of Broad-leafed Bottle and Helicopter trees and the sense of motion, lightness and air created by the Helicopter trees. The Helicopter trees proliferate in this part of the island; have little fruits with two leaves which act like rotating helicopter blades to disperse the seeds. The helicopter tree is also known as the *Twirly Whirly* because the winged fruits twist or gyrate as they fall from the tree to the ground. The air is full of these whirling seeds juxtaposed to the tactile sense of both rough and smooth textures experienced through the agglomerate stones.



Plate A16 West Point Volcanics: Visual sense data



Plate A17 West Point Volcanics: Visual sense data

A3.2 Wall Picture: Visual Sense



Plate A18 West Point Volcanics: Wall Picture: Visual sense

The 'wall picture' (Plate A18) consisted of three coloured photographs: one very narrow folded strip adjacent/separate to two wider flat photographs on the right. The composition of three vertical images, in soft yellow-green tones, depicted the view of the filtered light reflected amongst the vegetation of the West Point volcanics. The first photograph on the left was of a single branch of the helicopter tree; (4 x 27cm) the second photograph repeated the same branch with the addition of a second branch which broadened the view across the composition to include the leaves of the broad-leafed bottle trees (13 x 27cm). The third photograph (8 x 27cm) was abutted to the second which continued the effect of the myriad of green leaves but was darker in

tone to balance the composition of the darker, first folded photograph. The tactile sense is highlighted by the shadows of the folded images on the wall.

The sense of motion, lightness and air was recreated by the way the wall picture photographs were attached to the wall only at the top of the picture which allowed the whole thing to move in the breeze created by the air conditioner and/or the body movement of the viewers and also allowed for the creation of shadows. The shadows of the wall picture were created on the wall from the gallery lights and were considered as part of the artistic composition. The soft angular shapes of these shadows diffused the sharp rectangular shape of the wall picture and so enhanced the sense of tranquillity of the light and airiness. In the left hand section, the concertina shadows formed on the wall repeated the shape of the branch structure of the helicopter tree, encouraging the viewer to look to the central photograph. This photograph's shadow was very minimal at the bottom but lead the eye to the right hand photograph's shadow which created a strong angular effect in the bottom right hand corner.

The vegetation of West Point volcanics was photographed with an SLR camera with colour negative film. The resultant images were digitally manipulated in Photoshop and printed onto inkjet paper similar to Mount Cook ridges and Coastal Lowlands. The close-up view was composed in the SLR camera with a 135mm lens which emphasised the 'selective focus' which used F 3.5. The view was taken through the shaded leaves of the trees in the foreground and looked out to the sunlit trees in the background. The foreground leaves were out of focus. The angle was chosen to try to create the impression of viewing something through leaves. By focussing on something in the background, but by having the viewer look through leaves to perceive that background, it was hoped to create a more intimate perception of the environment. Rather than merely observing the leaves objectively, the viewer perceives the background landscape.

The 'wall picture' composite was created by one image from the camera. The image was cropped into three sections and printed at two different densities. The left and right sections corresponded to the beginning and end of the original image while the middle section consisted of the entire image which repeated elements from the first section and therefore extended the width of the composition. The repeated tree branches of the middle section lead the viewer's eyes in from the left of the composition. The middle section was printed twenty-five percent lighter than the outer sections, and this brightness draws the eyes

to the centre of the composition. Section three consisted of part of the original image rotated one hundred and eighty degrees which resulted in the out-offocus green leaves at the bottom right hand corner of the composite, diagonally opposite the top of section one. By opposing the out of focus sections diagonally on the top left and bottom right, the eyes were again drawn to the middle section and so encouraged to view the scene through the mass of vegetation.

The yellow-green palette of the coloured photographs were enhanced by five percent saturation in Photoshop to accentuate the light reflected from the filtered sunlight. The light yellow-green formed a broad 'V' shape in the centre of the 'wall picture' which echoed the shape of the helicopter tree branch to the left of the composition. The resultant shape represented the winged fruits from the Helicopter tree.

A3.3 Sculptural Bookwork: Visual and Touch Senses

Plate A19 West Point Volcanics: Sculptural Bookwork Container: Visual and touch senses

The container (Plate A19) was constructed from thin slices of wattle wood sculpted by Townsville artist, Allan Valentine. The miniature artist's books were not enclosed in the container nor did it have a lid which the viewer would have to lift in order to discover the secrets within. Rather, this sculpture/container was intended to be a metaphor for an open book structure. The sculpted vessel contained a conglomeration of small rocks/stones/coral and sticks collected from the West Point volcanics location inter mixed with numerous miniature artist's books.

The miniature artist's books, made of paper, were intended to represent the light leaves of the trees which overshadowed the rocky environment. The fifteen books were made of paper printed with pictures of either leaves or rocks from West Point volcanics location. The number of pages and the size of the books and stones varied to reflect the different sized elements in nature

The viewer's attention was drawn to the fact that the artist had constructed this landscape but the viewer was also encouraged to think about how perceptions of the natural are also understood through the filter of human perceptions. Ironically, the randomness of the natural world had to be selectively and carefully chosen by the artist; a point which would not escape all viewers and should encourage further reflection on the notion of perception. The lightness of the paper and the roughness/smoothness of the rocks/stones drew attention to both the visual and tactile senses.

The miniature artist's books were similar in size to the stones. The stones varied in shape and sizes; the largest stone was 7cm and the smallest 2cm in length but the width varied considerably. The artist's books also varied in shape and size to interact and create a dialogue with the stones. Just as no two stones in nature are the same size, shape or have the same pattern so no two artist's books were the same size or repeated the same visual design. Several of the artist's books were smaller and narrower than the stones and were deliberately hidden in crevices waiting to be discovered by the viewer/fossicker.

The visual images for the miniature artist's books pages were photographed with an SLR camera and followed the same process as discussed previously in the Wall Picture. The different photographic images of the vegetation, stones and trees were printed on both sides of A4 inkjet paper and cut horizontally and vertically into strips of different sizes. These strips were then folded to form the miniature artist's books.

A4 Mangroves and Salt Flats



Plate A20 Mangrove and Salt Flats: Sculptural Bookwork Installation

A4.1 Location

Mangrove and salt flats mainly occur between Cockle Bay and West Point on the leeward side of the island (Figure 1.1.1). The dominant mangroves that I explored were the Red mangrove (*Rhizophora stylosa*) and the Grey mangrove (*Avicennia marina*) found in Bolger Bay (Plate A21). The mangrove and salt flat location has a particular red mud and salt character. The Grey mangrove's particular physiology contributes to this environment. The Grey mangrove roots consist of 70 percent air spaces, and it is through the roots that the gases are exchanged. Gases diffuse through water 10,000 times more slowly than through air. Mangroves need oxygen in their roots and they cannot obtain that through the water and so the oxygen diffuses through the roots and iron oxides in the mud and causing red rusting on the roots. The mud stinks because it is anaerobic (low oxygen) and low oxygen bacteria are often considered by humans to have an unpleasant smell. The sharp pointed leaves of the Grey mangrove are so shaped because they reduce the surface area exposed to sunlight and therefore reduce water loss and salt intake.

The mangrove location is also one of rapid change and variation. The seedlings live off the parents (viviparity) and sit on the higher roots to reduce their exposure to salt. The offspring have a lower salt tolerance to parents and so are another instance of the variety and flux on this particular location. The stomata occur on the underside of the leaves. Both the top and the underside of the leaves were photographed, but the texture and variation in the underside created by the stomata created a far more pleasing aesthetic composition and so this visually appealing effect was another reason for the choice of stomata as emblematic of the location.

It is through the stomata, or the microscopic openings / pores in the epidermis of the leaves that the gases are exchanged. Stomata control water loss and therefore salt uptake. The stomata need to open to take in carbon dioxide. They provide for the exchange of gases between the outside air and the branched system of interconnecting air canals within the leaf. They are the means by which the trees live and breathe and so they were highlighted in the exhibition. It was hoped that the viewer might come to reflect on the similarity of the trees and humans as both depend on air. The identity of the viewer with the location would also deepen the sense of awareness and perception of the scene.

The mangroves exude an atmosphere of muddiness and saltiness and constant movement because of the tidal changes. Sight was stimulated by the strangeness of the various aerial root systems. The Red mangroves have large, high curved roots and the Grey mangroves have small straight roots. The complex webs of root structures trap and retain various flotsam from the marine location: shells, leaves, fruits, flowers and broken roots and also provide shelter for fish. The floor of the mangroves is covered in sand and when the tide recedes the sand is crusted with salt in various patterns. The sense of smell was stimulated by the saltiness and muddiness of the location which stimulated the sense of taste (Gibson 1964, Mather 2007).



Plate A21 The Mangrove and Salt Flat: Visual sense data

A4.2 Wall Picture: Visual Sense



Plate A22 Mangroves and Salt Flats: Wall Picture visual sense

The 'wall picture' (Plate A22) consisted of thirty-six images which were separated into two sections. The first section had sixteen images of black, grey, brown and ochre in a grid pattern to represent the red mangroves. The right hand section was composed of twenty-five images, also in a grid pattern, with a similar colour palette which depicted the grey mangroves. The first top left hand image of each section was a realistic image of the specific mangrove while the remaining images were photographic micrographs taken from the scanning electron microscope (SEM).

The visual images for the 'wall picture' were created from three processes: SEM, polymer plate etching and rusting as detailed below. The visual images for the representation of the Mangrove and Salts flats location were created by adopting elements from scientific observation, using the SEM technology as detailed below, a mixed scientific and artistic process in digital photography and more traditional artistic means of printmaking and painting. The complex of means, techniques and approaches enabled the finished installation to show the varieties of textures, characteristics and colours of the original location. The enlarged images of the stomata were intended to encourage the viewers to feel that they were seeing the full location, even down to the 'inside' of the leaves, a deeper perception of place.

A4.2.1 Interaction of Processes

Method for the Scanning Electron Microscope (SEM)

The Red (Plate A23) and Grey (Plate A26) mangrove leaves were collected from the environment and pressed in a paper book to dry.

- Two Red and two Grey leaves were prepared but separately treated. The top and underside of the leaf were prepared to vary the aesthetic choices. Each dried leaf was cut into two x 1cm squares which were then placed onto two studs. The specimens were then put in a spatter machine which sprayed them with a thin layer of gold. The gold coating allowed for the conductivity of the electrons in the SEM.
- The top of the leaf was placed on a stage in the SEM with an X and Y axis which allowed for a variation of movement positions of the specimen.
- The image was displayed on a screen and magnification was changed from 50x to 5000x.

- The underside of the leaf was placed on the stage and magnified from 100x to 1500x.
- When the composition was satisfactorily arranged, a digital image was taken with Semaphore, a software program which digitally transfers the SEM image to the computer and then the digital image is saved onto a CD.

$Red\ Mangrove\ leaf$



Plate A23 A photograph of the Red Mangrove leaves



Plate A24 SEM micrograph of Red Mangrove leaf: Top



Plate A25 SEM micrograph of Red Mangrove leaf: Underside

Grey Mangrove leaf



Plate A26 A photograph of Grey Mangrove leaves



Plate A27 SEM micrograph of Grey Mangrove leaf: Top



Plate A28 SEM micrograph of Grey Mangrove leaf: Underside

The SEM image was created through the different compositions. Under different magnifications (Plate A29, the SEM created patterns ranging from a repetitive large scale pattern to a detailed close up of a single element.

Magnification Factor





200x

500x



1000x







3500x



5000x Plate A29 Different Magnifications on the SEM

The composition variation was created through the magnification factor of the SEM. The lower magnification (200)& 500x) created а patterning effect while the higher magnification (3500 & 5000x and) showed specific details of the leaf stomata.



a. Electron b. Combo c. Topo Plate A30 Different Modes used on the SEM

The SEM takes photographs in three different modes (Plate A30). The first mode, electron (Plate A30a), produces a magnified image which looks like a normal black and white negative film and so maintains the full tonal range. The second mode, combo, (Plate A30b), increases the contrast of negative and positive and so reduces the tonal range. The third mode, topo, (Plate A30c), reverses the tonal colours from the combo.

The naturalistic photograph (top left) of both sections of the wall picture; Red and Grey mangrove trees were taken with a single lens reflex camera, SLR, 43-80mm lens and a polarizing filter with negative film. The naturalistic photograph was achieved in two stages: i) the mangrove leaf was photographed through a SLR camera onto 35mm negative film; ii) the film was then made into a digital file to produce a photogravure print. The exposed negative film of Stage i) was processed at a traditional photographic laboratory. The processed negative film of stage ii) was then scanned onto the Nikon film scanner which created a high resolution digital file.

Method for Photogravure: Polymer plates

The photogravure method as used by Welden since 1987 was selected because it allows for the maximum representation of the

full tonal range and because it was non toxic to the copper plate.

Film Procedure

- The digital file was manipulated in Photoshop. The light areas of the picture (highlights) had to read 2% density and the shadows to read 75% and image size was 18 x 12cm.
- The digital file was transferred to film by an image setter (digital printer). Specific instructions were required to maintain the tonal range from the digital file. Instructions for the image setter - 300dpi, 150 screen ruling with emulsion down.
- The resultant films were sandwiched between polymer plates (K type) in a vacuum frame and exposed to UV light for two minutes.
- The plate was developed and etched in 2 trays of water. The plate was placed for 2 minutes in the first tray of still water and about 15 minutes in the second tray of running water.
- The plate emulsion was hardened in sunlight (10 minutes in semi clouded sky) and dried in a cabinet dryer for 5 minutes.

Inking the polymer plate

- The plates were inked up with Charbonel black/brown ink mixed with 15% easy wipe through an 'intaglio' printing process: the ink was rubbed into the etched crevices and wiped off the plate's surface, leaving the ink in the grooves only.
- The polymer plate was placed on a printing press bed. Damp paper was placed on top of it, but, because the damp paper was smaller than the plate, a backing sheet was placed over the whole to take up the excess ink.
- The whole was then rolled through the printing press. The image in ink from the polymer plate was transferred onto the paper.
- The paper was torn 1mm smaller than the plate (figure A1.41) so that, when printed, the image would bleed over the edge of the paper and saturate the torn edges with ink. The torn paper created rough edges which reflected the randomness of the currents and the moving seawater. The paper was soaked in water and blotted before being placed on the bed of the printing press.
- The printed paper was air-dried on a mesh rack.



Plate A31 A SEM photogravure printed over the edge of the decked paper

Method for the Relief Printing Process

After the polymer plate was etched and inked up, another layer of ink mixed with transparency medium was rolled over the top of the plate with a large diameter roller. The large diameter roller was used to prevent roller marks on the plate (also Plate 31).

Method for the Rusting Process

- The micrographs were partially dipped for about one minute into a tray ferrous sulphate solution and tannic acid randomly.
- The micrographs were then dipped totally and particularly into a caustic soda tray for one minute to create the uneven ochre colours which produced a golden sand colour and granular, patterning effect.
- The micrographs were then washed for 10 minutes in running water and dried flat on newspaper (Plates 38, 39 and 40).

A4.3 Sculptural Bookwork: Visual and Touch Senses



Plate A32 *Mangroves and Salt Flats*: Sculptural Bookwork Container: Visual and touch senses

The ochre coloured cheesecloth container consisted of two pieces (Plate 32). The cloth was coloured by the rusting process and intended to evoke the sand and rust of the roots of the mangroves. Shapes could be discerned beneath the fabric but were not clearly visible. The viewer's curiosity was essential to provoke the viewer to unwrap the bundle and touch and move the objects within it.

The fabric container enclosed of a concertina book, two folded artist's books, a wrap-around book and fifteen loose pages (Plates A33 and A34). The visual images varied from SEM images of the Red and Grey mangroves at different magnifications similar to the 'wall picture', with the addition of abstract images produced from copper etching plates (Plates A35, A36 and A37).



Plate A33 *Mangroves and Salt Flats*: Artist's Books: Arrangement determined by the viewer



Plate A34 Mangroves and Salt Flats: Artist's Books different arrangement

The copper plate etching process was chosen for its potential to reflect the abstract patterning that occurs on the shoreline where the tides, sand and the mangroves meet. The advantage of using a copper plate instead of zinc plate is that it creates very fine lines and nuances that are etched in a less toxic acid bath. Experimentation with the copper etching process was undertaken to create three different effects that allowed the act of the processes to create the abstract marks.

- a) The Spirit aquatint process (Plate A35) serendipitously created ripple textures and patterning, reflecting the sand on the shoreline of the beach approaching the mangrove.
- b) The Crackling process (Plate A36) created a randomness of very fine lines and shapes to reflect the experience of hot, dried sand/mud after the tide had gone out.
- c) A Marbling process (Plate A37) created an image reflecting the movement of the tides and crosscurrents of the river and the sea where the fresh water river meets the salt water of the sea.

The visual images were printed in black etching ink and coloured ochre in the rusting process (Plates A35, A36 and A37) as detailed below. One side of the loose pages was chosen to reflect the mangrove tree concentrating on the leaf structure of the stomata while the reverse side of the page image enhanced the granulation and colour of the earthly structure of the sand and mud which also extended to the front image.



Plate A35 'Spirit Aquatint' represented the rippling of sand


a.

b.

Plate A36 Crackling process represented the salty, cracked mud



Plate A37 Marbling process represented the fluidity of the water



Plate A38 Rusting process: Two chemical bath



Plate A39 Rusting process: Three chemical bath



Plate A40 Multiple dipping in the rusting baths

All the books and papers in the bundle were in no specific order and the viewer was free to unpack and repack as he or she wished (Plates A33 and A34). The randomness of the shifting display of this bundle, which altered depending on who had handled it, further reinforced the notion of the random but constantly changing marine environment. The tactile and olfactory senses were evoked by the matt feeling of the rusting process and silky feeling of the photogravure polymer print.

A5 Coastal Lowlands



Plate A41 Coastal Lowlands: Sculptural Bookwork Installation

A5.1 Location

The Coastal Lowland geographic landform (Figure 1.1.1) is predominantly established on deep granite colluvium or piedmont sands washed down from the hills (Sandercoe 1990). Coastal Lowlands vegetation consists of Moreton Bay Ash or Tessellated Ghost Gum (*Corymbia tessellaris*), Blue gum or Forest red gum (*Eucalyptus tereticornis*), White gum or Poplar gum (*Eucalyptus alba*), Grey bloodwood (*Corymbia clarksoniana*) (Plate 42), Pink bloodwood (*Corymbia intermedia*), Coastal Casuarina (*Casuarina equiseti folia*), and Paper bark weeping teatree (*Melaleuca leucadendra*).

The dominant sense experience from the Coastal Lowlands was the quality of light reflected from the gums and bloodwoods at sunset and at the full moon. The light consisted of subdued mauve and orange tones and transitioned into greens and blues as the full moon rose.



Plate A42 Coastal Lowlands: Visual sense data

A5.2 Wall Picture: Visual Sense



Plate A43 Coastal Lowlands: Wall Picture: visual sense

The 'wall picture' (Plate A43) consisted of sixteen altered coloured photographs which formed a grid pattern. The composition of four vertical images across and down, in subdued mauve and orange tones, depicted the

view of the coastal lowlands at sunset. The photographs highlighted the rough, textured bark from the Pink and Grey bloodwoods, and Moreton Bay Ash trees, juxtaposed with the smooth, narrow leaves of the trees. The sunset the ochres, magentas, greys and greens in the vegetation. At dusk, the light is refracted at different angles and the colours radiate from the individual plants. The magenta sky, the orange sun and the ochres of the vegetation remain distinct in their original sources but also are blended as they refract and interact across the landscape. This varied play of light was reflected in the 'wall picture' by adopting three distinct paper surfaces: smooth, medium and rough. The smooth paper draws out more detail and produces an intense saturated colour whereas the more textured paper has a grain which breaks up the image and shows the light as less intense. The three surfaces allowed the wall picture to show the subtle nuances of coloured light at sunset and dusk that naturally occurred in the landscape.

The strong diagonal composition of the wall picture was created by the tessellated bark trees photographed on an angle. The diagonal movement started from the left of the composite, led the eye right out of the compositional frame, then moved quickly back to the left, out of frame at the top left. The strong direction of movement, across and upwards, was intended to evoke the sense of perspective felt when standing at the base of the trees and looking upwards through the leaves to the sky.

The vegetation of the Coastal Lowlands was photographed with an SLR camera with colour negative film. A tele-photo lens was used on the camera to create close-up views to simplify shapes of leaves and textured bark. The resultant images were digitally manipulated in Photoshop and printed onto smooth, medium and textured inkjet paper.

The altered coloured photographs in the 'wall picture' were manipulated through the 'image adjustment' feature in Photoshop. The intensity of colour tone manipulation was dependant on the intensity of light in the original landscape. The high intensity created by the sun to the low intensity light reflected into the shade. The full sun on the green leaves changed to intense/saturated tones of purple but the shadow areas kept the similar original green tones of the leaves. The blue sky changed to ochre tones. The tessellated barks of the bloodwoods remained dark with reflected purple and magenta colours skimming the surface of the bark. The 'image adjustment' feature also created a very fine dark line, similar to a drawn pen characteristic. In the close-up photograph, the thin lines of the veins of the leaves and thin lines outlining the leaves, are particularly obvious. These pen line aesthetics accentuate the effect of patterning, contrast and line. The fine lines also draw the eye to perceive the interconnectedness of the leaves and the vegetation.

A5.3 Sculptural Bookwork: Visual and Touch Senses



Plate A44 Coastal Lowlands: Sculptural Bookwork Container: Visual and touch senses

The container (Plate 44) was sculpted by Townsville artist, Allan Valentine who carved an organic rectangle from Red forest gum (Bloodwood) and Poplar gum sticks. The wood sticks of varied in diameters from 6cm to 3cm. The wood was sliced parallel to the grain along the length of the wood, approximately 27cm long and 1-3mm thick which formed the length of the container. The width was 27cm. The container was only roughly shaped into a rectangle to reproduce the randomness of the natural vegetation. The wood was cut at different lengths with about a 2cm tolerance. All the wood was cut from the outside of the stick and so produced curved edges and flat shapes toward the centre. The container consisted of wooden slats. The side slates were 27cm whereas the base slates ran across the width, 23cm. The length of base and

the sides, 51cm width 27cm and 23cm high including the handle of the lid.

The resultant flat segments were spaced apart to obtain glimpses of the artist's books and to represent glimpses of the vegetation seen through the trees while waking in the Coastal Woodlands. The lid was also constructed from interwoven, curved Poplar gum sticks which were extended to form the handle. The Red forest gum reflected pinkness from the wood while the Poplar gum reflected the creaminess of colour to reflect the qualities of light at sunset and dusk. The wood of the container was left untreated to indicate how it would weather over time, and so the viewer was reminded of the natural aging and decaying process of nature.

The 'sculptural bookwork' container contained two artist's books. The first artist's book, *Orange Magenta Sunset* (Plate 45), represented the atmosphere at sunset of bloodwoods and Moreton Bay Ash trees. The second artist's book, *Full Moon Reflections* (Plates 46 and 47) represented the combination of Grey and Pink bloodwoods, Moreton Bay Ashand Coastal Casuarinas under the light of a fullmoon.



Plate A45 First Artist's Book: Orange Magenta Sunset

The first artist's book, *Orange Magenta Sunset*, consisted of five digital inkjet prints, 23.5 x 18.5cm, printed on both sides of textured paper and bound at one corner. The prints were the same palette of colours as in the altered colour photographs of the 'wall picture': muted mauves, ochres, greens, browns and greys. The wall images were extended into the artist's book *Orange Magenta Sunset* to reproduce the effect of reflection and refraction created by the light dancing/moving on the vegetation as the sun set. The light connects the sky, the earth and the plants. So the sense of sight becomes the unifying force between the wall picture and the artist's book.

The visual images in the page design for the first artist's book, *Orange Magenta Sunset* were developed following the same process as the altered coloured photographs as discussed previously in the 'wall picture' of Coastal Lowlands. These altered coloured photographs were, however, smaller and printed on both sides of the paper. The specially coated side of the inkjet paper produced sharp, intense images while the reverse side, the uncoated side, acted like normal watercolour paper and was very absorbent. The inks were suffused into the paper fibres and so diffused the softness of the colour and resulted in a matt surface. The photographs were printed on both sides of the paper to represent the leaves themselves, which have a front and back and can be picked up and felt as well as looked at.

The altered coloured photographs of Pink and Grey bloodwoods and Morton Bay Ash were bound at the top left hand corner by a swivel pin structured on the design of a fan book. The fan book represented the leaves connected to the tree branch as they swayed from side to side in the wind.

The second artist's book, *Full Moon Reflections*, consisted of eight 15 x 12cm digital inkjet images, printed onto medium textured inkjet, watercolour paper. These pages were contained in two covers. The covers consisted of two, separate, heavy, ceramic pages, approximately 23 x 16cm with rough organic edges (Plate 46). Coastal Casuarina nuts and needle leaves were impressed into the clay covers to represent the fallen Coastal Casuarina nuts to the ground. They also had an inviting tactile surface which encouraged viewers to explore, by hand, the indentations and so be drawn more deeply into an experience of the Coastal Casuarinas themselves.

The front of the cover page was abstractly painted, mainly dark green with a white reflection of the moon in the background but very glossy to evoke the

luminescence of the moonlight. The reverse side was a very matt, charcoal colour which represented the shadow of the trees at night under a full moon. A 'Raku' glaze was applied which created a variation of beautiful lustres of dark greens, browns and white. The randomness of the natural vegetation, which springs up and flourishes wherever seed is cast, was imitated by the randomness of the metallic lustres which were created through the process of 'Post Fire Reduction'-buried in hot ashes in the ground and placed in water. This effect is more random than the controlled process achieved in a kiln.

As the nuts and sharp leaves were pressed into the surface in a random composition, the final image intended to represent the artist's sense of immediacy and interconnectedness with the natural environment which I felt as I walked through the trees. The embedded impressions of Coastal Casuarina leaves and nuts also evoked allusions to the fossils which are found in this landscape and which abound in the coastal lowlands. The covers conveyed visually and by touch the interconnectedness of flora, fauna and human in the landscape which the British phenomenologist, Rodaway (1994) refers to as 'sensuous geography'.



Plate A46 Second Artist's Book: *Full Moon Reflections* with raku glazed covers

The inside pages were created in soft blues and greens of semi-abstract images of Pink and Grey bloodwoods and Morton Bay Ash trees. The images varied in size and density and showed tessellated bark juxtaposed against the long narrow leaves. The pages were not bound so as to represent the looseness of leaves falling at random past the tessellated bark on their way to the ground.



Plate A47 Second Artist's Book: Full Moon Reflections with loose pages

The image composition of the second artist's book produced 'multiple viewpoints' of the Pink and Grey bloodwoods and Moreton Bay Ash and was accomplished by double exposure in the SLR camera. The negative film went through the camera twice. The first time the images were taken of different shaped leaves, at different viewpoints, which created a variety of leaf sizes. The film contained the latent images of the previously exposed leaf images which were then placed back into the camera and re-exposed to the tessellated bark of the bloodwoods and Moreton Bay ash. The resultant images created a random, but transitional effect and the images were reflected through each other. The rough, tessellated bark of the Morton Bay Ash reflected through the long slender leaves, created the sense of the movement of the leaves against the tree bark and so was intended to evoke a visual understanding of a transitional moment in time.

A6 The Coral Sea Fringing the Shoreline



Plate A48 Coral Sea Fringing the Shoreline: Sculptural Bookwork Installation

A6.1 Location

The Coral Sea fringes the shoreline and surrounds the island (Figure1.1.1). The eastern side includes the coral reefs whereas the western area the mangroves inhabit. The Coral Sea encompasses all the five different landforms.

The dominant experience in this marine location was the continuous, forceful movement of the tidal waters. Corals, shells and seaweed were tossed about by waves and were washed up in random places along the coast. The liminal nature of the scene, where the sand was the nexus between the water and land, also engaged a sense of lightness. The potential for change, the possibility of movement in different directions is manifest on a beach which allows the possibility of travel overseas or inland. This sense of potential, but also of unformed plans, and a sense of vague longing was coupled with the physical perception of heat, light and air as the wind blew in from the sea. The experience of the marine location was represented dominantly by blue and white for the water and sky.



Plate A49 Coral Sea Fringing the Shoreline: Visual sense data: The littoral



Plate A50 Coral Sea Fringing the Shoreline: Visual sense data

A6.2 Wall Picture: Visual Sense

The 'wall picture' (Plate A48) consisted of one large, natural, textured canvas, 3 metres x 2 metres, without an image referred to by Smith (2003) as "silence to speak". As the viewer looks at the blank canvas, and is confronted by the silence and blankness, the mind is encouraged to imagine, conceive, perceive and further reflect on the experience of the marine location. The space to think which is provided by the silence is another means to anchor or deepen the perception of the experience of the marine environment.

A6.3 Sculptural Bookwork: Visual and Touch Senses



Plate A51 Coral Sea Fringing the Shoreline: Sculptural Bookwork Container closed



Plate A52 Coral Sea Fringing the Shoreline: Sculptural Bookwork Container opened

This bookwork container (Plates A51 and A52) was the most intricate and most difficult to construct. I was fortunate to be able to collaborate with Wim de Vos, a Brisbane sculptor, on the design and construction of this. I wanted this container to have the element of movement and surprise, and also did not want the elements within to fall out when the box was opened. In order to achieve all these objectives, considerable precision was needed.

The square transparent perspex container was segmented into four sections across at the back (7.5 x 9cm) which housed the found objects from the shoreline. The remaining front section which contained two artist's books and a picture was 30×21 cm. It had three collapsible sides joined by printed and painted canvas (Plate A53) which allowed the sides to be flexibly moved. The canvas also

attached the back of the container to the lid, evoked the colours and movement of the water, as well as being a strengthening device and so had an aesthetic and a functional purpose. The lid was not separate to the container and therefore all sections were connected as a whole. This ceaseless interaction and connectivity of physical installation was meant to evoke notions of the connectivity of all in nature as the shore meets the sea and the waves flow and ebb through that creation.



Plate A53 Single Canvas image: Aesthetic and functional properties

To join the perspex sides, canvas and cheesecloth were used because of their different inherent qualities. The close weave of canvas makes it thick and strong and so was ideal for the movable sections of the perspex. Cheesecloth is light and airy and a narrow strip was used to outline the top of the container so the viewer differentiated the lid from the base. The sense of touch was stimulated

by the variety of textures: there was the smooth shiny perspex, the dense textured canvas and very rough cheesecloth with long straggly ends of threads. The canvas was painted randomly with Cyanotype emulsion first and then the image of the coral was printed by 'rubber stamp' process, onto the canvas with fabric ink. The cheesecloth was painted very lightly with Cyanotype emulsion. The cheesecloth had just a hint of blue which reflected the texture of the white caps rolling gently into shore. The painted canvas depicted the strength of the swells at the base of the wave as they moved over the coral beds. The method for printed canvas fabric combined two processes: Cyanotype and the Rubber Stamp printing (Plate A53).

A6.2.1 Interaction of Processes

The method for printed canvas fabric combined two processes: Cyanotype and the Rubber stamp printing (Plate A53).

Cyanotype Emulsion

The chemical solution was made up by the artist and solutions A and B were made up separately

Solution A

200g ferric ammonium citrate (green type) 800ml water

Solution B

80g Potassium ferricyanide 800ml water

- Part A and part B were stored separately and mixed 1:1 just before usage.
- The Cyanotype emulsion was brushed onto the fabric then
- Exposed to the sun and developed in water.

Cyanotype: First Process

• The large canvas, 50 x 60cm, was coated unevenly with a hake brush with cyanotype emulsion and some areas were left uncoated. A mountain shape was painted to depict Magnetic Island. The uneven emulsion created different tonal ranges of the blue colour with the same exposure and development time.

The thicker the emulsion, the denser the blue because cyanotype is sensitive to light.

• The exposed canvas was developed in water for 2 mins, washed for a further 20 minutes and then laid flat to dry naturally before the printing.

Rubber Stamp Printing: Second Process

- The blue canvas on the bottom of the box had several impressions of coral on it. These impressions were produced by a technique called 'rubber stamp'. A dense camping matt (made from a rubber like substance) was heated over a gas flame to make it pliable, and then a coral was pushed forcefully into the matt and then removed to leave an impression.
- The impression on the rubber was inked up (rubbed over the surface with ink on a cloth) with pearl, white fabric ink then printed onto the one piece canvas previously painted onto the indigo blue cyanotype emulsion
- The printed and painted canvas was then cut to fit the base and sides of the container.
- The inside base design, 29 x 21cm consisted of two printed corals (approx 11x8cm) diagonally opposite each other on a pale blue background.
- The outside base design 36 x 24cm consisted of two coral shapes closer together in conversation in the middle ground of the composition and the indication of blue horizon line blended against the lighter sky emphasised by the natural canvas colour.
- The printed canvas strip which connected the lid to the outside of the top of the box, 6 x 31cm, consisted of two printed corals of the whole coral shape juxtaposed to two coral images partially printed to create a wave motion against the mid blue background.
- The handle was also made from the printed and painted canvas. Fabric was cut to size 23 x 8cm which was folded 3cm over 3cm then the third fold was 2cm so the edge of fabric was not on the folded edge but on the inside of the handle. Final handle size was 23 x 3cm, and the material had been folded three times for strength but also for softness and comfort in the hand. The handle was sewn on with white thread through four holes in a square shape which mirrored the square box. The stitching on the square spread the weight and tension and made the whole more secure and capable of multiple handling.

Painted Cheesecloth

- The cheesecloth (90 x 25cm) was painted with a very light application of cyanotype emulsion to emphasise the structure of the open weave.
- The cheesecloth was then exposed for 3 minutes in the sunlight, developed in water for 2 minutes and then washed for 20 minutes and hung to dry
- This cheesecloth was then torn into a 75 x 1.5cm strip to provide a ragged fringe around the front three quarters of the lid. The edges were frayed and the strip was glued to the lid of the box. The frayed ends created movement like seaweed when the lid was raised by the handle.
- A strip of canvas was also placed on the inside back of the box to strengthen the hinges and to conceal the join. An extra strip of cheesecloth was placed over that for aesthetic purposes.

The 'sculptural bookwork' consisted of two codex artist's books, and a single picture with corals, shells and seaweed from the shoreline. The first artist's book, *Coral at Nelly Bay: White Waves* (Plate A54), represented the white caps of the waves. The paintings were predominantly white to echo the tips of the waves, and the strong, aerated bold sweeps of paint evoked the constant motion and activity of the surging of the sea. The second artist's book, *Coral at Nelly Bay: The Swells* (Plate A55), represented the swells at the base of the wave and so had a darker and deeper component to indicate the deep blue shadows of the waves. The single picture (Plate A56) laid flat on the bottom of the container, represented the roiling seabed where the water currents stirred the sand. The collection of the natural elements from the location stood, in their physicality, for the artist's presence in the location as I experienced nature.



Plate A54 Artist's Book One: Coral at Nelly Bay: White Waves



Plate A55 Artist's Book Two: Coral at Nelly Bay: The Swells



Plate A56 Single image: Represented the sandy water movement

The visual images in the page design for both the artist's books; *Coral at Nelly Bay: White Waves* (Plate A54) and *Coral at Nelly Bay: The Swells* (Plate A55) were a combination of Photograms and Cyanotypes. The Photograms produced the realistic images of corals and shells incorporated within the abstract painterly marks created by the Cyanotype process which was characterized by its distinct indigo blue colour. The designs were random because in nature the corals and shells were tossed around in the currents and were never in the same place twice. Both artist's books were very similar except for the exposed sewing of the spines as detailed below.

Photogram Method

- Five different shapes of corals and one shell were placed on the photocopier and copied onto A4 acetate film which created four different designs/ compositions.
- Design one: approx size 12 x 8cm. One roundish coral with small circular patterns was placed in the centre of the composition.
- Design two: One roundish coral with small elongated circular patterns was

placed in the centre of the composition.

- Design three: Two smaller corals; one 'U' shape, the other circular, (both approx 8 x 7cm) were placed 4cm apart in the middle of the composition.
- Design four: three elements were placed on the photocopier: a triangle shell (approx 7 x 3cm), fork shaped coral (approx 8 x 7cm) and a rounded triangle shape coral (6 x 4cm) each 4cm apart in a line in the centre of the film.
- Design five was similar to the elements in design four with the addition of another small triangle coral shape but composed differently and alternated down the length of the composition.

Paper Sensitised with Cyanotype Emulsion

- The three large sheets of watercolour paper 56 x 76cm were randomly coated with the cyanotype emulsion in darkroom conditions with a dry brush technique. The dry brush technique emphasised the brush marks of the hake brush (a broad brush with short bristles). The brush had only a little solution of emulsion so the hair-like marks kept their shape. This formed a line-like structure within the width of the brush size. Three different widths were used: 7cm, 5cm and 2cm. The lines formed by the dry brush technique created the movement of the waves, whether swirling in the current or just slowly moving parallel to the sand bed. These lines then lead the eye through the composition.
- The designs were random because in nature the corals and shells were tossed around in the currents and were never in the same place twice.
- The emulsion was not applied evenly so that the contrasting dark blues and whites could emerge.
- The acetate designs, 1, 2, 3, and 4 were also randomly placed on top of each of the three dried papers which were coated with the cyanotype emulsion.
- A thick sheet of thick glass was placed on top of the paper and film to form a good contact needed for the clarity of the realistic image.
- The large contact, paper and film were placed outside in the sun for 15 minutes which exposed the filmic images and the brush marks of cyanotype emulsion.
- After exposure (the image was a dull grey colour) the paper image was taken straight into the darkroom and developed in water. No chemicals were used at all, unlike the developer or fixer required in liquid light and Vandyke processes. Thus, this particular process was an all-natural one and tried to

highlight the perception of the sun, air and water of the seascape. The sunlight transformed the dull grey colour to indigo blue, just as the sunlight on the sea can turn dull grey waves into sparkling blue tones.



Plate A57 Photograms contacted under glass and exposed to the sun



Plate A58 Cyanotype images developed and washed

• The large processed sheets were then hung up to dry naturally which caused the blue to deepen even further; the action of sun and air produced on the paintings the same effect as they did in the natural landscape.



Plate A59 Larges sheet of paper ripped down to form the pages of the artist's book

Construction Method for Artist's Book One: *Coral at Nelly Bay: White Caps*

• Two sheets of the large papers with the cyanotype images were ripped to create the pages in the book. Each sheet was torn into 8 strips, and thus 2 sheets created 16 strips which were folded in half to create a folio. First, the paper was ripped in half along the long edge, then the two separate pieces were ripped again equally into 4 (into quarters) along the long edge to create 8 sheets of paper. The long edge of the paper was folded in half to form a folio.

Method for the covers: Hard front and back covers

- Mount board was covered with the cyanotype paper images. The process was the same for the front and back cover but the selection of images was different.
- The outside of the board (20.4 x15.4cm, slightly larger than the pages) was covered first. The imaged paper was I cm larger to bend around to the inside of the cover and was then glued. A sheet of cyanotype image (2mm smaller than the board) was glued onto the inside to hide the paper turned over from the front.
- The binding was exposed to allow the viewer to see the blue and white to enhance the ideas of the transparency of the waves and to echo the transparency of the perspex box.
- The binding was made by piercing four, unevenly-placed holes into the spine's edge. The 16 folios (a folded sheet of paper created one folio) were stitched together, one folio at a time with a Coptic stitch (similar to a chain stitch) in dark blue thread.

Construction Method for Artist's Book Two: *Coral at Nelly Bay: The Swells*

Similar process to book one but two main differences.

- More cyanotype emulsion coated onto the paper to depict the swells of the waves' deep shadows.
- The book had the same number of pages but two folios were sewn together and therefore it was double the thickness to reflect the thickness at the base of the waves.
- The covers were also thicker to reflect the thickness of the swells.
- The papers on the cover were not glued flat to the mount board but the double thickness was folded back on itself and only glued at the inner edges. Thus an 'airpocket' was created in the middle and so reflected the aerated nature of the waves and the lightness of feeling in the environment.
- The book was bound across the spine by three strips of paper, 2 cm thick, made from the cyanotype. These tapes were then oversewn by white thread to repeat the theme of white and blue of the sea and the white thread also counterbalanced the dark blue (Plate A55).

Method for Single Image

The Cyanotype and Vandyke brown photographic processes were not mechanical. The paper was first coated with cyanotype to leave uneven edges. While the emulsion was wet, the Vandyke brown was brushed onto the surface with different pressures on the brush. The thickness of the emulsion creates a darker exposure. When the cyanotype and Van Dyke meet there is a chemical reaction and a delightful glow appears. This glow was evocative of the sunlight glancing off the sandy whorls which had been stirred up by the tidal action.

A brush was used to apply the developer and fixer, and then the whole was placed in a water bath for about 20 minutes to remove any remaining chemicals from the Van Dyke Brown. The colour did emerge slightly on the back of the page and so the reverse had a faint reflection of the surface image. Thus, those who picked up and turned over the page would have seen this reflection and so perhaps been encouraged to think through further about what it was that they had seen.

A7 Invitation and Catalogue

The inside of the invitation contained the informational text details of the location and of the time, printed in dark brown ink. The selected font had a soft edge to blend in with the aesthetics of the mangrove location but were still readable. The information was not at right angles to the invitation as in normal layout, but the lines of script were angled at different angles. Those on the book were at 50 degrees, the lines at the top at 10 degrees. The name of the artist was at the top of the invitation at an angle to reflect the different currents crossing the mud flats as well as the mangrove fruits and leaves tossed about in the water movement amongst the mangrove roots. The visual appearance of floating also, in some ways, arouses the sense of touch, as it can evoke the recollection of stirring water by hand, or seeing water eddy around ankles as one wades by the shore.

The catalogue was a single sheet of A3 paper, printed on both sides and folded down to A4. The outside of the catalogue was a composite of colourful photographs from the Mount Cook location which contrasted against the inside which contained black text on white and small SEM images from the mangrove location. The Mount Cook pictures were chosen above the other five because the clarity of blues, greens and gold were stunningly visually attractive and so were thought to entice the viewer.

Appendix B.

Exhibition Two and Three: Bookscape Installations *Titled: Magnetic Island: Aesthetic Pleasure and Scientific Curiosity*

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B1 Location

The geographic location is a synergy between the coastal lowlands, particularly the Casuarina Trees, and the Coral Sea fringing the shoreline.

The dominant sense experience of the whole bodywas viewer's body brushed up touch and sight. The against the hanging pages as if the viewer were in the landscape itself. The blue colour was dominant which represented the marine environment.



Plate B1 Visual Sense Data: Synergy between Coastal Lowlands and Coral Sea fringing the shoreline

B2 Hanging pages



Plate B2 Exhibition Two: Bookscape Installation: Engagement of all senses



Plate B3 Exhibition Two: Bookscape Installation: Six Hanging Pages

Method (Plates B2 and B3)

The SEM a scientific tool, was used to explore the variety of aesthetics of the Coastal Casuarina bark. Two specimens of the Coastal Casuarina bark were prepared: the rough outside texture and the smooth inside of the bark. SEM extended the possibilities of the aesthetics by providing more images to choose from. The rough textured bark revealed a greater variation of visual elements and so I chose rough textured paper for the hangings to simulate this abrasive texture of the bark. The images were directed downwards and across and were also flipped to make double images and to create the illusion of flow and movement to lead the viewer's eye through the image.

Because SEM provides numerous magnifications it also extended the visual elements of small patterning or larger organic shapes. I experimented with four magnifications at of 100x, 200x, 1500x and 3,500x. Firstly, the 100x and 200x were analysed through the viewfinder of the microscope like a road map which led the eye to interesting compositions for further investigation by higher magnifications. The lower magnification, *Image Two* (Plate B9), produced small, patterning effects of shapes similar to viewing a landscape in the distance. This produced a feeling of detachment. On the other hand, the higher magnification, *Images One* (Plate B7), *Three* (Plate B11), *Four* (Plate B13), *Five* (Plate B15), and *Six* (Plate B17), produced larger, more detailed shapes which had similarities to a close-up view of a landscape and so encouraged a feeling of engagement. In total, I produced 36 black and white visual images from the SEM experimentation of the magnification of the smooth and rough bark of the coastal Casuarina, see proof sheet image below (Plate B4).



Plate B4 SEM micrographs of the Coastal Casuarina bark

Six SEM images were selected to create six symmetrical compositions because there were six 'hanging pages' in the bookscape installation. A variety of design elements were needed to emphasise the flow of movement throughout the 'hanging pages'. The design movement flowed up and down in a vertical movement, left and right in a horizontal movement and/or a circular movement which created a stationary effect for the viewer who was then encouraged to stop, look and reflect on the image. The overall aesthetic of the image changed according to the magnification factor used in the SEM. The 200x created smaller organic shapes while 1500x created medium organic shapes, and the 3500x created larger, detailed, organic shapes. The variation of the magnification factor reflected the different viewpoints the viewer experiences in nature: close-up or distance. Each visual image developed into a 'hanging page' which were numbered one to six. *Hanging Page One* started on the far left as the viewer stood at the entrance to the bookscape installation. *Hanging Page One* was constructed from *Image One*. The same method was used for the *Images Two* to *Six* which formed the hanging pages respectively, a slight variation for *Image Six*.

For example *Image One* selected from the proof sheet (Plate B4).



Plate B5 Original SEM for Image One 1500x



Plate B6

- a) The SEM image one flipped HORIZONTALLY in Photoshop which created the 'vertical symmetrical image'.
- b) Then the resultant 'symmetrical image' flipped VERTICALLY was the basic process for the growth of '*Hanging Page One*'

In *Hanging Page One* the SEM image magnification 1500x, the dominant design element, was of a vertical movement which was created by the larger light area consisting of a flaky organic shape on the left side of the image which contrasted against the smaller, darker area on the right side. Both the focussed and the unfocussed images ran parallel to each other. Selective focus by SEM enhanced the vertical movement which was achieved by focusing on the top layer of the bark specimen and allowing the back to go out of focus. The other design element was a very strong dark organic line which created a diagonal movement through the centre of the image. Part of the line was repeated in *Image Four* to visually interconnect the pages in the bookscape. The vertical and diagonal movements were dramatically extended through the mirroring effect created by flipping the image in Photoshop. The selective focus areas created long soft broad lines which contrasted against the sharp flaky shapes which ran from top to bottom.



Plate B7 Hanging Page One: Symmetrical composition constructed from *Image* One

To convey the sense of movement, *Hanging Page Two/Image Two* had both similarities and contrasts to *Hanging Page One/Image One*. It did continue the vertical movement but the organic shapes were much smaller due to the lower magnification, (200x). These smaller images created a more cohesive pattern effect rather than the individual organic flaky shapes of image one. The left side of *Image Two* was slightly larger and had lighter shapes compared to the smaller, darker organic shapes on the right side. This contrast produced the visual effect of up and down movement but not as strongly as in *Image One*. The vertical movement was extended in the Photoshop process called flipping. There were no strong lines or shapes and so the effect was one of a passive, quiet vertical movement which was juxtaposed to *Image One* (image before) and *Image Three* (image after).



Plate B8 Original SEM Image Two 200x



Plate B9 Hanging Page Two: Symmetrical composition constructed from Image Two
Hanging Page Three/Image Three contrasted with the angular flaky shale of Image One even though it had the same magnification: 1500x. Image Three had rounder, almost ball or berry like polyps, which were of a similar shape to the Casuarina nuts. The layered surface of the bark was still evident but it was not as prominent as in Image One. Cavities and caverns lay behind the surface layers and created contrasts of texture to draw the viewer's eye and to provide resting places of quiet and darkness. Image Three was reminiscent of the tranquil water movements on the surface of a lake where animals drank and contemplated their reflections.



Plate B10 Original SEM Image Three 1500x



Plate B11 Hanging Page Three: Symmetrical composition constructed from *Image Three*

Hanging Page Four/Image Four reflected the left side of Image One, but a slight shift under the microscope produced a slightly different patterning. The somewhat out -of-focus layer to the right of *Image One* was removed and the shale-like flaky appearance was brought to the forefront. The effect of eroded sandstone underpinned the notions of both roughness and the natural environment. The design focus was different in *Image Four* because the two major organic lines moved in and out of the image frame and thus kept the movement flow more or less contained within the image. But a very strong vertical and horizontal movement was created through the flipping process of the image. The dark organic line in the top right hand corner mirrored/flipped to create a very strong vertical movement, which became a strong connection point for the surrounding images. On the other hand, the amorphous shape at the bottom of *Image Four*, when mirrored, formed a heart shape which emphasised the horizontal movement. Therefore *Image Four* grew into a very strong vertical and horizontal composition. When flipped and hung together, *Image Four* created a pattern of a series of squares interspersed with ellipses. The squares drew the eyes to the vertical line and the ellipses created a horizontal line and kept drawing the eye to the edge of the image and so created a feeling of constant movement.



Plate B12 Original SEM Image Four 1500x



Plate B13 Hanging Page Four: Symmetrical composition constructed from Image Four

Hanging Page Five/Image Five had the largest magnification (3,500x) The image zoomed in on the preceding and emphasised the five large balls in an arc on the left. The rock/lung framed the whole and the centre had a large crevice which exposed the dark of a cavern and hinted at the possibility of multiple layers and tunnels behind. When the images were flipped they formed symmetrical lines of large flower heads. Interestingly, the bark magnifications when flipped turned into another natural and botanical image. In this instance there was a similarity with a kapok flower, a plant frequently found on Magnetic Island. The profusion of natural images and the way that one image (of bark) merges into another natural image (the flower) underlines the effect of the continuity of nature and the constant movement of the natural world as it flows from seed to flower and into the earth again. The large flower had a complex centre rather like a kaleidoscope. This long line of repeated flowers had a parallel row of more shapes: chevrons and round Casuarina nuts, softening out to a blurred almost cloud-like edge. The chevrons, inverted and upright, were repeated throughout the row and drew the eye to the centre of the design.



Plate B14 Original SEM Image Five 3500x



Plate B15 Hanging Page Five: Symmetrical composition constructed from Image Five

Hanging Page Six/Image Five and Image Six combined to form Image Six which was then elongated and only flipped 66% whereas the others were flipped 100%. The different degree of adjustment was chosen to create even more contrast in the images. The resultant pictures were indeed more complex than those which were flipped 100%. The principle direction of movement was horizontal. The symmetrical, almost face-like patterns, seemed to create teeth in a central skulllike image, and there was an underlying white horizontal line across the hangings. The round balls could be seen as eyes in the skull. In between the skull-like pattern there were repeated images of something that could be lungs or a girl in a hooped skirt. These images were surprisingly human like but still maintained the theme of the natural world. The images could even evoke self reflection in the viewer. The seeds, bark and various images morphed into different shapes to mirror the growth and decay of the natural world, and at the same time the energy of the dancing girl is overshadowed by the skull, which evoked intimations of human mortality. The images recall us, as viewers, to our own position as part of the natural world and therefore subject to decay. On the other hand, the teeth which encourage a sense of impending doom, can also recall the viewer to the need to preserve and care for the natural world while it is still here.



Plate B16 Original SEM *Image Six* was combined with *Image Five* (Plate B14)



Plate B17 Hanging Page Six: Symmetrical composition constructed from *Images Five* and *Six*

The 'hanging pages' were hung on a 10 x 10m wooden frame (Plate B18). The wooden frame was stretched with white scrim and the frame was hung from the ceiling by chains and suspended 30cm from the ceiling. Transparent fishing line was tied through the eyelets in the wooden frame and then sewn with a needle through the top outer edges of the prints which were reinforced with the special matt tape, 'Filmoplast', to prevent the paper from ripping. The tape was strong, flexible and transparent which allowed the image to reflect through the tape and also allowed the pages to move. The hangings were blown by a fan to create movement, as of a wind through the Casuarina trees.



Plate B18 Support construction for the 'hanging pages'

The 'Filmoplast' tape (Plates 19 and 20) was also used to attach the twelve symmetrical prints together to construct the 'hanging page'. While the top four images were attached to the white scrim with fishing line, the bottom corner edges were taped to the top corners of the images below in the second row to leave a gap of 2cm. The third row was also connected to the second row above with the matt tape following the same procedure. The vertical and horizontal gaps between the 12 images formed a large geometric transparent grid which reflected the small square shape of the tape. The geometric grid was a metaphor for the latitude & longitude of the world, a method for discovering and locating places on earth. The visual design elements of the organic shapes were a metaphor for meridian lines in the human body which direct energy flow around the body, just as the design elements lead the eyes/body through the 'hanging pages'.

In the bookscape installation, the viewer was constantly discovering different intricate designs on a small scale. The gaps between the images allowed the viewer to stop and look very closely through all the hanging pages to experience a different

aesthetic and to realise that the images do not stop at the surface of the printed image. The aesthetic compositions always changed depending on the angle from which were viewed, how close the body was to the images and the movement of the pages in the breeze. The images and therefore the responses to the images were always changing as indeed is one's response to the elements in nature.



Plate B19 Aesthetic Composition: Side view, the reverse side of the print is lighter



Plate B20 Aesthetic Composition: Close-up view

The tapes were connected on the top and bottom of the prints, leaving a 2cm gap to form a transparent line in which the tape develops into a square shape thus forming part of the design of the visual elements. The viewer looks through the intersection, explores and discovers intricate shapes and becomes engaged with the images.

B3 Invitations

The invitation was created from two designs (Plates B21 and B22). These two designs were themselves composites of all the original SEM images photographed from the Casuarina bark specimens. All the SEM images, selected or not selected for the exhibition, were used in both invitation designs because they were the beginning of the investigation into the visual elements of the Casuarina bark. A 'proof sheet' was made to reduce all the SEM images down to a small size because of the smallness of the invitations. The design strength of the proof sheet was that the images and text formed rows across the length of the frame. The invitations were cut into strips at a right angle to the row; therefore, each invitation design contained a diversity of SEM images and text (an image was selected from each row). All the selected SEM Images One-Six plus the variations of focus and density were juxtaposed to a 'miniature proof sheet' which consisted of all the bark specimens as detailed in Plate B21.



Plate B21 Invitation: Design One



Plate B22 Invitation: Design Two evolved from Design One

Both *Designs One* and *Two* were created from the same 'proof sheet composition' as detailed in Plate B23 which were digitally manipulated through Photoshop, predominantly the clone, transform and layer tools. Each digital manipulation of the visual elements was saved on a separate layer, and all were individually labelled in Photoshop. This filing system allowed me to enhance or change the design elements at any stage as I deemed aesthetically necessary to develop the design. *Design One* emphasised the harmonious appearance of flaky, bark texture by layering and sectioning parts of the whole. *Design Two* inserted angular black geometric patterns into the blue flaky surface in order to reproduce my sense of the sharp angularity of the Casuarina nuts. These nuts fell with a sharp 'ping' sound to the ground, pierced bare feet walking over them and had a strength and tactile power to them when rolled in the hand. *Design One* evolved into *Design Two* and both were extremely intricate and detailed because of the smallness of the invitation to be cut as compared to the large 'hanging' pages' exhibited in the bookscape installation.

Design One for the invitation created a harmonious composition which represented the flatness of the flaky bark texture of the Casuarina tree. The design originated from the 'proof sheet composition' (Plate B23) which formed rows of small SEM images and black text on a white background. Both visual images and text were part of the design. The SEM images in the rows were 'cloned' (copied) and extended into the white space below but the black was text visible. The black text was the information typed by the researcher while the white text displayed on the SEM image was the negative identification and magnification factor recorded by the SEM at the time the specimen was photographed. The SEM images were photographed with the choice of the information display on or off and the decision was made later via the proof sheet to which images were selected. A proof sheet is normally only considered as a scientific record, used to record the scanned images. However, here this scientific purpose was transmuted and transformed by the artistic process into an invitation to draw people into the exhibition which itself was an expression of the artistic and the scientific ways of human perception. The 'foundation' (Plate B24) was the intermediate step between the proof sheet and the final composition of Design One. Because the exhibition combined art and science, the text symbolised the science aspect, factual information, while the SEM image symbolised the aesthetics involved in art.



sheBarkTx500-69.tif

Plate B23 The proof sheet composition of SEM of Casuarina bark



Plate B24 The foundation design manipulated in Photoshop

The 'proof sheet composition' (Plate B21) was digitally manipulated in Photoshop to create the 'foundation design' (Plate B22) for the invitations. The 'foundation design' consisted of 19 layers of image manipulation in Photoshop which was divided into five rows and achieved by the following procedure.

Row one (top) of the proof sheet consisted of consisted of layers 1,2,3,4, 5 and 6

- Layer 1 The SEM images of the proof sheet were locked as a master copy
- Layer 2- The SEM text records were locked as a master copy
- Layer 3- Duplicated layer one, the worked layer, images to be copied from and manipulated. The original proof sheet which started the manipulation process of the SEM images
- Layer 4 Duplicated layer two, the worked layer, original proof sheet which started the manipulation process of the text
- Layer 5 of the proof sheet, included *Image One, Image Three* including two variations, density & focus, and *Image Four*
- Layer 6 Repeated (cloned tool) bottom section of layer five except *Image One.* Images included were *Image Three* and the two variations, density and sharpness plus *Image Four.* The white background to the text was made transparent and replaced by *Image Six* which also included the black text.

Row two of the proof sheet consisted of layer 7

• Layer 7 - *Images Two* and *Three* were a the variation of *Image Four*, which had a magnification time increased to 2000x and a variation of *Image Two* which included the display record in white text. The right end of the row was angled down, and was therefore wider than the beginning of the row which broke the effect of the parallel lines.

Row three of the proof sheet consisted of layers 8 and 9

- Layer 8 *Images Five* and variation to include the white text produced from the SEM, *Image Six* and variation of *Image Two*, magnification time increased to 350x which counter balanced layer 7. Far left of the row was increased in size while the right end of the row became smaller. A diagonal line formed where the two rows abutted.
- Layer 9 repeated (cloned tool) the bottom section of layer 8 to replace the white background of the proof sheet which contained *Image Five, Image Six* and part of *Image Two* variation. Magnification time increased to 350x to emphasise the black text.

Row four of the proof sheet consisted of layers 10 to 17

- Layer 10 Repeated through the cloned tool, the bottom section of layer nine replaced the remaining white background to form a small strip of *Images Five*, and variation of *Image Six* which included the white text display produced from the SEM.
- Layer 11 Included the miniature proof sheet and variation of *Image Two*, magnification time increased to 500x.
- Layer 12 Small section, part of *Image Six*, just before the miniature proof sheet.
- Layer 13 *Image Two* variation, magnification time increased to 500x which was composed on an angle to break the routine of the horizontal row formation.
- Layer 14 *Image Two* variation, magnification time increased to 350x
- Layer 15 *Image Two* turned horizontal
- Layer 16 Small close up of the dark part of *Image Six*
- Layer 17 Part of Image Two

Row five of the proof sheet consisted of layers 18 and 19

- Layer 18 *Image Three* and the variation of density and focus, plus *Image Four* which were all increased in size by 10% and stretched sidewards (Transform tool) to fit the remaining space of the composition. This made the images look bigger at the bottom of the frame which reflected the top row, *Images Three* in layer 5 (except *Image One*).
- Layer 19 Same-size *Image Three* as in row one. Row five was folded to meet row one on the invitation so the images were very similar but slightly different to blend the images particularly in the harmonious composition in *Design One* more tension.

The invitation was two-sided; one side had the designs and the other side had information about the exhibition in three different shades of blue which reflected the blues of Design One and Design Two.



Plate B25 The Graphic Design Layout printed in three shades of blue on the reverse side of the SEM images.

The invitations were cut down from Design One and Design Two to create 16 individual designs to allow for greater variation of images for visual stimulation. The small invitation fitted easily into a hand and so the recipient could interact, unfold, touch, feel the fibres of the cotton paper and the varying smooth, medium or rough textures and take time to discover and explore the intricate shapes.

Appendix C.

DVD

C1 Pre-completion seminar

C2 Exhibitions and Guest Speakers

