SPEED_SPACE
Architecture, Landscape and Perceptual Horizons

Appropriate Durable Record
A thesis submitted in fulfilment of the requirements for the degree of Doctor of Philosophy by Project

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Abstract

Developing a new spatial model for generating poetic intelligence in response to the already constructed and degrading landscape.

The thesis has a simple inquiry: what innovative architectural spatial models can be developed within, or in response to, the townships and degraded land located along the Perth-Kalgoorlie water pipeline in Western Australia, to help instigate a new poetic intelligence when considering architectural making that has a direct relationship with the landscape that it exists within?

The thesis begins and ends with a triad relationship between human perception, architectural idea making, and landscape: it begins with observation, engagement and recording and ends with a generative proposition. The thesis articulates how the complexities of a defined site can be recorded and modelled to bind disparate elements into being and therefore model more accurately the wholeness of perception that often drives architectural thinking.

Commencing with the lens provided by the Perth-Kalgoorlie water pipeline, the thesis examines a domain in which architecture, landscape, and human action combine to activate our poetic intelligence. The thesis shows that we feel what we think we see, the visible power of man in nature and, the relentlessness of a middle distance that has been constructed around us.

Through critical reflection a tremoring occurs, causing powerful new imaginings. The research attempts to visualise the new landscape and show that we help to degrade what we treasure. This moment or realisation can be framed as an aesthetic moment that causes us to think again. The research, formulated as a progressive, heightening of experience, leads the observer from Rambler’s Gallery through commonplace territory pointing out observations along the way and then ultimately winds these commonplace observations together to construct a new presentation of the commonplace.

The final exhibition announces a new spatial model for generating poetic intelligence in response to the already developed and degrading landscape. The exhibition creates a Speed_Space that posits and tests the essential theme of the research; it is an act of invention that creates new knowledge (the poetic intelligence). The common link between architecture and landscape in this thesis is that both are understood to have been significantly constructed by the human subject and, that this constructed landscape is a finite system and is all that we have.

This thesis, through the evidence embodied in SPEED_SPACE offers a mechanism to demonstrate what gaining architectural experience is like;
uncoiling into the world, observing, weakening, moving at the limit and then coiling up moments of experience, knowledge and perception to create a force of the imagination that generates new poetic intelligence as a result being in 'that' world. The new spatial model shows architectural experience, in response to the already constructed and degrading landscape, to be more like a self-made constellation acting as a force of imagination rather than a sequence of facts collected together.
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Abstract

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Introduction

Statement of the topic of inquiry

Developing a new architectural, spatial model for generating poetic intelligence in response to the already constructed and degrading landscape.

The thesis begins with a simple inquiry: what innovative architectural spatial models can be developed within, or in response to, the constructed landscapes – townships and degraded land located along the Perth/Kalgoorlie water pipeline in Western Australia – to help instigate a new poetic intelligence when considering new architectural making that has a direct relationship with site, the constructed landscape that it exists within?

Carol Burns notes that ‘In architectural design, the demands of relating a building to a physical location are necessary and inevitable; the site is initially construed and finally achieved in the architectural work’. It follows then that in order to achieve an architectural project as a work of site we must really attempt to understand both the mechanisms of building and the actual characteristics of a physical location.

The thesis begins and ends with the triad relationship between human perception, architectural idea making, and landscape: it begins with observation, engagement and recording and ends with a generative proposition. The thesis articulates how the complexities of a defined site can be recorded and modelled to bind disparate elements into being and therefore model more accurately the wholeness of perception that often drives architectural thinking.

Context of the study

The research is ‘by project’ – therefore the architectural project embodies and demonstrates the matter being investigated. There are a number of levels (or types) of architectural demonstration projects. The following three groups summarize the broad range of such projects.

Type 1, Built Idea Models, such projects are designed and constructed to demonstrate ideas about architecture through the medium of a building itself. For example, the German Pavilion was designed and built for the World Exhibition in Barcelona, 1929 by Mies van der Rohe, and GucklHupf designed and built for the upper Austrian ‘Festival of the Regions’, 1993 by Hans Peter Wörndl.

Type 2, Unbuilt Idea Projects and Models, architectural projects intended to demonstrate ideas for buildings in a form that is readable as a building to be built. The project may be built in a revised form after further consultation with clients. Idea models - (created) to demonstrate architectural intentions, they are often designed as imaginary schemes made in response to changing conditions in the environment around us. For example the imaginary urban schemes
presented by Steven Holl in his 'Edge of a City' proposal, the projects can be seen as inventions rather than solutions. My Master of Architecture thesis project, A Rambler's Gallery, belongs here.

Type 3, Perceptual Models, projects designed as a model to generate poetic intelligence rather than offer any particular new architectural project or scheme. A perceptual model presents a new spatial scenario that has been developed out of a given situation; it is prognostic and tends to introduce perceptual change. For example the project Theatrum Mundi: through the green membranes of space, 1985 by Daniel Libeskind. Libeskind is admired for his capacity to bring new dimensions to the perception of architecture.2

The Speed_Space model is located within Type 3: in documenting and searching for a new presentation of the experience of the world, new worlds are made; as such it rests within the context of a world gathering that aims to create new fictions. It therefore draws on projects and literature that illuminate methods for world gathering and ways to present models that bind fragments into being and present forces of the imagination.

Most Specifically the Thesis Draws on the Following:

Physical Context: the Wheatbelt towns and landscapes of Western Australia connected by the Goldfields Water Supply Pipeline.

Ideas Gleaned from Literature: John Sallis - Reason and Imagination, Movement at the Limit, Force of Imagination; Phillip Fisher - Wonder, All at Once Experience; Frances A. Yates - The Art of Memory, The Memory Theatre; Leon van Schaik - Second Order Modernism in Architecture, Province and Metropolis; Jorges Luis Borges - Fictions, Poetics, Infinity, Serial Repetition; Paul Carter - Repeated Beginnings, Andrew Benjamin - Spacing and Distancing, Carol Burns - On Site; Gianni Vattimo - Weak Thought; William McDonough & Donald Worster - Nature's Well-Being; Jean-Francois Lyotard - Presenting the Unpresentable, It Happens; William Carlos Williams - My Surface is Myself, To Discover in the Local City a 'World' City; J.P.Stern - Lichtenberg, A Doctrine of Scattered Occasions; Italo Calvino - Invisible Cities, Raoul Bunschoten - Chora and Soul's Cycle.

Projects: Stephen Neille - Rambler's Gallery (Master of Architecture project); James Corner - Taking Measure; Daniel Libeskind – Theatrum Mundi; Ivan Rijavec – Perceptual Edge, Whole New World; John Hejduk – Soundings; Lars Lerup – After the City, Massiveness; Cy Twombly – Poems to the Sea; Zeynep Mennan – Non Standard Exhibition; Florian Beigel – Doing Almost Nothing.

Structure of the thesis

The argument commences with the Rambler’s Gallery, and the findings that gave it form. The line along the Goldfields Water Supply Pipeline is considered as an experiential sequence. As the Rambler’s Gallery revealed, that experience is held in the mind as a ‘constellation’, a system of meaning held by the person who has had the experience in a necessarily sequential process. What is however ‘recalled’ or remembered (or imagined) is a journey as a united constellation of highlights.

The thesis is structured and presented as a coiled sequence - Expansion, Tremoring and Contraction. Beginning with the Rambler’s Gallery, it stretches out to collect and observe the sequence of towns and landscapes. The preliminary research, the recording of the sequence, is informed by text, and the reflections on the thesis are bound into minor projects. These stages are recorded and noted until a tremoring occurs, (after John Sallis) a recoiling at the limit. The tremoring marks a key perceptual moment and sees the beginning of the ‘configuration of the project’ as the contribution and summary of the thesis. What is designed is a material model of the duality of sequence and constellation. The spatial, verbal and sensual markers that are the towns are laid out in a line abstracted from the actual journey. The marks recorded and remembered are coded into the segments of a sphere that can be coiled up into a sphere, in which the overlapping and reconciling and editing of the total into a single, holistic memory is modelled.

The conclusion demonstrates the aim to create a more accurate model of architectural experience. What you take away is not the sequence, but the self made constellation. The outcome shows a different way of designing that takes these two processses into account. The evidence is the redesign of the Rambler’s Gallery using this model. The examination consists of both the Rambler’s Gallery and Speed_Space shown in a landscape layout, connected by a coiling sequence of images showing the stages of the argument and enlargements of the fragments of information (town spaces, etc.) that are held in the thesis.

The Durable Visual Record of the thesis is structured in three major parts bounded with an introduction and conclusion. Part 1, Expansion, is articulated in four sections that work together to reach Part 2. Part 2, Tremoring, ‘describes a movement at the limit’ from which the major project is then articulated in four sections making Part 3, Contraction.

Part 1, Section 1, Beginnings, commencement of the argument, presents the Rambler’s Gallery as a demonstration project designed to relate building form to a physical location. The design process began with a site investigation and attempted to articulate functional programmatic and spatial demands. The research project evolved in such a way that the physical location was used to help structure the form. The developing form also attempted to slightly restructure the location
itself to enhance the overall site. The Rambler’s Gallery is carefully considered and articulated. Yet with all its technique and discipline it stands comfortably within the recurring field of masterly architectural production. It emphasizes the architectural object as a physical go-between that draws on cultivated architectural knowledge and responds to the physical location – the site - the constructed landscape – the ‘world as found’.

Part 1, Section 2, Stretching Out, a performance of place, describes how the research stretches out from the Rambler’s Gallery, seeking to investigate the ‘world as found’, to investigate the site context that is asserted by so many to play a determining role in the outcome of new architectural work. The research begins with wonder, it follows an intuition indicating that something irremovable remains hidden in the shadows of ‘the world as found’, as if aspects of the physical context in which architecture operates still remain unclear. Issues of the constructed landscape needed to be clarified and revealed so that new intelligible beginnings could be made. What is it about ‘the world as found’ that could be revealed so as to provide a closer approximation to truth? What aspect of reality could be exposed in such a way that it may affect our experience of architecture and landscape, affect our poetic intelligence? What kind of exposure might affect our re-imagining of site and therefore lead to the achievement of new architectural work?

A linear system, the Goldfields Water Supply Pipeline, was identified and used as the site for a curated exhibition of theoretical works. Architects were asked to create a speculative project in one of the many small towns that are connected by the water supply pipeline and the intertwining road and railway lines as they stretch across the Wheatbelt landscape of Western Australia between Perth to Kalgoorlie. The project was documented and presented as ‘Big Journey/Small Buildings: Inhabiting a Drawn Out Landscape’. When reflecting on these projects and the Rambler’s Gallery an intimidating and haunting sense arose that something is absent in the work. In considering the model photographs used to represent the Rambler’s Gallery and Big Journey/Small Buildings projects a limitation is noticed in the way the projects connect with the actual characteristics of the physical location. Something is missing within the picture; the architectural object is there, but the context itself is almost absent. It appears that in the excitement to reveal architectural intentions some projects may have been over abstracted.

In this situation the site – the physical location – which is an underlying and founding ingredient of architectural making, is diminished. It is as if, in the closing moments of presenting each project, something indiscernible was found hidden in the already constructed world, something unfamiliar and formidable, something that could, if detected and exposed, shake the very foundation principles of the architectural project itself; as if the actual conditions of the
location, so exposed, could destabilise the whole effort and therefore cause us to feel differently about what we think we see. The problematic reality of the physical locations were perhaps just too difficult and therefore left out.

Part 1, Section 3, Closer Observation, here the research focus turned to the close observation of this extensive and pervasive site, a site that may be considered as a major part of Western Australia’s greatest single site project, the Wheatbelt. The Wheatbelt developed as a result of the need for economic growth and development; it was constructed rapidly and is a typical example of late 19th century and 20th century expansion. Within that enormous overall project, it was recognised that to observe the whole environment was impossible and therefore the study focused on the series of townsites that have been constructed along the Golden Pipeline. Aerial photographs describe the various geometric configurations of the towns situated within the greater Wheatbelt setting, they provide a snapshot of the new landscape that has been constructed over the last 100 years or so.

The Wheatbelt landscape moved me. It moved me because of its ability to record the passage of time and to physically describe itself. Its capacity to maintain the markings and traces of human will that shaped the location are extraordinary. The sense of overbearing land exhaustion is evident in its surface. It records our continuing need to build human habitat and our continuing lack of regard for a land undergoing collapse.

When considering our habitat, the relationship between buildings and physical locations, we cast ourselves adrift within the very space of our existence. We open up a method of spacing and distancing that must consider, at the same time, the ground on which we live, and the objects and spaces that we construct for our own purposes. The American poet William Carlos Williams said it so well when he stated ‘my surface is myself’.

Part 1, Section 4, Weakening, the research began to indicate that the aspects of site: building and location are in fact much closer together than we may think. It was noted that location and buildings combine to form site and that any particular site is part of a larger system. When you look at any location from a distance you realise that it is really a part of one big site, and that this one site is all we have. Site is pervasive, it is everywhere and a lot of it has already been constructed. When considering typical sites or locations anywhere: cityscapes, landscapes, or the Wheatbelt towns described here, it can be observed that an advanced state of degradation and fatigue is occurring in many parts of this thing we call site. Working with the theme of regimes of care and the idea of weaker actions, I designed a Sanctuary Park between the intertwining lines that define the rambling journey through the Wheatbelt. Rather than inserting more objects in the landscape, a new configuration of landscape is proposed within the existing transport system.
Part 2, Tremoring, movement at the limit, describes a point at which I was overburdened with the enormity of the project, by the significant fatigue and degradation evident everywhere in the project. I felt that I had come to a movement at the limit, a movement that the American Philosopher John Sallis calls ‘tremoring’ - the experience of limitation in which man recoils from exceeding nature. With this tremoring came the onset of a discerning paralysis issued in as a result of reflection under the recoil. I read Lyotard’s writings on the sublime and moved slowly at the limit, not wanting to move as usual, but to move and act differently, more carefully in the face of the enormity of the fatigue witnessed in the research field. Here came the compulsion to not make more, as usual (Type 2) projects in the landscape, but rather to create a demonstration project that works in the realm of poetic intelligence, as a (Type 3) perceptual model.

Part 3, Section 1, Looking Back, making sense at the limit, is the beginning of a coiling back, the beginning of the configuration of the final model as the contribution and summary of the project. When encountering site, we rarely, if ever, experience the overall big picture. Generally we perceive site through a whole series of connected locations, as moments, as bits and pieces, as separate elements like the separate Wheatbelt towns connected by a thread of road. While investigating these towns I wondered if a perceptual model could be created to bind the identified parts into being and form a new entity, a new entity that merges the various locations together into a new site, a doctrine of scattered occasions that combines configurations from various locations into a new fabrication which constantly reveals the characteristics of the bigger picture.

Photographic images recorded and captured the towns as moments in a sequence (like pears on a string). They represent the experience of the site as a sequence, as a line. However, this is not how the towns, as a part of the greater landscape, are remembered. The total experience of the towns as one travels past, and through, is much greater. The towns gather as a whole, they are bound in the mind, they blur, they are remembered differently. The string and pears were gathered together forming a loose ensemble that more accurately described the one big site. The ensemble resembling a loose sphere seemed to present the individual moments (town images) as a whole, as a singular form that constantly presents new horizons as one moves their position relative to that of the object. A spherical polyhedron was unravelled and each component of the polyhedron imprinted with an image of a town located in the sequence provided by the water supply pipeline. The towns, as imprints onto geometric segments, are then rebound to form a new continuous surface of parts; the line becomes an object; the sphere becomes a perceptual model.

I began to wonder if the perceptual model could act as a muse, as an instrument that may, when experienced, prompt speculation about the recurring
conditions of fatigue evident in the site. Such reconsideration may help trigger shifts in perception, shifts that acknowledge site degradation to be a state caused by our mismanagement, shifts that cause useful change and a careful reconsideration of the relationship between building and site. Could such a model cause a trembling in our perception, a shudder that saw us recoil from the experience of exceeding nature? Could we turn away from our typical buildings that perpetuate our comfort in domination? Could a muse help to reveal a terrifying beauty that exists around us, within the project of our actions: the site? The research attempts to visualise the critical apex of our time, it seeks to disclose the fact that we are making the physical conditions around us and that we are helping to accelerate the condition of fatigue within the very thing that we treasure most – site.

Part 3, Section 2, Gathering, presenting at the limit, I have attempted to gather and frame this realisation as an aesthetic moment that can prompt us to think again, to act differently, to act gently, quietly, and carefully. In the Wheatbelt project Speed_Space tries to reveal that when small moments are bound together they can instigate grand caring conceptions. The sphere of images is powerful, it binds parts into a whole, but the perception of the sphere remains on the surface. The experience of site - the landscape - is greater, of more consequence, more spatial it is three dimensional. The model must gather space. The spatial, double skin characteristics discovered in the Rambler’s Gallery are applied to the polyhedral system; each town is inscribed as a spatial figure into a hexagonal or pentagonal cone, the sequence of cones are bound to form an entire system. A new geometric perceptual model was invented.

Part 3, Section 3, Coding, the potential in pieces, parts or moments are like a doctrine of scattered occasions. Each part of the model is documented as an occasion; containing the town plan as figure, town image imprinted onto the unfolded cone, aerial photograph, the town figure within the sphere and the location sequence of each cone as one follows the organisational linear sequence.

Part 3, Section 4, Speed_Space Model, is another ‘Theatre of the World’ (as an idea model or muse) it is the new perceptual model. Ultimately this work attempts to reveal a specific intelligence that can be gained in architectural spatial experience, one which recognises that it is our state of mind that must change in order that we build more carefully in future, that coded perceptual models in architecture can help us feel differently about what we think we see. The Speed_Space Model is like the unsuccessful Wheatbelt towns that never became what we intended. It reveals that our surface is our self, it is a constant reminder of wholeness that is built out of the transitory and fragmentary landscape of experience; a doctrine of scattered occasions. It is a tribute to those who change their minds about current strong practice, who will weaken, who will ‘give up’
present strength. It is a monument to care and change, to loss, to becoming again.

In the conclusion of the PhD, I discuss the thesis project in terms of the issues that were discovered, how the project is a work of imagining, commenced by stretching out from an identified beginning, how it works to prompt speculation, searching, collecting and reflecting; and how by working at the limit, it dissolves old thinking and creates a new perceptual model that coils and uncoils into the world as found, presenting a new spatial model for generating poetic intelligence in response to the already constructed and degrading landscape, that shows architectural experience to be more like a self-made constellation acting as a force of imagining rather than a sequence of facts collected together.
Part 1, Section 1, Beginnings, is the commencement of the argument for this doctoral thesis. It provides a summary of the Rambler’s Gallery and the findings that gave it form. It provides a singular Object/Space/Landscape, a focused view, a place in the world - a first mark. A series of seminal themes have been drawn out of the Rambler’s Gallery and presented in the following pages as: Constructed Landscape, Constellation, Rambling, Body, Double Skin - Objects and Figures, and Making.

**Rambler’s Gallery**

The Masters Thesis, A Rambler’s Gallery: Spatial Propositions in Architecture¹, is a research project that solidifies a specific approach to what would be considered the normal role that architecture enacts in the process of place making. It both structures and is structured by the context and, in fulfilling the double role the architectural object plays, the new work simultaneously configures its own spatial and programmatic order. The Gallery project settles a new work firmly in an existing site, an already constructed landscape that is the monastery town of New Norcia. Specifically though, it creates a moment of suspension when, at a point in time and space, a series of distinctly separate parts come together in a moment of unity, a moment that is only experienced briefly before the whole ensemble splits apart. The moment is small in time but swells in the mind and fixes a picture of classic beauty; an object in the landscape with parts symmetrically framed about the viewer’s axis. The whole is created as a lexicon of individual spaces that are individually configured and located so that they can be seen as a part of a set. They become a part of a set when experienced from a particular point of view, the parts change their relationship with one another because of our changing relative position.

With all its elegance and discipline, the Rambler’s Gallery, as a Type 2 Unbuilt Idea project, stands normalised within the ranked field of architectural knowledge. It maintains a focused view of the architectural object as a physical go-between that draws on both cultivated architectural knowledge (the discipline) and the context in which buildings are made (the site, the constructed landscape), the ‘world as found’.

It is in ‘the world as found’ – that very context, the site that is asserted by so many to play a determining role in the outcome of new architectural work², the landscape component of architecture and landscape – that this research begins......

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2. Carol J. Burns. 1991. On Site: Architectural Preoccupations. In Drawing/building/text: essays in architectural theory, edited by A. Kahn. New York: Princeton Architectural Press. Burns notes that, ‘In architectural design, the demands of relating a building to a physical location are necessary and inevitable; the site is initially construed and finally achieved in the architectural work.’ She also notes that, ‘Because of its intrinsic importance and generative potential, the conceptual content of site must be made available for study and opened to question as a means to disclose and, ultimately challenge the motives and precepts of the discipline’.
Acknowledgement that the landscape is not given, but produced; it is not of nature but of fiction.

**Constructed landscape**

In imagining the constructed landscape as a system that is made up from a whole series of bits and pieces connected by routes and paths we unearth a fascinating and productive view of contemporary habitation. It allows every particular city or town to be likened to a galaxy, as if we had drawn something like the image of the night sky back onto the skin of the earth. The region, city, town or suburb becomes a scattered image that can be explored and charted.
Constellation

The idea of relation is a central theme which considers the spatial dependence of autonomous objects and how they may be experienced as an entity. In these systems individual parts rely upon the specific location and presence that they establish within a site. The Gallery is specifically located within New Norcia; it is made of seven individual parts that are grouped together to form a constellation that can be recognised as a complete object when experienced from the road.
Above: Body-Mind-Experience Diagram

Right: New Norcia looking north along the Great Northern Highway, Stephen Neillie

*In rambling we construct mental pictures of the world, the body works as an information exchange system formatting cognition and perception - we feel what we think we see.*

**Rambling**

This is a term that I use to describe the spatial practice of those people who occupy these constructed landscapes. Ramblers are just ordinary people going from place to place on their business, travelling about the constructed landscape – wandering from place to place, room to room, object to object. They construct their lives within and between a whole series of specific bits and pieces.
Body

The human body provides the connection with all things; the viewer is the key to the project. The body plays its role as an information exchange system, a sensory apparatus, a cognitive apparatus - it is perceptive: with intuitive recognition the mind refers its sensations to external objects as cause. The constellation of individual gallery rooms appears to the observer to be grouped together and form a complete object. This is achieved by virtue of the visual parallax that is designed into the layout of the gallery.

Left: Constellation in Constructed Landscape (Objects + Figures), Stephen Neillie

The object appears in the site, it is made of parts that together form the picture which is held in the mind.
Below: Sections, plans, elevations. Spatial types - linear, spine, serial progression, grid, cloister, courtyard, centric.

Recognising the extremes of linear and centric spatial organisation.

Double skin - objects + figures

Architectural objects may be seen to be amphibians which are required to perform a doubling act in order to serve two conditions at the same time. Their double condition must simultaneously define the volume of the internal spatial figure and establish a specific formation within an identified context and for these purposes can be thought of as having two skins.

The figure is a formal spatial idea. It is the indispensable motive from which a particular architectural volume draws its reference. Volume is a zone of space aimed at inhabitation. It is differentiated from a universal model by the mediating figure, which in its turn is characterised by particular circumstance.
Making

Objects such as drawings and buildings are made, that is they give form to ideas and the realisation of things. Making constructs a spatial, geometric and material order - an operational task which attempts to understand the constructed environment and reconstitute it as a thing that oscillates between the idea and the physical – giving form to thinking through the joy of making.
Part 1, Section 2 **Stretching Out**

Cover of Exhibition Catalogue - showing towns located along the road stretching into the landscape, Stephen Neille
Part 1, Section 2, Stretching Out, contains two components: Component 1, an introduction describes how the research stretches out from the Rambler’s Gallery seeking to investigate the world as found, it describes the site used in the thesis, records the methods used for generating an understanding of site, and details observations of, and reflections on, the site. Component 2 is a project, Big Journey/Small Buildings: inhabiting a drawn out landscape, created as a means to explore and document the site and involve the insight of others; the project is described in this Durable Visual Record using images, text and photographs from the exhibition and catalogue.

**Stretching Out - Component 1**

**Wonder that dances in the peripheral vision of a focused view of architecture**

The thesis begins in wonder¹, in the sense that something imminent is in the shadows of ‘the world as found’ and that something remains unclear about the physical context in which architecture operates that needs to be clarified so that we can make new intelligible beginnings. What aspect of reality could be exposed in such a way that it may affect our experience of architecture, one that would affect the poetics of our experience of architecture and its relationship to the physical land? What kind of exposure might affect our re-imagining of landscape and therefore lead to the achievement of new architectural work? Most importantly, how could such a collection and re-imagining be presented as a new spatial model for generating poetic intelligence² that brings new dimensions to the perception of architecture?

**A stretched dimension**

*Rural and remote communities across Australia are by no means homogeneous – indeed there are great differences by State and territory, size of town, wealth and environment. What they have in common is a small population spread across a vast area.*³ (Chris Sidoti)

Western Australia has a particular sense of place. Its natural topography has a consistently stretched dimension that seems to run horizontally across vast plains. The sense of protracted distance is chronic. However, what is most remarkable about the place is the expanded and relentless spacing and distancing⁴ of the built environments that have been, and are being, constructed in order to make production and habitation of the land possible. Where the Rambler’s Gallery is a singular project located in a singular town, New Norcia, the thesis requires a more extensive site, a built environment in the form of an already constructed

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1. For an expanded discussion on wonder see Fisher, Philip. 1998. Wonder, the Rainbow, and the Aesthetics of Rare Experiences. Cambridge Massachusetts: Harvard University Press.

2. Leon van Schaik notes that Howard Gardner has long worked on defining the various (seven) human intelligences. Spatial intelligence is one of these. Poetic intelligence is a coinage from Gaston Bachelard through Gardner, and is a sub-set of spatial intelligence. See also Leon van Schaik. 2004. Mastering Architecture: Becoming a Creative Innovator in Practice. Chichester: Wiley.


4. Andrew Benjamin. 1991. Spacing and Distancing. In Art, Mimesis and the Avant-Garde. New York: Routledge. The concept of spacing and distancing is central to the development of this thesis; for a discussion on the distance between elements and the importance of distance and relation in their specificity see Benjamin’s essay.
landscape that could be stretched out into, explored. The Goldfields Water Supply Scheme (GWSS), commonly known as the Golden Pipeline, is a notable and clearly identifiable example of such a stretched built environment. It is a finite entity and as such identifies a distinct site of focus for the thesis. It is the site used for observation and consideration within the thesis; it provides a testing ground for the thesis. (For a full listing of all the towns located along the GWSS see Appendix i and for a brief history of each town see Appendix iii)

The goldfields water supply scheme

The Goldfields Water Supply Scheme was created by C.Y. O’Connor during the late 1890’s to bring the lifeblood of fresh water to the arid Goldfields. The pipeline is a long drawn out and much celebrated artificial river that runs 550 km from Mundaring Weir located in the Darling Scarp at the edge of the Perth Coastal Plain to the gold mining town of Kalgoorlie located in the dry interior. The pipeline ensured a golden age of mineral prosperity and it helped to open up valuable agricultural land along its route and is widely recognised as a world standard engineering feat, rivalled in Australia only by the Snowy Mountains Scheme and the Sydney Harbour Bridge.\(^5\)

Linear network

The pipeline itself forms the primary linear water movement system within the greater water supply scheme which includes pumping stations, storage dams, various gazette land parcels for use by the Western Australia Water Authority and a gravel maintenance track that runs parallel to the pipe itself. Investigation has shown that the pipeline scheme as it has been configured between Mundaring and Kalgoorlie also forms a part of a network of linear supply and connection routes that intertwine as they stretch across the land. The linear network can be seen to include the Great Eastern Highway, the Old Goldfields Road (gravel), secondary roads, the national Indian Pacific east/west railway line, overhead power lines and the remnant linear earth mounds that was the Old Goldfields railway line. It follows the paths that early explorers such as Charles Hunt created in the late 19th century. “Hunt made the journey in stages, moving from one water hole to another.”\(^6\) He created a linear path by joining up individual points that were the existing aboriginal water holes. In some ways it follows the earlier traditional Aboriginal trading routes as the pipeline network winds its way through the Wheatbelt connecting the hillier, moist coastal plain with the flatter, drier, salty interior. The pipeline, as a part of the identified ‘linear intertwining network’, also passes through or directly beside some 43 towns and gazette railway sidings\(^7\) and it runs through or beside hundreds of farm allotments that were surveyed and created along with the Old Goldfields Road and railway system of transportation.
**Inscribed fragments**

The towns are important. These towns, sidings and farms are individually defined places that are geometrically inscribed into and onto the land. The towns and sidings are variously connected together by the pipe, the road, and the railway and have therefore been identified in this thesis as distinct components (objects) that form a part of the linear intertwining network. The towns themselves are not linear or primarily about movement. Rather they form stoppages and defined territories along the way; they support and are supported by the primary linear intertwining network movement system. The towns are documented as aerial photographs on pages 48 and 65.

**An identifiable territory**

Together all of these components galvanise around the pipeline to form a distinctive constructed landscape, an identifiable intertwined territory that has been created to help make the land habitable and productive. This defined territory has a spatial character that can be clearly identified as spine-like. The spine-like character of the pipeline territory makes it a suitable case study site for investigating the expanded dimension of suppositions raised by the Rambler’s Gallery project. It provides a series of interconnected parts (the towns) which can be investigated in terms of questioning the connection between objects and their context (between architecture and landscape), of searching to expose the peculiarity of the gap, the present nature of the parts and the space between them.

**Stretching, exploring, travelling**

Stretching is used as a method to extend out and explore the broader landscape. Explorers, pioneers, use this method to find out about places. They record their experience, recognizing and recording the quality and importance of rare and peculiar objects, situations and settings. The site of this thesis, the Wheatbelt landscape is experienced while moving, rambling; driving through, flying over and walking within. It is, however, predominantly experienced from within the cabin of a car, bus, truck, or rail carriage. See the image by John Brack, The Car, where the car is not so much in the landscape as the landscape is in the car. This view is overwhelmingly persistent in the Wheatbelt landscape where according to the Department of Main Roads, Western Australia, approximately 10,000 vehicles pass through the Pipeline towns per day.

**Experiencing the stretched out constructed landscape**

*From time to time the journey is marked by moments of rest, but... for the most part, it is an account of provisional explorations – an account occasioned by, and dedicated to, keeping thought in motion. Together, paths, points of departure and points of rest form a constellation that might describe the space of architecture.* (Andrea Kahn, *Across and Down*)


The research asserts that (amongst other things) we build our understanding of the environment while we are travelling; we collect the world as we go, while rambling, walking, cycling, flying, or driving. This peripatetic method is a particular form of knowledge gathering, 'a form of wandering that constitutes a ground-marking' and ground-collecting, it helps to constitute poetic intelligence. We think while we travel, we see, we perceive. I assert that we build pictures of the environment while on the move. This picture is not a narrative story like a film, it is to my way of thinking more like a gathering of bits and pieces: images, sounds, feelings etc. We collect fragments unconsciously and then assemble fragments to form a greater picture. Like a mosaic. Architecture is gathered while travelling, both internally through objects and spaces and externally through the Constructed Landscape. The Constructed Landscape that we travel through and construct our picture of place is generally a constant environment, such as the town or city or suburb that we live in. We travel through that environment many times, repeatedly; we travel through familiar spaces and create a picture of that place in time. Our body, as an information exchange system, a sensory apparatus and a cognitive apparatus is perceptive. Our mind knits together perceptions (images) of the world/place at a fast rate while travelling. Newness is also recognised and gauged in the instant, while travelling and rambling, newness is constantly compared to that combined picture that we have developed in the mind. We compare what is intimate or known with what is new or strangely familiar. Exploring the stretched space between familiar objects and spaces creates a wider ranging space within which to gather new information, new perceptions of the world. It is a way of pushing towards a limit of the familiar.


12. Rambling is a term used to describe a certain type of slow travelling.


Right: Gallery 94. 1999. Exhibition of student projects designed for the Wheatbelt site and presented for the studio Architectural Design 202, Curtin University of Technology and used as a pilot research study for Big Journey / Small Buildings, Stephen Neille.
Stretching out - component 2

This component describes the project, Big Journey/Small Buildings that was designed and used in the process of the thesis as a means to open up the site of the thesis and to involve the insight of other designers. It was devised and used as a means to document the site and provoke responses to the site in the form of architectural projects. The full introduction text from the published catalogue, Big Journey/Small Buildings: inhabiting a drawn out landscape, is presented below as a means to describe the intentions, framework and structure of the project, the 20 individual architectural projects created for the exhibition are presented on the following pages 32-35, and the exhibition itself is described using a sequence of 16 time lapse images included on pages 36-37.

Big journey/small buildings: inhabiting a drawn out landscape

My stories are, in a sense, outside of me. I dream them, shape them, and set them down: after that, once set out into the world, they belong to others. (Jorge Luis Borges)

In response to an invitation instigated by the event of Habitus 2000 - A Sense of Place, Stephen Neille and Stephen Parkin devised the Big Journey/Small Buildings project. The project takes the form of an exhibition that draws together a group of 20 architect/educators who are connected to the didactic space created by the Design Studio teaching programme at the Department of Architecture, Curtin University of Technology. This drawing together of individuals creates a constellation of practitioners that participate in a common habit: the education of architects. The group is, in many ways, as concerned with projects that are addressed to the imagination as they are in projects addressed to reason. Big Journey/Small Buildings' appeal is to the imagination. The exhibition and catalogue are intended to form a platform for the presentation of a series of speculative architectural projects, rather than as a showcase of existing projects. Participants were asked to select, as a site, one of the towns that are located between Northam and Kalgoorlie along the 550 kilometre extension of The Goldfields Water Supply Pipeline as it intertwines with the Great Eastern Highway 94. Each person or practice was invited to consider three themes: Site and Place, Architecture and Distance, and Constructed Landscape, and to envisage a new architectural work, with proximity to the road and pipeline, that creates a place to...

Site and place: Western Australia has a particular sense of place. Its natural topography has a consistent stretched dimension than runs horizontally across vast plains of water and earth, and vertically to the southern skies. The sense
of protracted distance is chronic. However, what is most remarkable about this place is the expanded spacing and distancing of the built environment that has been constructed in order to make habitation of the land possible. The Goldfields Water Supply Pipeline is a notable example of this stretched built environment. The pipeline is a long, drawn out and much celebrated artificial river that supplies fresh water from the coastal plain to a gold mining city located in the dry interior. It is a marvellous engineering landmark that forms a part of a system of linear supply routes: the railway, highway and power lines. In some ways it follows the earlier traditional Aboriginal trading routes as it winds its way through the Wheatbelt. However, a paradox exists; just think of that visible pipeline, encased and protected, carrying fresh water right through the thirsty landscape!

**Architecture and distance:** architecture simply forms a small part of the constructed environment. We spend so much time travelling between particular rooms and places, our world seems to be constructed within and as a part of a whole series of smaller events. From within this habitat we put together constellations created from our experience of place and therefore assemble a particular picture of the place. What qualities may be advanced for architecture that is conceived of being a small part of a much bigger picture, as eddies within a fluid landscape? Could these small works be designed so that they remain in the memory, for a while, as we drive from place to place, town to town, suburb to suburb collecting buildings in our heads, forming pictures, constructing a sense of place?

**Architecture and landscape:** a romantic but hackneyed slogan, particularly if we think of architecture in its current, typically exploitative and laissez-faire relationship with the natural and constructed landscapes. The Wheatbelt landscape is currently in a state of fatigue, having been significantly bankrupted by 20th century practice. What new relationship might architecture play within such a place? If architecture can be said to be site specific and therefore develop close relationships with the landscape, what new relationships can be formed between architecture and the fatigued landscape that we experience along the water pipeline between Mundaring and Kalgoorlie? Can there be any positive response to this entropy in the environment?

**Thoughts and projections:** The twenty propositions that have been created for the exhibition are like a string of pearls that have been cultivated along the Pipeline and the Highway. They are perceptive and thoughtful. Take some time to read the drawings and text that each contributor has constructed as they offer insight, wit and opinion on what is possible. The works fabricate and present Dreamtime,
stories and innovations: places to… turn to tea, ric, and rak…connect…interpret…
inform…caretake…compose…remember…engage…learn…appropriate…Speed_
Space…revisit…pause…reap…reverie…drive to…reflect…cleanse…pump.com…
and gather. This ensemble of schemes illustrates that when architects imagine,
think and construct, heritage has a chance of being realised again and again. This
is not because architects do create the works; rather because when architects
realise dreams many possible futures are exposed in preference to the traditional
copybook building re-enactment. These projects cause us to ‘feel something
about what we think we see. Being, as they are, representations of the architect/
educator’s spatial sensibilities and mind play, these projections inevitably lead the
reader to thought and on, to personal imagining, to wonder, to speculation - which
is of course the springboard of educational and cultural growth. The work of this
exhibition suggests active participation in wonder and promotes the important role
that unbuilt projects play in the advancement of architectural research.

The long-drawn-out-ness of the pipeline and the necklace of small
buildings is special. It is special, not so much because of the distance that
“the pipe” spans as it winds its way through the landscape, nor because of the
elongated spacing that is created between the new works. It is special because
this pattern of the widely spread connectivity that exists between isolated
components is so consistently repeated in the urban and suburban spaces of
our Western Australian towns and cities. We find ourselves firmly embedded in
the daily spatial practice of Big Journey/Small Buildings. We inhabit a drawn out
landscape which presents us with a curious spatial condition that needs to be
comprehended, studied and speculated upon if we are to continue to cultivate
and sustain our surroundings, or better still to advance a more desirable living
environment. Our appeal throughout has been to the imagination, the exhibition
and concepts that you see are ephemeral; they are representations of the mind,
which have been described through the use of drawings, text and models. We
trust that you find, within this collection of imaginings, a few motivating sparks for
use in your evolving journeys.

Stephen Neille
2000
Right: Projects one - five of the twenty individual architectural projects created for the exhibition and catalogue: Big Journey / Small Buildings; inhabiting a drawn out landscape.

Note: the full text describing each project is included in Appendix iv
Left: Projects six - ten of the twenty individual architectural projects created for the exhibition and catalogue: Big Journey / Small Buildings; inhabiting a drawn out landscape.

Note: the full text describing each project is included in Appendix iv
Right: Projects eleven - fifteen of the twenty individual architectural projects created for the exhibition and catalogue: Big Journey / Small Buildings; inhabiting a drawn out landscape. Nota: the full text describing each project is included in Appendix IV.
Left: Projects sixteen - twenty of the twenty individual architectural projects created for the exhibition and catalogue: Big Journey / Small Buildings; inhabiting a drawn out landscape.
Note: the full text describing each project is included in Appendix iv
Above: images one - eight of the sixteen sequential images recording the assembly of the exhibition
‘Big Journey/Small Buildings: inhabiting a drawn out landscape’, John Curtin Art Gallery, 2000,
Photographs: Chris Geoghegan
Above: images nine - sixteen of the sixteen sequential images recording the assembly of the exhibition 'Big Journey/Small Buildings: inhabiting a drawn out landscape', John Curtin Art Gallery, 2000, Photographs: Chris Geoghegan
Above: Key map showing the extent of the 550 km Goldfields Water Supply Pipeline within the context of Australia.

Right: Satellite image of the Wheatbelt showing the Golden Pipeline that carries water for the Goldfields Water Supply Scheme. The image shows some of the towns that the pipeline connects and travels through. Image by the Department of Lands Administration.
Reflection on the project: big journey/small buildings

All participants designed a project for one of the towns within the identified site that stretches across the constructed landscape of the Western Australian Wheatbelt (As well as conceptualising, curating and designing the exhibition and catalogue with Stephen Parkin, I also designed and submitted a building design proposal with artist, Jurek Wybraniec, see pp: 18-19 of the exhibition catalogue made available in the Thesis exhibition). All projects were addressed to the imagination. The overall project, both exhibition and catalogue, exposed and opened the Wheatbelt site; it challenged perceptions of the place and most importantly it provided a major project to reflect upon in order to progress this thesis.

As mentioned in the introduction, when reflecting on the Rambler’s Gallery project and the Big Journey/Small Buildings projects there arose an intimidating and haunting sense that something was still absent in the work. In considering the model photographs that were used to represent the Rambler’s Gallery and Big Journey/Small Buildings projects (see pages 23 and 32-35) a limitation is noticed by the way the projects connect with the actual characteristics of the physical location. Something is missing within the pictures; the architectural object is there, but the context itself is absent. It appears that in the excitement to reveal architectural intentions some projects may have been overly abstracted.

In this situation the site – the physical location – which is an underlying and founding ingredient of architectural making, is diminished. It is as if, in the closing moments of presenting each project, something indescribable was found hidden in the already constructed world, something unfamiliar and formidable, something that could, if detected and exposed, shake the very foundation principles of the architectural project itself, as if the actual conditions of the location, so exposed, could destabilise the whole effort and therefore cause us to feel differently about what we think we see. The problematic reality of the physical locations were perhaps just too difficult and therefore left out. This set of images together with the aerial photographs collected, mappings made, and site information collected, provided material for the next part of the thesis investigation: Closer Observation.

15. For a detailed exploration of ‘reason and imagination’ from which I draw the aphorism ‘We feel what we think we see’, see John Sallis. 1987. Spacings - of Reason and Imagination in texts of Kant, Fichte, Hegel. Chicago and London: The University of Chicago Press.
Part 1, Section 3  Closer Observation

Great Eastern Highway No. 94. (Photo: Stephen Neille)
Part 1, Section 3, Closer Observation, is concerned with both the close observation of
myself as a researching designer and closer observation of the site itself. It
expands on the identified method of travel search, recognising that designers
travel - they search - and in doing so gather knowledge of places whilst on
the move. Closer, deliberate observation is a method of slowing down that allows one
to see again, to see the particular, to gather and critically consider perceptions.
This chapter focuses on the site that is gathered while travelling, both the parts
and the bigger picture are described in more detail. It describes the conditions
witnessed, the representations used and the perceptions made. It describes how
a middle distance was noticed after repeated beginnings and how the constructed
landscape is found to be pervasive, close to us in time and undergoing fatigue. It
closes by presenting the series of thirty two aerial photographs of the towns used
in the study and a preliminary attempt to visually represent the middle distance that
came into focus under closer observation.

Travel time

Travelling along the road between the towns again and again was useful.
It was noticed that the road could be used as signifier of space unfolding in time.
No final meaning need be determined from this method. However, a network of
associations is generally gathered together and formed by the person who has the
experience. Observers therefore play a significant role in reworking and producing
the sense of a place. James Clifford aims to rethink cultures as sites constructed
through and crossed by travel.1 Designers travel, they take in the experience
of place through movement in time, there is a constant change of scenery, of
atmospheres. A sense of place develops by considering situation in space as
distinct from position in space. The experience is one whereby the place is
constructed as a series of fragments, of moments in time. Time is both experienced
and thought out in travel along Highway 94, the time of the travel itself, and time
as witnessed in things themselves: the weathering of buildings, wear and tear of
the road, repairs to the pipeline, traces of bush fires, growth of crops, remnant
vegetation, etc. The observer brings it all together. Such a perceptual whole may
be seen as a type of image assembled and held in the mind of the observer. Gilles
Deleuze notes that the movement-image can be seen to be: ‘extensive (space),
intensive (light) and effective (soul)’. Time forces ‘us to think an absolute of the
movement of bodies, an infinity of the movement of light, and a backgroundless
(sans fond) of the movement of souls: the sublime’.2 The developing awareness
is one of place as a perceptual construction. The experience is something akin to
the experience of non-place described by Marc Auge3 where one seems to be part
of a space continuum albeit one made of many parts, the combined effect is an
experience of space in time - a kind of Speed_Space.

1. See James Clifford whose aim is to rethink cultures as sites constructed
through and crossed by travel, Clifford, James. 1997. Routes: Travel and
Translation in the Late Twentieth Century. Cambridge, Massachusetts:
Harvard University Press.


Thinking travelling

While travelling the landscape (as in traversing architecture) we participate in it and with it. It is seen, touched, felt, thought about – it is travelled through, over and under. It tells us about itself by being there. It can be observed and thought about while travelling and by using representations such as photographs, maps, paintings film, texts, etc. I observed the Wheatbelt landscape in a number of ways, walking, driving through and flying over. From the ground, on the road, things appear in a particular way, the land is compressed into a perspective-like view. When in the air, from a satellite point of view the land is stretched and perceived as a surface. I gathered various representational data of the landscape; aerial photographs describing the individual towns connected by the Goldfields Water Supply Pipeline, satellite images of Western Australia showing the extent on the entire Wheatbelt and a collection of cartographic maps showing roads, railways, land sub-divisions, town boundaries. These representational techniques were used to record moments in time and the appearance of things. They were used to trigger thoughts and other perceptual dimensions of the landscape, both while in the landscape and while working from the studio away from the landscape itself. First hand experience was compared with what was represented in the collected maps and images, and representations were compared with what was experienced. The combined effect of the immediate and the ephemeral is useful; when what is seen is compared with what is recalled, a new perceptual dimension can be constructed. We feel what we think we see. The task is to bind these points of view and shifts in perspective into a useful whole that may trigger moments of suspension, where usual travel thought is challenged and therefore contributes to the advancement of poetic intelligence.

4. Various maps and images are used in this thesis. A reference index is included in the ‘Map’ section of the bibliography. The specific references referred to in this section are: Uncontrolled Landsat Mosaics, South West and Eucla, 1:1,000,000, Great Eastern Highway (Drawing No’s. 7922-128 to 7922-147), Scale 1:25000, G. & A.W.S. Main Conduit Route Plan (Drawing No’s. 49696-1-1 to 49696-1-15), and Australian Map Grid Cadastral Survey, Series R712, R.F. 1:50000.

5. Evidence of these recordings can be seen in the exhibition, in this Durable Visual Record and they are shown in the bibliography.

6. There are many ways of presenting this coded information to describe various aspects of the site, see contour plans, road maps etc. Famously, Buckminster Fuller questioned the way that information about the surface of the earth was represented – see the Dymaxion Projection Map which is a projection of a global map onto the surface of a polyhedron, which can then be unfolded to a net in many different ways and flattened to form a two-dimensional map which retains most of the relative proportional integrity of the globe map.

Images and maps reveal

Images and maps are the two major sources of representation used in closer observation. Images and maps record and reveal. They reveal different types of information. Images, such as photographs, films and sketches approximate what is seen, whereas maps, such as plans and diagrams, abstract and code information. Images can record and describe the site from many points of view; along the surface, on the surface and above the surface, where maps tend to record and describe the site from above. It is useful to briefly describe and compare the two predominant modes of representation that were used to observe the site from above: aerial imagery (satellite images, aerial photographs) and, maps and plans. Both are reproduced at a scale. The map abstracts information that has been surveyed or measured to form coded information about the arrangement and chief features of a given area. The map does not show us what
it looks like, it describes the position, shape and scale of things: the road, railway, towns, site boundaries, contours, etc. Sometimes vegetation is shown, sometimes not. This is what the map does; it shows particular abstracted information and omits information in a way that does not happen so consciously in an aerial photograph. Maps and plans were used in this thesis to plot the extent of the site.\textsuperscript{7} Aerial photographs describing each town along the water pipeline were collected. These aerial photographs are compelling; they are descriptive and evocative, both as individual images and as a collection of parts. Aerial imagery ‘pictures’ the given area, replicating what we see, it is a photograph taken from above. In this way the aerial photograph describes the features as they appear, picturing the surface of the earth. The traces on the surface tell us about the thing itself; the landscape physically describes itself, its markings reveal its history and its present state. Aerial photographs reveal the appearance of the thing whereas the plan requires an established code. Aerial imagery reveals topographic features such as where the water runs on the surface; it reveals time, weathering, ageing and decay but does not explicitly indicate the height of the land above sea level as the contour map does. The surface is read in light; aerial photographs used picture only what is visible to light, not heat, magnetism etc. Looking at the aerial photograph prompts one to consider the condition of the site pictured. Some touch the surface to gain an extended sense of the site, for instance, when people touch photographs to gain a felt sense of the thing pictured, even though they know the features seen will not be physically felt in the photographic surface. This reaching out to touch something seen may be a type of motor action used to trigger memory to increase perceptual understanding. The state of the land can be seen, coded and described. Images and maps reveal; aerial images reveal what is seen from a particular point of view and maps reveal information that is not directly perceptible, such as height above sea level. Images and maps record, describe and represent; they help to reveal the surface of the earth.\textsuperscript{8}

\textbf{What is seen – aerial photographs}

Aerial photographs were used to observe the particularities of each Wheatbelt town located along the pipeline. All towns were evaluated and overlaid with maps to compare perceptual understanding and coded information. The townsites were visited on a number of occasions to compare image and reality. Aerial photographs help to form a better understanding of the arrangement and appearance of the towns. Observations were noted together with anecdotes from text and stories. The entire list of observations made for each town is too extensive and repetitive to be recorded here, but it is worth recording the notes from one of the towns to give a sense of what was seen and described. The town randomly selected is ‘Hines Hill’ (see image reproduced on page 56),

\textsuperscript{7} See my plan (10480mm x 864mm) drawn at scale 1:50 000 that plots the entire length of Goldfields Water Supply Scheme pipeline, and the extent of the Great Eastern Highway, Standard Gauge railway, Old Goldfields Road, townsites boundaries directly associated with the pipeline.

\textsuperscript{8} See the many layers of information assembled together to create such Internet electronic references as ‘Google Earth’ and the high-resolution photographic imagery of Western Australia available by a web server called ‘Skyview WA’ accessed through The Department of Land Information Western Australia. www.landonline.com.au/skyviewwa/content/asp/skyviewwa...
the aerial photograph used is colour image No 5204 WA3452 C KELLERBERRIN AND EXTENSIONS (2434), RUN 2 (5181 – 5204), 1:25000. 29.10.94, 940926. The border of the photograph is coded with information including the photographic run number, scale, north orientation and the date the photograph was taken. Cartographic sub-divisions of the land are evident as faint linear markings that define areas of land. Town boundaries can be seen inscribed into the landscape. Within the town boundary remnant vegetation fills the place where a township including school, church tavern, railway station were to thrive. The Great Eastern Highway runs diagonally across the orthogonal northerly orientation of the town boundary. The hill, ‘Hines Hill’ is left vegetated because dozers cannot clear once a hill reaches a particular gradient. The Old Goldfields Road, the old railway, the pipeline and the new railway line all run diagonally across the town boundary. Township building sites and road ways generally run perpendicular to the Great Eastern Highway. Land sub-division generally runs north/south while the communication and transport lines seem to run their own path through the place, as they follow Hunt’s track which was the earliest of the colonists’ sortsies into the region. Path and land division seem to be separate items. A once fresh water river, now a salty river due to significant clearing of native vegetation, runs right through the town. A large salt lake is present on the northern edge of the town; a fence marking that town boundary follows the surveyors’ Cartesian geometry crosses straight through the lake. This insistence on geometry speaks of the early disregard for the lie of the land and the shapes of nature. The salt lake is marked on early maps as ‘Lake’; early aboriginal accounts of the land show that salt lakes were known to exist though out the area. The boundaries of the town are evident in the aerial photograph, the town starts where the agricultural clearing ends. The town never filled the boundary that was laid out for it and the native vegetation was left intact. The town was not built to capacity; public building sites noted in the town plan gazette do not exist. In some ways the town failed to achieve its potential, yet because of this failure to expand, to clear the land in the town for building, remnant vegetation is left where building was meant to happen. This remnant vegetation is critical to us today as it indicates what species thrived in this area. The aerial photograph shows the town as a township landscape.

Repetition and the middle distance

*I don’t suppose any of you has ever been to Lobos. Not that it matters. There’s no other small town in the Argentine that isn’t exactly like all the others – even to the point of thinking itself different.* 
(Jorge Luis Borges)

The township landscapes studied and considered for this thesis are linked in series by a unique artificial (constructed) water pipeline that binds them into an
identifiable series. On closer observation what became important is the fact that the towns and re-occurring landscape seem to repeat, in peculiar and particular ways, the series of human actions and natural processes that helped to bring the entire site into being. When working on the thesis I keep overlaying information, aerial photographs and maps over one another. The towns and landscapes define specific artefacts that mark stoppages in the continuity; they make specific configurations along a line. It is observed that in repetition connections are made and ‘moments of suspension’ are experienced where the fragments seem to bind together creating sharp focus, where a projection is made that is grounded in recollection. We define ourselves by what we find and therefore our wandering constitutes a ground making, a type of place making by continually going between parts of the region but going nowhere.

On the travels through the archipelago of towns distributed along the intertwining paths that run between Perth and Kalgoorlie two unexpected finds were made: firstly, in the repetition of towns a middle distance started to appear and secondly it was observed that a unique component of the overall landscape through which the Goldfields Water Supply Scheme runs could be identified as the ‘Wheatbelt Landscape’, this precinct is recognisable because of the significant clearing that has occurred in the area between Mount Helena (8 kilometres from Mundaring Weir) and Karalee (381 kilometres from Mundaring Weir), this huge area of clearing can be clearly seen as the predominantly yellow, pixilated area of the satellite image on page 38. Remnant vegetation then predominates eastward of a distinguishable line that runs north-south through the southwest corner of Western Australia. This ‘Wheatbelt’ precinct has been identified as the focus area of the study and the series of thirty-two towns that lie within that precinct are described in more detail throughout the rest of the thesis including the aerial photographs shown on pages 48 - 65 and the town names and distances listed in Appendix ii. Each of the aerial photographs focuses on one of these towns as fragments of the overall Wheatbelt Landscape. I attempted to record this experience of the middle distance by photographing the township landscapes from the road. A representative sample of township Wheatbelt Landscapes between Tammin, 177 km from Central Perth, and Southern Cross, 366 km from Central Perth were photographed at each 3 km interval. Four photographs were taken at each interval using a digital camera, a photo facing predominately east along the Great Eastern Highway towards Kalgoorlie, a photo facing predominately west along the Great Eastern Highway towards Mundaring, a photo facing predominately north perpendicular to Great Eastern Highway, and a photo facing predominately south perpendicular to Great Eastern Highway. The images are stored on a series of three CDs; each image is printed as an A4 black and white image and bound as a book document. The images as they appear in the book did
not accurately represent how the township landscape was being experienced as a recurring middle distance, the images were reconfigured by cutting the images into triangular segments and joining them together as a sequence where the four images taken at each interval could be seen all-at-once in a way that is closer to my experience of the place. This new imagery is recorded on page 67 of this document.

The usual experience of the Wheatbelt landscape is that of travelling through it, by road, as described previously. Generally the place unfolds in time, like the experience of the suburban metropolis, where after the constant recurring appearance of small fragments that have been constructed over the past 100 years or so, a repetition is experienced, a constant recurring that issues from that construction. People, objects, technology and spaces are part of the landscape scene. The artificial divisions of human construction and nature are blurred. The landscape is recognised, not as a romantic or nostalgic picture but as a re-occurring present - a middle distance.

Replacement in the greater surface

The surface of the Wheatbelt can be thought of as the skin of the earth\(^\text{11}\) where gravity act to ground fragments. Individual aerial photographs showing the repetition of the towns within this patchwork was observed together with satellite imagery that shows the full extent of the Wheatbelt landscape through which the pipeline travels. The satellite image (see page 38) describes the greater surface as an all-at-once experience that is not really appreciated when travelling through the landscape; it shows how the land has been extensively divided into many parts, fragments that include both townsites and agricultural subdivisions. The South-West region of the Western Australian landscape is vast and until western settlement was extensively covered with a unique ecology called the bush that has become, as I shall explain, isolated into monumental form.\(^\text{12}\) Prior to European settlement, Western Australia’s Wheatbelt area was covered by a complex mosaic of woodland, mallee, shrublands, granite rock and salt plants. Clearing has left only remnant areas, most of which are quite small. Remnants designated as reserves are among the largest and have a mean size of 114 ha.\(^\text{13}\) Clearing the land in order to implant productive mechanisms has progressively emptied the land. Western settlement tamed the wilderness of the habitat by clearing, surveying, marking out, building, etc., and often replacing indigenous bush landscape with new agricultural landscape. Imperial civilisations tend to want to tame everything in sight, to make strange things familiar.\(^\text{14}\) This clearing and replacement eliminated, in many parts of the land, the strange melancholy provoked by the unfamiliar evergreen bush and this cultural practice created a new constructed landscape, a new patchwork matrix. Aerial photography, at both the large scale showing the entire Wheatbelt
and the closer scale of the individual town, reveals the new condition of the skin of the earth; where the repeated small geometric fragments of cleared land have replaced the extensiveness of the bush that was.

**Fatigue and the modern ruin**

We live in a capital driven society. As a result, the towns, the road, pipe, railway etc. from Perth to Kalgoorlie were constructed in order to profit from the land. These were, and still are, land-clearing practices that place great stress on the land system. The clearing of land for agriculture was rather successful; indeed land clearing was promoted and sponsored by the State Government. This clearing has had a destructive effect on the land, perhaps beyond what may have been predicted. The towns are beautiful in a way because they have been shaped by the processes of time acting against the static geometries that man inscribes into the land. Perhaps this is sublime, a grand dimension of time is pictured. What can be seen in the aerial photographs is the evidence of marking out, the results of land clearing and the processes of the ecological system. When reflecting on such an extensive landscape, I questioned the appearance of wonder in the Wheatbelt: it lacks moments of delight. Pressed to make sense of the place, the lack of regard for ecological, hydrological or long term economic health, I begin to realise that this particular constructed landscape has, as evidenced by its current form, or lack of it, been made in the short term, during the last four generations or so since World War 1. Recognising the rapid rate of replacement and significant evidence of fatigue creates a perceptual shudder in me. The towns are seen as modern ruins. In one sense they are failed projects never becoming the modern townships they were supposed to be; on the other hand they have survived in a new form, as fragments of demarcated remnant vegetation, which are of great value today because they maintain remnants of the ‘Monument that was’. What is witnessed in the towns is strong and heroic practices of the 'Modern' undergoing fatigue, ruination, stress and disappearance - showing modernity to be fallible. We operate today, in light of the modern ruin, with an altered sense of time, that modernity can be seen as the past is a paradox.\(^{15}\) The future is not so certain, but will come and be enacted. In conclusion it can be seen that the landscape is subject to degradation that is the result of human action and human will; it is what we make it. Fatigue is present in the Wheatbelt landscape; this fatigue is not confined to the bush and in many ways is repeated in the metropolis. See comparative pixelated aerial photographs showing the Wheatbelt landscape and the Perth metropolitan landscape on page 66. The landscape is a surface of our making. We live as a part of an ecosystem that we have helped to construct, it is a constructed landscape made by reshaping what was there; it is of ourselves – as William Carlos Williams put it, ‘my surface is myself’.

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Right: Mount Helena
This image scale 1:60 000
(Source document at 1:20 000)

Below: Chidlow
This image scale 1:60 000
(Source document at 1:20 000)
Wundowie
This image scale 1:60 000
(Source document at 1:20 000)

Bakers Hill
This image scale 1:60 000
(Source document at 1:20 000)
Far left: Clackline
This image scale 1:60 000
(Source document at 1:20 000)

Left: Grass Valley
This image scale 1:60 000
(Source document at 1:20 000)

Far left: Northam
This image scale 1:60 000
(Source document at 1:20 000)

Left: Meenar
This image scale 1:60 000
(Source document at 1:25 000)
Mockering
This image scale 1:80 000
(Source document at 1:25 000)

Cunderdin
This image scale 1:80 000
(Source document at 1:25 000)
Bungulla
This image scale 1:60 000
(Source document at 1:25 000)

Kellerberrin
This image scale 1:60 000
(Source document at 1:25 000)
Hines Hill
This image scale 1:60 000
(Source document at 1:25 000)

Nangeenan
This image scale 1:60 000
(Source document at 1:25 000)
Walgoolan
This image scale 1:60 000
(Source document at 1:25 000)
Carrabin
This image scale 1:60 000
(Source document at 1:25 000)
Yerrillen
This image scale 1:60 000
(Source document at 1:25 000)

Bodallin
This image scale 1:60 000
(Source document at 1:25 000)
Left: Noongar
This image scale 1:60 000
(Source document at 1:25 000)

Below: Nulla Nulla
This image scale 1:60 000
(Source document at 1:25 000)
Moorine Rock
This image scale 1:60 000
(Source document at 1:25 000)

Garrall
This image scale 1:60 000
(Source document at 1:25 000)
Ghooli
This image scale 1:60 000
(Source document at 1:25 000)

Yellowdine
This image scale 1:60 000
(Source document at 1:25 000)
Karakke
This image scale 1:60,000
(Source document at 1:25,000)
Comparative aerial photographs.

Pixelated Wheatbelt landscape and Perth metropolitan landscape.

This image shows that the border landscape has been divided into a myriad of fragments or individual allotments of land. These fragments can be seen, given distance, all-at-once and when seen as such they combine to create a constructed landscape-mosaic. The previous aerial photographs describe a specific set of such land fragments. It also shows that the city and the country have both been divided and fragmented in similar ways, that the findings made in the country can apply to the city. See ‘Repetition and the Middle Distance’, pages 44 and 45.
Middle Distance Imagery, 2003 (Photos: Stephen Neillie)

These images are created by combining twelve sets of digital photos. Each set includes four images taken from a single point along the Great Eastern Highway: two photos show what is seen perpendicular to the direction of the highway one facing north and another facing west, two photos showing what is ahead and behind on the highway, one facing east and another west.

The procedure and geometry used to create the image attempts to represent more accurately what I perceived as I travelled along the highway. I was collecting view fragments in my mind.

This image combines the sets of photos in a linear sequence. However, the usual rectilinear photo frames are spliced into one another. The perpendicular horizon capturing images are spliced into the perspectival spaces described by the road so we see - all at once - what is ahead, to the side and behind.

The image is a closer representation of what I think I see as I travel along the road. See ‘Repetition and the Middle Distance’, pages 45 and 46.
Part 1, Section 4  Weakening

Remnants of structures built on lands now being eroded by rising salt water. (Photo: Stephen Neille)
Part 1, Section 4, Weakening, is a withdrawal from strength that occurs after witnessing the repeated degradation evident throughout the wheatbelt landscape. It is a withdrawal from strength after seeing the ruinous strength of the modern project at work and having recognised this ruinous strength as ours. Working with ‘weak thought’, new ecology and nature’s well-being, concepts of new civic presence and regimes of care are introduced to help prompt and guide new works of the imagination. New projects aim to demonstrate the appreciation of weak thought, of doing less as advanced thinking, as progressive, as humane acting in this place. The constructed landscape is seen as a part of one world, and environmental aesthetics helps guide new works relevant to the complexity and truth of contemporary life. In trying to make sense, a little anxiety is felt, as the importance of the real care required in thinking and acting is grasped. A new provisional park Wheatbelt Common is designed and a series of ‘Soft Images’ created, actively weakening the strong binding systems that have been found, recorded and observed.

Shock after encounter

It comes as a shock to recognise the consistency of the decay that is repeatedly encountered in the experience of the middle distance, as if the whole place is auto-figurative, having been made as a consequence of a single unmoving mind set. The Wheatbelt landscape is at once wonderful, terrifying, productive and degraded. It stands as a concrete representation of the effects of our ideas in action on the earth. The constructed Wheatbelt landscape, in this way, shows our ideas to be somewhat harsh, persistent, clear, organised and evident. The fatigued landscape fills my mind with a new kind of wonder, with grand ideas about what could happen in such a landscape, but then leaves it floundering when I defer to that landscape itself as the schema for the formation of those ideas. It turns the soul in upon itself. It shakes poetic intelligence. The imagination is set in movement; there is a straining of the imagination to think a possible future for such an implausible present. This view of the landscape is so terrifying because we see our power destroying exactly the thing what we require for healthy continuity.

Weak thought

Gianni Vattimo’s notion of ‘weak thought’ challenges the privilege assigned by traditional metaphysics to ‘strong thought’ and its form of ‘reason’. His notion that the ‘complexity and truth of contemporary life should be recognised and reflected in new works’ is useful. Leaning towards the provisional and interpretative, his philosophy of actuality that aims to interpret the present condition and reconstruct sense ‘again and again against the threat of fragmentation presented by the rationalisation of the modern world’ allowed the

thesis to progress. As architect and designer, I could respond more directly to the fragmented and fatigued conditions of the place and contribute to the chain of actions by acting lightly, carefully, looking to a more provisional horizon. Rather than the shift to weakening being a conversion, the interpretation demonstrated through the project could be a form of knowledge that transforms the interpreter. The viewer may also sense the announcement that current practice is perhaps too strong.

**New civic realm and agricultural presence**

The civic realm can be understood as that which is conceptually and physically common to all residents, a collective consciousness of what it means to be an inhabitant of a particular city or region including a consciousness that transcends the desires of an individual or particular group; it supports the common good.² In this thesis I venture to stretch the idea of a civic realm to include the series of agricultural districts and towns located along the Golden Pipeline linear network and the associated Wheatbelt landscape. The problem of land clearing evident from this network has become a clear and present crisis, where the government encouraged individuals to clear the land of its natural habitat giving rise to the domination of agricultural practices. This agricultural process of efficient and economic means determines the ‘look’ of the agricultural landscape. It is a self referential object and ‘considered alone, it will remain a tool for economic production without the humanity of civic life.’³ This stretching of the civic, the realm of the public good, is a response to the new image that we are able to project of ourselves and our habitation particularly since the Apollo space images describing the singularity of the whole, round earth have been etched in our minds⁴. The aim within this philosophical position is to reconsider how to make aspects of the country in a civic manner, an arena that would traditionally be considered the antithesis of the city.⁵

**Regimes of care**

The need to act in the aftershock of realising the extent to which landscape, as a man-made construction, appears to exceed nature is a terrifying task. Care and quietness⁶ are required. Perhaps we can begin by considering again our responsibilities in making the civic realm, but this time in the light of the pervasiveness of the new ecological awareness that man and nature are totally inextricably linked, to the extent that we can consider the whole earth as a constructed landscape.⁷ Care as an underlying driving force becomes explicit; the cyclic nature of systems, the reciprocal relationship between things and ecology need be considered when gathering an understanding of the world, which is not necessarily green. So, how to create new architectural, spatial models in

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3. ibid


5. See Raymond Williams Town and Country

6. See Alison and Peter Smithson speaking about quietness; “It would seem as if a building today is only interesting if it is more than itself; if it charges the space around it with connective possibilities; especially if it does this by a quietness”. Alison and Peter Smithson. 2001. Without Rhetoric (1973) quoted in A Matter of Art; Contemporary Architecture in Switzerland. Basel: Birkhauser, p. 197.

such a context? Care! Caring buildings? Care projects? New works within the Wheatbelt landscape should be conceived in light of such civic realities as the bush; aboriginal elders have stated that their (Aboriginal culture) contribution to modernity was the bush land itself, left intact.

Thinking care

Enter here the compulsion to maintain the towns as places of celebration that indicate what is possible when brutal and destructive practices do not proceed. The towns are key markers as they describe, in their very being, the importance of doing almost nothing, of letting things be, of not building too much, of not exploiting the land for all it is worth. When the towns grow they have done so because usual practice has triumphed; where towns did not grow, the sustainable monument that is the natural environment survives. A lesson is here exposed. Modesty is required in our reworking of the already constructed environment. It is not essential to mark out human progress by producing more interpretive objects, rather signs of progress can be marked with new symbiotic caregiving projects that rework what already is in order to establish new constellations where old is intertwined in the new. The land is now failing from over exploitation, from over stressing the system. So now we ask how to shape the new environment. Too many leaders and groups are saying that the right thing to do, that is to re-plant up to 40% of the cleared land, is too expensive. This is poor vision. What is that cost compared to the cost of future repair of an increased problem? Grand caregiving conceptions are required in order to redress the destructive nature of past grand conceptions; grand conceptions of care recognising the importance of doing almost nothing, of emptiness, of modesty.

Careful making and reassessing settlement for well-being

So what of the relationship between architecture and landscape? New architecture can draw reference from the site (landscape) in which it is to be sited, a form of grounding. Drawing from the ground is a form of locating recurring themes that are promulgated by society and embedded in people’s memory. We bring to any site cultivated baggage. We feel what we think we see. The task is to alter the situation slightly in order to build a new relationship between occupied space and the given ground, a relationship that draws from the site itself and from the possibility of weaker thinking, that offers an interpretation of the present situation and projects a future. Now that we think differently, we feel differently about what we see. Images of beauty can be created that play on the mind, and that cast ethical land use as beautiful. To do this, ideas of beauty should shift from ‘strong thought’ cast in modern minds to a ‘weaker thought’ of the present. A new radical, organisation of everyday life is required, a turn to pure architecture, a turn to the classic attempt at beauty, to sublime uselessness. Creating a spatial

8. See various writings by Florian Beigel.
scenario of interconnection between environment and artifice, an operating system within a fatigued environment, that creates a scenario of new uselessness, of beauty. To make visible the situation in which we stand, to order its currents and describe a new caregiving way concerned for and interested in the constructed landscapes’ well-being, it is necessary to immerse the public (car driving) in the image of development, in the landscape as a programmed and assembled network.

Off-Reserve spatial precincts

The National Landcare Program (NLP) is one of a number of programs supported at the federal level by the Natural Heritage Trust. The NLP encourages landholders to undertake landcare and related conservation works by supporting collective action by communities to sustainably manage the environment and natural resources.11

There is no mention here of man-made landscapes. In the face of the 'Instant Environment Machine' that treats landscapes/places as purely economic resources,12 what could be designed as a new project that consciously reassembled the identified towns and associated landscape in a way that attempts to show how we can create new off-reserve spatial precincts13 within the present fragmented and separated regions. Such off-reserve precincts could create a new shared civic realm that is not necessarily to be thought of as a city but rather as type of agricultural civics? Perhaps off-reserve spatial precincts could be created, concerned with joining fatigued fragments, spreading vegetation, and living with it. The research project can be seen as a visualisation of the language of such ‘official’ statements above. A more defined spatial region could be created where typical exploitative/productive procedures are suspended in order to allow natural processes to have a little more sway and to prompt people to share a little more of the ground. Rather than perpetuating the situation that currently exists, where strong human practices of clearing predominate, new off-reserve spatial precincts could be proposed to demonstrate ways in which new (weak) regions can be created in the midst of typical agricultural strong-holds. An off-reserve spatial precinct is a place and an indicator of new weak progress. It is to be experienced, it is special and it indicates a little bit of wonder happening in the Wheatbelt. People not only travel through it on their way into and out of the State (a new gateway project), but urban people can be drawn there to experience for themselves a destination place to be appreciated for its natural/cultural, artistic value.14
Wheatbelt common

With more than 90 percent of the woodlands cleared and the remnants threatened by factors such as rising salinity, grazing and fragmentation, the challenge of management is enormous. As the task of developing the Wheatbelt for agriculture was achieved tree by tree and hectare by hectare, so the task of conserving the remnants can be achieved fencepost by fencepost and seedling by seedling. (Mike Bamford

The task is not only one of conserving, as Mike Bamford mentions, but also of expanding and increasing the intensity of the Wheatbelt region in caregiving ways. The constructed landscape that is the Wheatbelt can be seen as having developed a particular aesthetic, a particular look; the lie of the land tells us of its history, its make up. It is indeed fragmented as Bamford mentions and as can be clearly seen from the look of the land, the aerial photographs. It is fragmented just like most of the developed world where fragmentation is valued and created as a source of specialization. Working piece by piece, an off-reserve spatial precinct called Wheatbelt Common (see plans on pages 75-82) was designed to test and reveal how the series of towns and fragments of land that are connected by the Golden Pipeline could be used and rebound to make a new identifiable place of care.

The observed network of linear transport routes that connect the towns (Goldfields Water Pipeline, Great Eastern Highway 94, Old Goldfields Road, Hunt's Track, and the Standard Gauge Railway) often travel together in parallel. However, it was observed that in some sections of the Wheatbelt they split apart, travelling as a series of intertwining lines that create a network of organic paths through the landscape. I determined, from the aerial images collected and composite maps made, that a 168 km long spatial precinct between the towns of ‘Bungulla’ and ‘Garrett’ could be identified where these lines intertwine. This precinct binds and collects fragments (towns, reserves, farm allotments). Because of its particular spatial characteristic, it defines areas of land within its serpentine boundaries that, when identified as such, can be seen as a new whole. These areas are geometrically divided into fragments of privately owned and government held land. Under the government sponsored buy back scheme it is proposed that the areas of privately owned land within the serpentine linear network be purchased and assembled into a new off-reserve spatial precinct, Wheatbelt Common.

The areas of cleared land that fall within the precinct boundaries are to be replanted with native vegetation using the remnant vegetation left by the ‘towns that never occurred’ as precedents guides indicating what existed of the ‘monument’ of land that existed prior to the massive modern clearing. Wheatbelt


16. Our perception also seems to work in this way. Dr John Teleive states that his whole understanding of the world is made up of fragments that he has been collecting since he began perceiving. The television helped him to understand this phenomenon, this compartmentalization of the modern world in the very way that it presented itself as fragmented programs, one show clearly separated from the next, and then the commercial breaks, always clearly separate, neatly parcelled as fragments. See radio interview, Edwin Dowel, 1978, An interview with John Teleive, Four Corners, ABC Australia.

17. See Appendix ii listing all towns in the study, including the kilometre distance by road from the Perth GPO and the kilometre distance along the pipeline from Mundaring Weir.
Common is an example of an off-reserve spatial precinct; it is a new place and an indicator of new weak progress. People travel through it by rail, car, truck, bicycle, and on foot; they fly over it and would perceive it from the air as they travel into and out of the State, whichever way the ‘Common’ is perceived it in many ways creates a new east/west gateway project into and out of the state of Western Australia. Travelling by car, for example, one would approach a very large segment of vegetation amongst the middle distance clearing. Entering the ‘Common’, the serpentine road, railway or gravel track travels both through the vegetation and alongside, placing the viewer either in the ‘Common’ or between the ‘Common’ and the typical cleared middle distance landscape. The paths move between the two conditions as they wind their way. The scale and newness of the precinct can be read against the ruinous modern landscape, it makes an announcement, allowing those who experience it to recognise new land care at work. Wheatbelt Common is a demonstration of weak thought, created out of the characteristics of what exists, as a destination place to be experienced for its ability to bind into being cultural, land caring and artistic value by moving through it.
Wheatbelt Common: The Project

Plan showing entire 'Wheatbelt Common', 2003
(Pencil and ink on Drafting Paper, 4422mm x 864mm: Stephen Naille)
The intertwining linear network, including the highway, pipeline, railway and Old Goldfields Road, are used to create identifiable boundaries between which a new landscape is grown using the remnant vegetation found in the towns (see town figure outlines in map above). Individual land lots, seen outlined, can be purchased from private land holders by the government in order to create a National drive through park or reserve.
Soft images: thirty-two photographs

During the design of the Wheatbelt Common, because of my ongoing careful travels (see ‘Thinking Care’), I gained an increased sense of the particularity of the place that needed to be more accurately represented. The constructed landscape appeared to be at the limit; I noticed man exceeding nature and the recoil set about a melancholy stance. Usual ways of seeing melted, new poetic intelligence swelled up, seeking to construct new phantom images out of the melting present. The constructed middle distance is the melting present. Working with an increased sense of fragmentation, fatigue and the recurring present, a second project called ‘soft images’ was made. The project is a series of thirty-two images (see pages 84-99) made using photographs taken during ‘Closer Observation’ (see ‘Repetition and the Middle Distance’); each image depicts a town in the identified Wheatbelt landscape. Township landscapes between Tammin, 177 km from Central Perth, and Southern Cross, 366 km from Central Perth were photographed from the road. Four photographs were taken at each interval using a digital camera, a photo facing predominately east along the Great Eastern Highway towards Kalgoorlie, a photo facing predominately west along the Great Eastern Highway towards Mundaring, a photo facing predominately north perpendicular to Great Eastern Highway, and a photo facing predominately south perpendicular to Great Eastern Highway. For the ‘Soft Images’ series each set of four photographs is combined as an overlay technique so that the four views can be seen at once. The photographs were overlaid using the Adobe Photoshop CS2 program. These representations attempt to capture the circumstantial and are therefore ephemeral, lasting only so long as to transfer thinking through graphic form into the reader’s imagination and intellect. The project slows time for the reader to think, to ponder the nature of the thing presented. The more intriguing, the slower and greater the space created for the picture or image in our mind. This pays off by making more space for the project to be formed in the mind of the observer; giving the image time gives what the image represents, space and time.
Mount Helena 40 km from General Post Office (GPO), Perth

Chidlow 48 km from GPO
Meckering 129 km from GPO

Cunderdin 153 km from GPO
Wyola Station 165 km from GPO

Tammin 177 km from GPO
Moorine Rock 345 km from GPO

Garratt 359 km from GPO
Part 2  Tremoring

Tremoring Diagram, shaken perception, all the parts are in the air, fragmented, unbound
Part 2, Tremoring, presents a movement at the limit. On reflection and burdened by the enormity of the thesis project so far, a discerning paralysis shakes the thesis to its core. The overwhelming need to move very carefully in the wake of the vastness of the project is sublime, the need to continue to act is ever present and under the tremoring a way forward is found shifting the emphasis of the thesis project from Type 2, Building Idea Models, to Type 3, Perceptual Models. A poetics of perception pushed to the limit.

Movement at the limit

Movement at the limit is the experience of limitation in which man recoils from a recognition of having exceeding nature.¹ Having realised that the constructed landscape architects work with and make deep connections with,² to the point of saying ‘architecture goes landscape’,³ is in a state of advanced fatigue, unrecoverable in some places and having tried designing a mechanism of repair, Wheatbelt Common, a tremoring occurred; a research moment recognising that constructed landscape fatigue is due in large part to the ongoing acts of human will to progress and prosper under the globally championed banner of modernity and advanced capitalism. The onset of a discerning paralysis issued in as a result of reflection under the recoil saw the thesis floundering, not wanting to simply move forward as usual, but rather to act differently, more carefully in the face of the enormity of the destruction witnessed in the research site: the Golden Pipeline linear network and its associated Wheatbelt landscape. This continued working under the recoil created a compulsion to not make more as usual projects in the landscape,⁴ rather to push a poetics of perception to the limit in and at that limit act materially, creating a demonstration project that works in the realm of poetic intelligence.

The sublime

*The sublime, writes Boileau, is not strictly speaking something which is proven or demonstrated, but a marvel, which seizes one, strikes one, and makes one feel.* (Jean-Francois Lyotard⁵)

The tremoring that issues from movement at the limit is striking; it makes one feel. As such, excursions into the sublime, through Lyotard, help to locate feelings of pleasure and pain, joy and anxiety, exultation and depression that issue forth at this time. Such feelings are situated within a present that has a profound scale, with the ability to communicate and travel across vast distances and the ability to consider immense time scales projected both back in time and forward in time, to acknowledge massive scientific and artistic stretching, and to witness grand shifts in scale from the infinitesimally small to the vastly large.⁶

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The Wheatbelt was the result of a utopian vision of modern development. It now reveals the problematic state of such practice, the golden state, a sublime state of affairs. Sublime: movement at the limit, the experience of limitation in which man recoils from exceeding nature. The present trembling provides a sublime movement (moment of suspension) in which to act. The tragic modern world appears to lie all about me, in ruins. It highlights the need to push perception of what exists to the limit of the present, but leaves the question open: how does one make spatial propositions in the presence of such fatigue?

Continuation

Thinking and imagining continues. The continuity involves a series of complex repetitions; things occur again and again, the repeating is a continuing renewal. At moments within the continuity critical reflection causes a spike, a moment of suspension, a moment when in thinking our emotion swells to swamp typical or usual thinking and therefore cause change in the pattern of continuing thinking. Second order modernism acknowledges nature as a constructed landscape. We now see that we help to control and determine that landscape. Closer Observation and Weakening show that the landscape is degraded, continuing to be degraded and that the degraded state of the landscape is precisely what we need to recognise, care for and continue with. The state of the landscape is therefore what affects our continuity of thinking. A personal ethics develops. Sublime moments occur when a recoil is issued in as consequence from having exceeded nature; we shift our knowing from states of being to processes of becoming. We not only place things in the landscape; we also, like early explorers, create works because of that landscape. We alter the packages that we know according to the state of play of the landscape in which we find ourselves. Modernity provided a founding dislocation, a rupture in tradition, yet persistent formal patterns occur again and again. We see in architectural work that continuation involves repetition and renewal; aspects of the particularity of the present are absorbed into the whole discipline and change the way we think we see the present. Parts appear and disappear in a continual process of becoming. The task for designers is to create new spatial models that bind together and present these fragments in a specific way: as a new integrated working of time, space and object into a perceptual whole, to show, in the recoil that issued from stretching, close observation and weakening, the development of a perceptual model that shows architectural experience to be more like a self made constellation acting as a force of the imagination rather than a sequence of facts collected together.
Shifting the model (type 2 > type 3)

A reflection occurs in the tremoring: new poetic intelligence is generated in the straining of the imagination to use nature (witnessed in part 1 as an already constructed and degrading landscape) as a schema for new ideas. In this straining the thesis shifts perception, and basic instincts, towards a new personal ethics, a poetic intelligence that acts with an awareness of the need to create well-being in the face of a degrading self. A new model is required that acts in the light of sublime perception, indicating: – it is happening – careful making - acting differently. A model created from observation of the real, of what is happening. A work that is experienced, provoking one to think, ‘this is happening!’ We are in it, the present, poetic intelligence happens now! We realise ourselves performing it, making it happen; it is an object of our ideas, expanding and contracting between a desired future and that which already is. The new work aims to create a sense of the spacing and distancing that is experienced in the Wheatbelt. We witness the fragmentary nature of the place experienced in time and movement; the project then binds these many parts (the repeated middle distance) into being. The ‘tremoring’ causes a shift in the type of demonstration project required; the new model should shift from demonstrating solutions to demonstrating perceptions. The project should no longer describe more of the same; it should not be idea models like Rambler’s Gallery, Big Journey/Small Buildings or Wheatbelt Common which demonstrate ideas and solutions readable as something which may be built, rather a new ‘perceptual model’ is needed demonstrate perceptions and help generate poetic intelligence. The new perceptual model should take form as an object_ spaces, acting as a muse; withdrawn and separated from the landscape to become a founding act. The already constructed landscape sets up the foundations of a pervasive space (middle distance), which can be seen as the silent powers before, after and around the object and space, before and after man. The new perceptual model should be generative; a thing based on an identified foundation that provokes a poetics of perception.

Part 3, Section 1  Looking Back

Rambler’s Gallery - the landscape between, Stephen Neille
Part 3, Section 1, Looking Back, at the 'Expansion' out from the Rambler's Gallery, the beginnings made there, the observations, weakening and the subsequent coiling of information into a more profound awareness of the place resulted in a trembling. Looking Back attempts to make sense at the limit; it is the beginning of a coiling back. It describes the curiosity, attention and satisfaction to be found in new perceptual models and describes the commencement of the configuration of the final project as the contribution and summary of the thesis. It begins the process of attempting to bind disparate elements into being to materialise new awareness. Commencing with the 'The Sphere and the Map', subsequent critical reflection sees a return to the sequence of towns. From the sequence of towns a new perceptual model, operating as an instrument of perception, is created.

Making sense at the limit

Our awareness, our poetic intelligence, is built up slowly in space and time. From experience and impressions we build up a life. Philip Fisher describes this process of awareness building as an ongoing fragile project of making sense. Here we are concerned with the nature of making sense rather than the nature of knowing. Making sense implies a temporal building up of understanding and can be seen as an alternative to certain knowledge. The process has been one of developing an understanding of the constructed landscape, and of how we might refine poetic intelligence in order to continue to act in making that landscape, in light of the fact that the very thing we are making is showing signs of extreme fatigue. In time, through observing, reading about, travelling through and recording that landscape the research has led to an acute realisation that to act now requires a new leap, a movement of poetic intelligence at the limit, "an experience of limitation in which man recoils from exceeding nature". Such sublime perception tempers the imagination; the will to act (architecturally) undergoes a trembling. This trembling, or sense of momentary perceptual paralysis, forms a critical moment in the continuing movement of poetic intelligence as it can impact on desire to continue to act in ways that environmental education and reasoned argument cannot. It shakes our usual desire to act in the ways that we have in the past and the ways we are acting now. It triggers an awe that is not nostalgic but rather tends towards new careful plastic experiment. The recoiling in Part 3 attempts to make sense, after the trembling, of the already constructed and degrading landscape and to materialise this sensibility through the project; a perceptual model that is playful and created, like a diagram, to act as an icon of relation.

Curiosity, attention and satisfaction

The Wheatbelt landscape that has been the site of investigation in this


2. Deleuze and Guattari (through Charles Saunders Pierce) make a special case for the “diagram” in semiotics as, an icon of relation. Greg Cowan presents this observation in his Master’s thesis.
thesis is a place, a place that can be defined as a situation in space but also seen as an intellectual concept. The project emphasis is now concerned with the immediate qualities of the experience of the project, shifting from explanation of site to a materialisation of the experience of site. In this kind of work the systems of representation are very important. Drawings, satellite images, maps, road movies - all structure the experience of the viewer. How they come together in a machine of vision, a perceptual model, is a critical design issue. The model should reward the attention of the viewer by revealing a proposition that expresses the view (experience) of already constructed and degrading landscape in a more complex revealing way. The viewer understands in more aesthetic terms, that is, a perception should be gained that is concerned neither with factual information to be gained from the things perceived, nor with their practical uses, but rather with the immediate qualities the perceptual model gained from the contemplative experience itself. In this coiling back the study abandons the idea of putting new objects in the landscape, or picturing new works and shifts towards realising models that put us in the picture, placing the experience of things in the foreground of architectural understanding; foregrounding poetic intelligence and heightening our sensibilities. Indeed, new perceptual models attempt to find a new type of wonder at the border space between the ordinary and the extraordinary, a space of pure experience, so present and overwhelming, that it hardly allows for memory or the imagination but involves both, ‘we find ourselves delayed in its presence for a time in which the mind does not move on by association to something else.’

There is a moment of seeing and understanding the whole, where the sense of wonder leads to ‘curiosity, prolonged attention, [and] satisfaction.’

**New perceptual models**

Having researched the field, how could the experience of enormity, both the scale of the site with its disjointed continuity of middle distance, and the massive strength of human will that shaped the place, be represented? Not simply as a collection of facts or pictures but as a mechanism describing such awareness. Daniel Libeskind made his perceptions felt through such works as the drawings made to present his ‘Theatrum Mundi’ or the ‘memory machine, writing machine and reading machine’ made to demonstrate ‘Three Lessons in Architecture’. These are awakening machines that show us other certain awareness; they are strangely familiar, ghostly. Ghosts are shaped as a projection, cast from both what we know, and don’t know, about the human figure. We feel what we think we see, and as such new perceptual models should embody connections to a spatial order or pattern that the experiencing subject carries with them (in this thesis the shapes and geometries of the towns). The observer carries the past in memory, constructing the present as they experience it, combining in their mind,
what they see with what they remember. New work aims to slightly alter the beam of vision that projects out of the experiencing subject, new perceptual models aim to refract usual vision reshaping sensual and cognitive recognition usually held in the observer’s mind’s eye. In this way perceptual models are not to be taken as works of architecture to be experienced as such, but as mode’s used as a prompt or muse, when imagining and creating new works of architecture. The perceptual model acts like a crystal ball; peering into it can generate the imagining of a new reconfigured and blurred image projected out of the present.

The sphere and the map

So far, the research project has been ‘An agony of self-realization bound/ into a whole/ by that which surrounds it.’ What fascinated me now were the possibilities of the context, the site, and how the fragments that surrounded me could be bound into a whole. I responded to the big picture site, the Wheatbelt landscape, to the individual towns and to the enormous effort of human will that created them. Early models were made to test these perceptions and how they may be re-presented included placing a sphere, describing the cyclical and persistent singularity of human will that helped create what surrounds us, within a rolled out map describing the fatigued site of the thesis, the Wheatbelt Common. The project model, ‘Sphere and the Map’ (see photograph page 110), presents an object space (sphere) located within a site space (map). The object space is a vast thing within the site-space; it is perceived as autonomous and disproportionately large but hinting at the movement inherent in thought. When read against the landscape map, the willpower sphere can be seen differently, as an entity that is both affected by the context and in return affects the way context is read; the object is drawn into the space of the site and the site is drawn into the space of the object. The intentional vastness of the object and space is intended to demonstrate that how we think has an enormous impact on the constructed landscape, an impact well beyond physical human dimension. The two parts, site-map and willpower-sphere, are equal in size; the Wheatbelt landscape is enormous and fatigued, the sphere is singular and strong. The two together indicate the sensibility found in ‘tremoring’ where schemes that are the result of human will, in turn, re-implement human will. The axiom, my journey is myself, comes to mind.

8. In history a Claude Glass was taken on the grand tour or even a localised country tour as a perceptual mechanism that would allow one to see the landscape anew.


Return to the towns

Although the ‘Sphere and the Map’ helped to model perceptions it did not accurately present my experience of the constructed landscape which was more like a constellation of moments bound into being by the observer. The human component was separate from the landscape that surrounds it, yet my experience couldn’t really separate what was landscape what was human will. Both seemed
entwined. I returned to the series of towns within the overall site. When travelling through the Wheatbelt landscape the towns strike the mind; they are experienced and gathered as we live, as we travel. My spatial experience captured the towns as identifiable parts with certain formal characteristics¹¹ storing them to form a constellation. It repeated the sense of the middle distance described in 'closer observation'. Such constellations are, from my observations, developed in the minds of individuals to establish an understanding of our world. In the parts are gained an invocation of the potentially whole, linkages form a sequence in the assembly and human perception creates a self-made constellation. My experience of the sequence of towns is like this and so I created a second model to reveal a more accurate demonstration of this understanding. The individual towns, even when abstracted from the landscape, formed a constellation that seemed whole. Through subtleties of geometry and form they created another world full of surprise.

Appearance of a new model

I returned to the middle distance images created to describe each town (see images Part 1, Section 3, page 67) and configured a geometric mechanism that would maintain the sequence but bind the parts into a whole. I joined the photographs (perceptual images) of each town into a linear series replicating the sequential order of towns and crumbled them into an experience bundle that more accurately described the experience of the towns as they existed in my mind. Experience, like the landscape, is being constructed and reconstructed again and again, and in this way disconnected perceptual images are bound together formally to create a new relinkage.¹² A new reading of the constructed landscape is formed (bound into being) that creates an altered picture or understanding of what is there in front of us. As shown in 'weakening' the new pictures describe a space that is sparse, that has been emptied by our productive methods but that is, as we see it, in a state of fatigue, in operation because of our strong practice of removal. The new model, the experience bundle, now took the loose form, a weaker form, of the sphere created earlier to represent human will; it is whole but the whole is made of identifiable parts. The new loose sphere was made by unravelling the sequence of hexagons and pentagons that are joined together to form a soccer ball, a truncated icosahedron.¹³ Before the ball was unravelled I traced a line across the face of the sphere to connect the pentagons and hexagons into a linear sequence replicating the sequence of thirty-two Wheatbelt towns with each face describing a Wheatbelt town. The sequence created a linear net of edge-joined polygons when the faces were unravelled (See coil diagram, page 111 of this section); this line of thirty-two faces can be coiled to form a uniform polyhedron and uncoiled to reform the sequence of Wheatbelt towns. It was important to find a uniform


¹² ‘Empty' and 'disconnected' are not the best words. An empty space, without characters (or in which the characters themselves show the void) has a fullness in which there is nothing missing. Disconnected, unlinked fragments of space are the object of a specific relinkage over the gap: the absence of match is only the appearance of a linking-up, which can take place in an infinite number of ways. Gilles Deleuze. 1989. Cinema 2: The Time-Image. Translated by H. T. a. R. Galeta. Minneapolis: University of Minnesota Press, pp 245.

¹³ The truncated icosahedron is the 32-faced Archimedean solid corresponding to the facial arrangement. It comprises 12 regular pentagonal faces, 20 regular hexagonal faces, 60 vertices and 90 edges. It is the shape used in the construction of soccer balls, and it was also the configuration of the lenses used for focusing the explosive shock waves of the detonators in the Fat Man atomic bomb (Rhodes 1996, p. 195). The truncated icosahedron is also the structure of pure carbon known as buckyballs (a.k.a. fullerenes). The truncated icosahedron is uniform polyhedron and Wenninger model. It has Schläfi symbol t and Wythoff symbol. See http://mathworld.wolfram.com/truncatedicosahedron.html
polyhedron that could provide a close approximation to a sphere and create two essential conditions: a linear net of edge-joined polygons and a sequence of polygons similar in surface area and geometry to ensure that each town is similarly represented across the entire surface of the new coiled form. The truncated icosahedron provides these conditions. In this second experimental model the towns presented both the landscape and the experience as one. The whole thing presented a more accurate demonstration of 'my surface is myself'. A new spatial model was being formed in response to the already constructed and degrading landscape, one that began to more accurately model the wholeness of perception that often drives architectural thinking. (See model photograph on page 111).
Model of the 'Sphere and the Map',
First attempt, 22.03.2004
Wall: paint on plastic, 1090x270mm.
Sphere: pencil on paper around plastic sphere,
diameter 200mm
(Painting and Model: Stephen Neille)
Above right: Coils diagram - showing the linear sequence of towns

Above: 'Appearance of a New Model', Middle distance wheatbelt images of each town, from the sequence above, coiled to form a truncated icosahedron.
Second attempt, 18.04.2004
Truncated icosahedron: photographs on paper, diameter 200mm
(Photographs and Model: Stephen Neillie)
Part 3, Section 2  Taking Form

Spherical Icosahedron and Uncolled Linear Net
Part 3, Section 2, Taking Form, describes the new spatial model. The systems of representation that structure the experience of the viewer described and presented in Part 1, and the driving forces outlined in ‘Looking Back’, continue to guide the work. The early models made there are critically reviewed and used to help visualize and form the final model. This section shows the model taking form, how it is formed by, and then after, the trembling, looking back, prototyping models and sustained critique; how the new, weaker perceptual model takes form.

Critical reflection - from surface to space

The early ‘surface model’ created a mechanism of winding and unwinding the weakened middle distance images into a model describing the wholeness of perception. However, the images describing the new perceptual landscape remained on the surface. My experience showed landscape to be more like architectural experience, more spatial. I returned to the architectural, spatial system of the Rambler’s Gallery presented in ‘Beginnings’. The ‘body-mind-experience diagram’ and the ‘double skin’ offered clues as to how the model being developed could be reinvested with a greater spatial dimension. The body-mind-experience diagram in ‘Beginnings’ describes the body as centre with the architectural object being perceived located in front of the body. The thesis research of Part 1 showed experience to be more spatial, constructed landscape completely surrounding the body, ‘we are in it’. I expanded the body mind experience diagram to completely surround the body (see new diagram on page 116 of this section) and worked out a way to create a spatial doubling act where the structure of the project could operate to serve the two conditions, the towns and the landscape surface, at the same time.

Coiled horizons

As shown in ‘Looking Back’, the Constructed Landscape has two primary conditions: the ‘landscape’, the as found environmental matter, and the ‘construct’, the schema of the will of people. The construct is an omnipresent human geometry overlaid onto the landscape, a sign of our repetitive productive system of self-preservation; the town figures are a sign of this. The landscape is the ‘skin of the earth’.1 It has been shown to be ever-present and finite; the continuous surface of the truncated icosahedron is a sign of this. In the new model the structure is the mechanism of the coil that winds and unwinds. Following the new expansive body-mind-experience diagram, the thirty-two surfaces of the truncated icosahedron were projected inwards to the centre representing the experiencing subject and resulted in a spatial solid made from a series of thirty-two regular hexagonal and pentagonal cones. The town constructs are maintained but the flat images representing the towns is abandoned and replaced by the wilful spatial figures of

the towns. The towns are now inscribed into faces of the truncated icosahedron as negative figures cutting into the solid form of the hexagonal and pentagonal cones. This excavation is a form of weakening, a withdrawal from the strength of the singular form. The new model represents the sequence of towns as a new constructed landscape. Although a new landscape of towns involving both landscape and construct is presented, it is not simply a collection of facts. The work encourages the viewer to change their perspective to understand its parts; a horizon is continually presented involving the horizon of landscape and the horizon of our will. The two parts are made whole by the structure of the model, meaning rests on an intricate play of showing and concealing. Two models were made. An Auto-Cad computer model, rendered as a transparent solid showing the presence of the double skin with the object-cone and the figure-space being seen at the same time. A card model was also constructed were to test the immediacy of perception that a physical artefact can generate (a later a timber model was made for the final presentation). The computer model is presented in the following pages and the physical model presented as part of the exhibition.

It should be noted that there are two types of the thirty-two sided icosahedron being used and presented in the thesis; a truncated icosahedron (with flat external surfaces) and a spherical icosahedron (with external faces rounded to make a complete spherical surface), the two types are similar in that they both are three-dimensional models constructed using thirty two faces, it is only the curvature of the external face that changes. Physical models and early computer models are made in the form of a truncated icosahedron where the spherical face is not appropriate, later computer models as shown in the sections ‘Taking Form’, ‘Coding’ and ‘Speed_Space Model’ are constructed as spherical icosahedrons.


3. Connectionism is Edward Thorndike’s term for his analysis of psychological phenomena in terms of association between, not ideas, but situations and responses. Learning, he wrote in 1931, is connecting. The mind is man’s connection system. Psychological phenomena comprise elements, such as ideas, sensations, feelings, stimuli, and responses, which have become associated according to some law. See Edward Thorndike. 1949. Selected writings from a Connectionist’s Psychology. New York.

A doctrine of scattered occasions

The site of the thesis is made up from many familiar, identifiable parts. The new model, likewise, is made up from a series of regular, identifiable parts. The townsites have been gathered as particularly identifiable spatial figures embedded into regular geometries of landscape, the middle distance, with gaps of space and time between them. If we see space as a somewhat amorphous substance then structure and form are the supports that mould and shape this substance. The model presents a type of connectionism. A Gathering up, connectivity of moments, perceptions, observations, viewpoints and insight; the parts are gathered to create the state of play. Looking at the whole all the spaces and details cannot be seen but there is a constant horizon to the regular form that forecasts the whole from which we sense that other parts exist although they cannot see them presently. A bigger picture is built by connecting fragments. The whole thing is a gathering device. It assembles and reveals; it materialises the
identified site connecting it with the observations made in the thesis, embodying the porosity of the field in which we act, placing a perceptual model embodying a curious wholeness of perception right there before us.

The object happens again and again

The making of the new artefact binds parts together in a sequence but also collects the parts in such a way that on viewing the whole all the parts appear together in no necessary sequence. Only the object of the truncated dodecahedron is present and the endless horizon that the object creates. Beginning and end are there, but they are subverted and incorporated. The end is implicit in the beginning, the beginning in the end. A concentration of the visible becomes evident in the work. We project ourselves back onto the land. The degraded landscape describes ourselves. We then project futures in light of ourselves. The object happens in light of not being auto-figurative, of not simply repeating the present but by breaking the skin, identifying a gap in the present order to show how 'the' constructed landscape becomes 'a' constructed landscape. The object is a spectacle of the Speed_Space identified within the thesis. It magnifies/exaggerates the significant role that our will plays in constructing that landscape and shows it to be in a constant state of becoming. It is like the Labyrinth of Daedalus, the site of dance and drama, of the 'co-presence of path (Hermes) and space (Hecatia)..... the symbol of cities (and architecture in general) in the Western Tradition.'


Above: ‘Rambler’s Gallery’
Early model parallaxic geometry, double skin and no site.
(Model: 1998, Stephen Neill)

Right: ‘Appearance of a New Model’
The sequence of three drawings shows the ‘body-mind-experience’ diagram introduced in ‘Beginnings’ (page 20) being transformed. The first diagram describes the body as centre, the architectural object being perceived is located in front of the body, the mind’s eye is located above the body and describes memory. Diagram two shows the spatial experience surrounding the body in the horizontal dimension, memory is now located in the experiencing subject. Diagram three extends spatial experience into the third dimension, completely surrounding the body in the vertical dimension. The thesis research of Part 1 showed experience to be more spatial, constructed landscape completely surrounding the body; ‘we are in it’! This set of diagrams shows this graphically.
(Drawings: 2004, Stephen Neill)
‘Sequence of Coiling and Uncoiling the Towns’

Top Right: The sequence of thirty-two towns from Mount Helena to Karalee. The connecting lines of the Great Eastern Highway and Water Supply Pipeline can be seen passing through or next to each town figure.

Middle: The sequence of thirty-two towns inscribed into the linear net of polygon surfaces. Each town figure is shown extruded as a spatial solid, at a length equal to the radius of the truncated polyhedron.

Bottom Left: Extruded towns coiled into the form of a truncated polyhedron creating a object of thirty-two extruded town figures. The sequence is still linear but is now experienced all-at-once.

As the previous series of diagrams shows, spatial experience is all around us. These images demonstrate how that observation can be modelled to show how thirty-two towns, as sequential fragments of experience, can be bound into being as a geometric project.
Bottom left: A complete truncated icosahedron is overlaid with a line that connects the thirty-two geometric faces each representing a town in the sequential order established by the 'Golden Pipeline'. The truncated icosahedron is uncoiled revealing the geometry that results if the line is to be maintained as a continuous thread. Each of the thirty-two surfaces is extruded upwards (or inwards towards the centre of the complete truncated icosahedron) to form a coil of volumetric cones, shown in grey. The sequence of cones, following the original linear pattern of uncoiling is then coiled into a completed spherical icosahedron.
Above: Following the mechanism of the double skin established in the ‘Rambler’s Gallery’ each of the thirty-two cones can be invested with two parts or two skins: Part 1 is the spatial extension of unique town figure (shown in the coiled sequence of town figures on the left) and Part 2 is the necessary geometric volume that the cone must follow in order to create a solid spherical icosahedron where all thirty-two cones fit together to make a complete spherical icosahedron (shown as a transparent model on the right).
Computer image showing the two skins (Parts 1 & 2 superimposed). The extended town figures and volumetric cones are bound together then the extended town figures solids are removed to create spaces within the solid cones.
Above: Complete spherical icosahedron with town solids removed, describing the new spatial model. A series of individual cone fragments of the spherical icosahedron showing town figures removed.
Computer images describing the process of removing the extended spatial figure of the town from the solid geometric cone, where the geometry of town figure meets the five or six sides of the cone a new geometrical interface is created.

Top and middle images: shown in three parts: 1 - spatial geometry of cone with town figure removed from cone, 2 - the town figure removed from the cone, 3 - the town figure and solid cone superimposed.

Bottom images: describes how cone segments meet at the centre of the truncated icosahedron, two cone segments are shown with the town figure remaining as a solid (shown in dark grey).
Elevation of one face, showing town figure within the cone: dark grey shows the surface of the truncated icosahedron, white shows the light grey shows the location of the town boundary figure with the cone surface (this figure extends 90 degrees from the surface towards the centre of the spherical icosahedron), light grey shows the geometric pattern that neighbouring town figures make when they intersect with the indicated cone.

Left: Spherical icosahedron with cones removed to show intersection of object-cones, with extruded spatial town figures.

Computer image showing the truncated icosahedron rendered as an opaque sphere. Here the footprints of the town figures are shown as negatives, each located within one of the truncated icosahedron faces. The rendering shows the resulting constellation of spatial voids.
Computer rendering showing the spherical icosahedron as a transparent model. The rendering shows the thirty-two fragments all-at-once, it is a model that captures and describes a form of "binding into being": each part is autonomous and can be explained (see "coding"), yet the whole reveals and describes the combination of the parts to be more complex, more like spatial intelligence that holds together a doctrine of scattered occasions as a complex spatial memory, similar to a muse that is both reflective and projective, it acts not as a collection of facts but as a force of the imagination.
The first series of images (bottom left) describe the process of assembling the pentagons and hexagons as a series of surfaces that coil to form the singular surface of the truncated icosahedron. The truncated icosahedrons are shown as autonomous objects.

The second series of images (middle moving up and right) describe the truncated icosahedron being uncoiled and include the abstraction of the Goldfields Water Supply Scheme Pipeline and Great Eastern Highway as an intertwined line that connects the parts as a linear sequence following the linear experience of the towns. The darker series of solid geometric components describes the early process used to construct the cone solids from the pentagon and hexagon surfaces. The uncoiled sequence is then shown as a series of solid cones that can be coiled into a solid truncated icosahedron (far right).
Thirty-two cones used to form the spherical icosahedron. Each cone is pulled apart from the centre showing the parts as autonomous fragments.
Part 3, Section 3, Coding, records the parts gathered and invested in the Speed_Space model. The three-dimensional complexity of the thirty-two individual cones that create the truncated icosahedron, Archimedean solid is exploited as a mechanism to code the multiple aspects of the model. Each of the thirty-two cones used to create the model describes one of the selected Wheatbelt towns. On the following thirty-two pages each town is coded, various methods of description are used repetitively to show the small, but important, changes embedded in the Speed_Space model.

Page layout

Each page contains: 1 - the name of the town, the distance of the town along the Great Eastern Highway from the Central Perth GPO, 2 - the distance of the town along the Golden Pipeline from Mundaring Weir, 3 - a snap shot of the wire frame computer model held in a stationary position showing the location of each town cone in sequence within the overall object, 4 - a snap shot of the transparent, rendered computer model rotated each page to reveal the named town figure against the entirety of the town figures forming the new landscape, 5 - aerial photograph showing the town and landscape, 6 - an unfolded cone with embedded images describing the towns from two points of view: from above, aerial photographs embedded in the exterior surface; and from the road, the ‘Soft Images’ of each town embedded into the tapered triangular surfaces that connect the exterior surface with the centre. The aerial photographs embedded in the exterior surface describe the landscape in which the town is located, like the surface of earth. The town has been removed at its boundaries to show where the figure of the town has been extruded and removed from the solid cone in the Speed_Space model. The representational soft images, embedded in the tapered triangular surfaces describe the recurring middle distance that is experienced from the road.
Town: Mount Helena
Pipeline: 8 km from Mundaring Weir, Highway 94; 40 km from Perth Central GPO
Town: Chidlow
Pipeline: 16 km from Mundaring Weir, Highway 94; 48 km from Perth Central GPO
Town: Wundowie
Pipeline: 30 km from Mundaring Weir, Highway 94; 63 km from Perth Central GPO
Town: Bakers Hill
Pipeline: 38 km from Mundaring Weir, Highway 94; 69 km from Perth Central GPO
Town: Clackline
Pipeline: 45 km from Mundaring Weir, Highway 94; 77 km from Perth Central GPO
Town: Northam
Pipeline: 58 km from Mundaring Weir, Highway 94; 95 km from Perth Central GPO
Town: Grass Valley
Pipeline: 74 km from Mundaring Weir, Highway 94; 107 km from Perth Central GPO
Town: Meenaar
Pipeline: 85 km from Mundaring Weir, Highway 94; 118 km from Perth Central GPO
Town: Meckering
Pipeline: 94 km from Mundaring Weir, Highway 94; 129 km from Perth Central GPO
Town: Cunderdin
Pipeline: 119 km from Mundaring Weir, Highway 94; 153 km from Perth Central GPO
Town: Wyola Station
Pipeline: 131 km from Mundaring Weir, Highway 94; 165 km from Perth Central GPO
Town: Tammin

Pipeline: 142 km from Mundaring Weir, Highway 94; 177 km from Perth Central GPO
Town: Bungulla
Pipeline: 153 km from Mundaring Weir, Highway 94; 186 km from Perth Central GPO
Town: Kellerberrin
Pipeline: 154 km from Mundaring Weir, Highway 94; 200 km from Perth Central GPO
Town: Doodlakine
Pipeline: 181 km from Mundaring Weir, Highway 94; 216 km from Perth Central GPO
Town: Baandee
Pipeline: 191 km from Mundaring Weir, Highway 94; 226 km from Perth Central GPO
Town: Hines Hill
Pipeline: 203 km from Mundaring Weir, Highway 94; 236 km from Perth Central GPO
Town: Nangeenan
Pipeline: 211 km from Mundaring Weir, Highway 94; 245 km from Perth Central GPO
Town: Merredin
Pipeline: 219 km from Mundaring Weir, Highway 94; 255 km from Perth Central GPO
Town: Burracoppin
Pipeline: 245 km from Mundaring Weir, Highway 94; 276 km from Perth Central GPO
Town: Walgoolan
Pipeline: 253 km from Mundaring Weir, Highway 94; 288 km from Perth Central GPO
Town: Carrabin
Pipeline: 264 km from Mundaring Weir, Highway 94; 300 km from Perth Central GPO
Town: Yerbillon
Pipeline: 271 km from Mundaring Weir, Highway 94; 306 km from Perth Central GPO
Town: Bodallin
Pipeline: 281 km from Mundaring Weir, Highway 94; 318 km from Perth Central GPO
Town: Noongar
Pipeline: 293 km from Mundaring Weir, Highway 94; 330 km from Perth Central GPO
Town: Nulla Nulla
Pipeline: 300 km from Mundaring Weir, Highway 94; 336 km from Perth Central GPO
Town: Moorine Rock
Pipeline: 339 km from Mundaring Weir; Highway 94; 345 km from Perth Central GPO
Town: Garratt
Pipeline: 321 km from Mundaring Weir, Highway 94, 359 km from Perth Central GPO
Town: Southern Cross
Pipeline: 329 km from Mundaring Weir, Highway 94; 366 km from Perth Central GPO
Town: Goolgi
Pipeline: 342 km from Mundaring Weir, Highway 94; 377 km from Perth Central GPO
Town: Yellowdine
Pipeline: 382 km from Mundaring Weir, Highway 94; 397 km from Perth Central GPO
Town: Karalee
Pipeline: 351 km from Mundaring Weir, Highway 94; 416 km from Perth Central GPO
Part 3, Section 4  Speed_Space Model
Part 3, Section 4, The Speed_Space model, is the final section of the thesis. It is the name of both the perceptual model and the thesis exhibition itself. The name Speed_Space alludes to many aspects of the thesis, to the nature of the experience as one moves through time and space and to the conceptual and perceptual movement that is inherent in the model.

Gently revolutionary

The Speed_Space model is gently revolutionary. It has the qualities of a ruin in the sense stated by Robert Harbison when he notes that ruins are Ideal: the perceiver’s attitudes count so heavily that one is tempted to say ruins are a way of seeing. It is an enactment that revolves around the foundations of movement, of moments of suspension, of seeing things again and again. The project sets in play motion and time as constituent parts of world gathering; winding up understanding. We collect the world as we experience it and we unwind our reconstituted experiences back out into that world as a means of testing what it is that we think we saw. The project attempts to present a thoughtfully useful thing that is a ‘binding into being’ of scattered occasions, that when cast together construct new thought about the possibility of a spatial scenario that helps construct the new public. The spatial scenario has everything to do with ‘the river with no end’ described in ‘Ars Poetica’; it accesses the eternal everyday. We recoil in the face of exceeding nature, of seeing the ruin that we are making. In showing a particular presence of the constructed landscape it reveals that culture is our nature, and that the culture that we are returning to nature is pervading and causing significant stress on the land. Speed_Space endeavours to bring personal ethics to the surface clouding our typical dominating strength of will. By continuing to create weaker, better, more sustainable futures we act transformatively, in gentle revolutions.

Experience and wonder

The model creates an ‘all-at-once’ experience (see Fisher) where the viewer attempts to make sense, in time, of what he/she sees. It reforms the Wheatbelt landscape precinct. At first the whole model is seen; many parts and details are present in the thing at once. Though all the parts are not seen at this instant, they are understood to be constituent parts. On approaching the model the viewer creates their own sequence of ‘moments’, of sense making by creating a temporal observation sequence playing on the border between sense making and thought ‘by looking now at this detail, then at that, changing scale to larger or smaller details in each experience a self-determined history of attention’. There is freedom in the sense making; there is an exploratory freedom of attention which plays over the details. Instead of receiving them one after another like a linear narrative, the participant makes up a self determining narration from the wealth of


4. Ibid, p.22
details in the aftermath of the first instance of seeing it, of wonder. Speed_Space, although actually out-of-place, becomes curiously in-place, constructing a new reading of the place. We look again, what is this non-place-place? Being not-in-place reveals the wonder of an ordinary place.

A final description

At first its overall character is seen, a whole - LANDSCAPE - then a particular landscape, the towns of the Wheatbelt landscape, begins to be recognised. This landscape is associated with the usual middle distance, the repeatable patchwork of landscapes. Speed_Space is a new perceptual model, it presents a new theatre of the world.5 It is like the unsuccessful Wheatbelt towns that never became what they were intended to be. It reveals that our surface is our self. It is a constant reminder of wholeness that is built out of the transitory and fragmentary landscape of experience; a doctrine of scattered occasions. It is a tribute to those who change their minds about current strong practice, who will weaken, who will give up present strength. It is a monument to care and change, to loss, to becoming again. The end is implicit in the beginning, the beginning in the end. Ultimately this work attempts to reveal a specific intelligence that can be gained in architectural spatial experience, one which recognises that it is our state of mind that must change in order that we build more carefully in future. It shows that coded perceptual models in architecture can help us feel differently about what we think we see.
Conclusion
For the beginning is assuredly
the end—since we know nothing, pure
and simple, beyond
our own complexities.

Yet there is
no return: rolling up out of chaos,
a nine months' wonder, the city
the man, an identity—it can't be
otherwise—an
interpenetration, both ways. Rolling
up! obverse, reverse;
the drunk the sober; the illustrious
the gross, one.
(from Paterson, Book One, William Carlos Williams)

The thesis begins with a question: What innovative architectural spatial scenarios can be developed in the constructed landscapes—townships and degraded land located along the Goldfields Water Supply Pipeline in Western Australia—to help instigate a new poetic intelligence when considering the relationship between architectural making and landscape?

Beginning with the Rambler's Gallery and 'stretching out' through the lens provided by the Golden Pipeline constructed landscape of Big Journey/Small Buildings and Closer Observation, I have examined a domain in which architecture, landscape, and human action combine to activate our poetic intelligence, often in profound ways. In 'Weakening' we feel what we think we see, and what we think we see can change in the perspective of reflection. We feel the amazing and often severe power of man in nature, experience the relentlessness of the middle distance that has been constructed around us.

Through critical reflection a shock occurs causing powerful new imaginings, via rambling, to face exhaustion, and ultimately glimpse hope—the 'everness' developed by Borges.¹ The research attempts to visualise the critical apex of our time as one in which the tremoring disclosed when considering that we make the very thing that is helping to accelerate the degrading of what we treasure. This moment or realisation can be framed as an aesthetic moment that causes us to think again, to act differently in future: gently, quietly, and carefully by gathering small moments that can, when bound together through experience, bring grand caring conceptions into being.

The research, formulated as a progressive, heightening of experience, leads the observer from Rambler's Gallery through commonplace territory pointing
out observations along the way and then ultimately winds these commonplace observations together to construct a new presentation of the commonplace whereby the observer is able to see and grasp what might be a closer approximation to truth, a plausible truth that is usable in design thinking.

In the recoil the thesis works towards the final moment when the exhibition announces a new spatial model for generating poetic intelligence in response to the already developed and degrading landscape. The exhibition creates a Speed_Space that posits and tests the essential theme of the research; it is an act of invention that creates new knowledge (the poetic intelligence). The common link between architecture and landscape in this thesis is that both are understood to have been significantly constructed by the human subject. The research sets out to demonstrate that when we consider the relationship between nature and architecture we cast ourselves adrift within the very space of our existence. We open up a method of spacing and distancing that must consider, at the same time, the ground upon and within which we live, the object_spaces that we construct for our own purposes, and the relationship between them. Looking back points out that these two constructions are in fact much closer together than we may think and that nature/architecture together form the constructed landscapes and that this landscape is a finite system and is all that we have.

Speed_Space adds to the body of knowledge by undertaking travels, observing systems, examining this place, my place, reflecting on what is found and then collecting these fragments and binding them by making a new perceptual model that is able to reorganise fragments to create a new idea about the experience of space we live in and travel through. A model that makes a contribution to poetic intelligence by shifting our interest from states of being towards processes of becoming, from collections of facts towards forces of the imagination. The subject construes the object in a particular way. The demonstration project articulates the thesis to show that innovative architectural spatial scenarios play a critical role through their situation and configuration in space, not simply as topographically localisable places but as intellectual concepts: they can alter the way that we feel about what we think we see.

Where next?

After all this I find myself occupying a whole new world, and not without hope. The poetic intelligence demonstrated in the thesis insists that future operations should not be like before, but that new projects, new imaginings operate in light of new found perception. New architectural design projects, new building works, new paintings, new teachings, new research documents should attempt to act within such a world and to chart new, possible and careful imaginings in it. We are it. We are in it. Re-founding it. Reflections on it. Projecting out of it. Of
importance in this thesis, is the recognition that the ground is a place in a state of fatigue, a state that is realized and seen by the occupants. The perceptual model Speed_Space remains as a muse, prompting thinking and wonder. It can be coiled and uncoiled to demonstrate poetic intelligence as something that is continually being formed and reformed out of the stuff that surrounds us. The thesis project collects fragments and adds new fragments in order to make a new picture. The new work acts by increasing the density of the existing constellation and by making new connections between existing fragments. The project activates memory through perception. Lacking authority and responsible to no one, the model is gently revolutionary, letting us dream and wonder. When bound together it creates a whole new world out of a series of existing Wheatbelt towns. Like Italo Calvino’s ‘Invisible Cities’, it shows architectural experience to be more like a self made constellation acting as a force of the imagination rather than a sequence of facts collected together.

This is a potential model for what may happen in the typical metropolis, only exaggerated and before the time of critical metro-fatigue: a condition whereby the exploitative practices of modernity rise to affect the place we have created, to make it unhomely, scary, worrying, and fatigued. The middle distance observable in the Speed_Space model breaks the perceptual link with the ongoing acceptance of the modern Wheatbelt project and reveals any-space whatever, empty or disconnected spaces characteristic of our experience of the contemporary world. As an example, see the new images following this text. These thirty-two strangely familiar images have been generated out of the spatial model Speed_Space by cutting a series of sections through the computer model and therefore opening a whole topic of inquiry up again. The findings of this thesis are most useful in the realm of architectural poetics where the foundations of architecture are seen to be composed of intentions that destroy materials for the sake of sensation.

I believe that where sensation and experience are valued in architectural design it operates in the area of poetics. Architectural design happens as a result of continued and sustained thinking and doing, of making again and again, of stretching out to find out, of realising limits and problems, trawling the familiar and the unknown, as Herman Melville has it in Moby Dick ‘like ploughing the sea’, in order to gain heightened experience of what is already there. This thesis, through the evidence embodied in Speed_Space offers a mechanism to demonstrate what gaining architectural experience is like, uncoiling into the world, observing, weakening, moving at the limit and then coiling up moments of experience, knowledge and perception to create a force of the imagination that generates new poetic intelligence as a result being in ‘that’ world.

One to sixteen of thirty-two sections cut through the Speed_Space computer model. Speed_Space modelled how the newly bound Wheatbelt town figures created a new spatial configuration of what can be seen to be remembered after being in that world. This modelled formation of the sound memory can then be dissected again to reveal another dimension to that newly gathered and born world... another form of becoming again is shown in this series.
Seventeen to thirty-two sections cut through the model 'Speed_Space'.
Reference List

List of all text directly referred to within this Durable Visual Record.


Munchen: Schirmer/Mosel.

Reference maps
List of maps referred to directly and used to construct drawings shown in this Durable Visual Record and the examination exhibition.

Department of Land Administration, Western Australia. 1987. South West, Western Australia, Landsat Mosaic. In 1:1 000 000 Uncontrolled Landsat Mosaics. Perth, Western Australia: Department of Land Administration.
Main Roads Department, W.A. Great Eastern Highway (Drawing No’s. 7922-128 to 7922-147). In Drawing Type 25, Scale 1:25000. Western Australia: Main Roads Department.
Public Works Department, Western Australia. 1976. G. & A.W.S. Main Conduit Route Plan (Drawing No’s. 49696-1-1 to 49696-1-15). Perth: Public Works Department-Western Australia.
Bibliography

List of text consulted during the research period.


Beresford, Quentin, Hugo Bekle, Harry Phillips and Jane Mulcock. 2001. The Salinity Crisis: Landscape, Communities and Politics. Crawley: University of Western Australia Press.


176
List of all towns and pumping stations located directly associated with the Goldfields Water Supply Scheme (GWSS). The list indicates the town number and distance in the linear sequence between the beginning at Mundaring Weir (0 km) and the end at Mount Percy Reservoir (552 km).

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Yilgarin Shire

Coolgardie Shire

Koorawallye

Boobin

Boondi

Bullabulling

Bullabulling

Coolgardie

Mungari

Kurrawang

Mount Charlotte Reservoir 9000m3

Mount Percy Reservoir 25000m3, 425.10m AHD (assume - above height datum)

* Located on The Great Eastern Highway at the time of road travel 2003.
Sequence of thirty-two towns located along the Goldfields water Supply Pipeline and Great Eastern Highway within the region known as the 'Wheatbelt' and as
Sequence of thirty-two towns located along the Goldfields Water Supply Scheme and Great Eastern Highway that are used in the ‘Speed_Space’ model. This sequence of towns are all located within the agricultural region known as the ‘Wheatbelt’

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Appendix ii
Town Names

The following information is a summary of the origins for town names in rural Western Australia. The text is taken directly from ‘History of Country Towns’ in Landgate, http://www.landgate.wa.gov.au/corporate. nsf/web/Historyy+of+country+town+names+--+m (cited April 2007)

Note: The names of all rural towns are being added progressively to the electronic database, those noted below as ‘Not Available’ where not available at the time of access April 2007.

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<th>Town Name</th>
<th>Location</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Mount Helena</td>
<td>(Not Available)</td>
</tr>
<tr>
<td>2</td>
<td>Clidlow</td>
<td>(Not Available)</td>
</tr>
<tr>
<td>3</td>
<td>Wundowie</td>
<td>Latitude 31° 46' S Longitude 116° 23' E</td>
</tr>
</tbody>
</table>

The townsite of Wundowie is located in the Darling Range 72 km east north east of Perth and 31 km west south west of Northam. It is located adjacent to the original railway track from Perth to Northam, and in 1907 the Railways Department applied for a name for a newly constructed siding at the 53 Mile between Werribee and Karrije. The name Wundowie was suggested by the Lands Department, and this was shortened to Wundow by the Surveyor General.

In 1943 the government decided to commence preliminary work for a blast furnace and wood distillation plant at Wundowie, and to develop a townsite for the workers. Following the survey of lots in 1946 the townsite of Wundowie was gazetted in 1947. Wundowie derives its name from Woondowin Spring, an Aboriginal name for a nearby spring first recorded in 1874. The spelling for the siding was changed according to rules for spelling Aboriginal names adopted by the Lands Department. The meaning of the name is not known, but it has been suggested it may be derived from Ngwundow, meaning “to lie down”.

4          | Bakens Hill | Latitude 31° 45' Longitude 116° 27' |

Originally declared as Mount Baker in 1897, this name was changed to Baker’s Hill in 1902 to avoid confusion with Mount Barker. The apostrophe in the name was not officially dropped until 1944. The town is said to have been named in honour of an early settler, John or James Baker.

5          | Clackline | Latitude 31° 43' S Longitude 116° 31' E |

The townsite of Clackline, located 17 kilometres south west of Northam, was gazetted a townsite in 1896. Despite being on a railway line, the name has no connection with the railway, and is an Aboriginal name. The surveyor John Forrest, later Premier of Western Australia, recorded the name for a well and brook in 1879, but did not record a meaning for the name.

6          | Northam | Latitude 31° 39' S Longitude 116° 40' E |

Situated 97 km east north east of Perth, the townsite of Northam is located on the Avon River in the central agricultural region. The Avon River was discovered by Ensign Dale in August 1830, and following further exploration of the district by Dale in October 1830, land was made available for agricultural settlement. At the same time land was set aside for three townsites, and as early as December the northernmost of these townsites is referred to as Northam. Boundaries for the townsite were officially adopted in August 1836, but it was 1847 before any lots were surveyed, and 1848 before the first lots were sold.

Northam was most likely named by Governor Stirling after Northam, a village in North Devon, England, or another village now part of Southampton. The name may also relate to Northam being the most northern of the three Avon townships, although this seems unlikely. There is no definitive information on the origin of the name.

7          | Grass Valley | Latitude 31° 38' S Longitude 116° 48' E |

The townsite of Grass Valley is located in the Avon Valley area, 14 km east of Northam. The name of Grass Valley is derived from an original property name, “Grass Valley” being the name given by William Nairn to the property he was assigned in 1833. The railway line from Northam to Southern was constructed through here in 1893-4, and this section opened for traffic in January 1895. Grass Valley was one of the original stations when the line opened, and the government subdivided land in the area. Land for a townsite was set aside in 1898, and the townsite gazetted later that year.

8          | Meenaar | Latitude 31° 38' S Longitude 116° 54' E |

Meenaar is a townsite in the central agricultural area, 22 km from Perth and 25 km east of Northam on the Great Eastern Highway. It is also on the railway from Perth to Kalgoorlie, and a siding was established at Meenaar in the late 1890s. In 1898 the government considered subdividing land for small blocks here, but it was 9 years before lots were surveyed. A townsite was gazetted in 1908. One source gives meenar as the Aboriginal word for the wild onion, and the name may be derived from this word.

9          | Meckering | Latitude 31° 38' S Longitude 117° 00' E |

Meckering is located in the central agricultural area, 132 km east north east of Perth and 35 km east of Northam. The railway to Southern Cross was constructed through here in 1894-95, and Meckering was selected as the site for a station. When the line opened in 1895 Meckering was the second stop east of
Northam. There was sufficient demand for land in the area for the government to declare a townsite at the siding, but the name selected was Beebering, the Aboriginal name of some hills 3 km to the north. Beebering townsite was gazetted in December 1895.

Less than two years later, in 1897, the name was changed to Meckering, to agree with the railway station and because this name was locally used. Meckering is an Aboriginal name, first recorded in 1872 for a well. The meaning is unknown, although some sources give it as meaning “moon on the water” or “good hunting”.

10 Cunderdin Latitude 31° 39’ S Longitude 117° 14’ E
Cunderdin is a central wheatbelt town on the Great Eastern Highway between Meckering and Tammin, 156 km east of Perth. Land was set aside for a townsite here in 1904, and the townsite was gazetted in 1906. Cunderdin is the Aboriginal name of a nearby hill, first recorded by the explorer C C Hunt in 1864. The meaning of the name is not known, but one source states “Cunder” is derived from “Quenda”, meaning “place of the bandicoot”, and another source gives it as meaning “big turkey”.

11 Wyola Station (Not Available)

12 Tammin Latitude 31° 38’ S Longitude 117° 28’ E
The townsite of Tammin is located in the central agricultural region, 179 km east of Perth and midway between the towns of Cunderdin and Karrakatta on the Great Eastern Highway. The railway to Southern Cross was constructed through here in 1894-95, and Tammin was one of the original stations when the line opened in 1895. As the surrounding area developed for agriculture, there was sufficient demand for land in the area for the government to declare a townsite, and Tammin townsite was gazetted in 1899. Tammin is an Aboriginal name derived from the nearby Tammin Rock, a name first recorded by the explorer C C Hunt in 1864. The rock possibly derives its name from the “Tammar”, the Aboriginal name of the “Black Gloved Wallaby” which was once found in this area. Another source records it as possibly meaning “a grandmother or a grandfather”.

13 Bungulla Latitude 31° 57’ Longitude 117° 35’
The townsite of Bungulla, located just to the west of Kellerberrin, was gazetted in 1910, and was previously a railway station. Bun-Galla is the Aboriginal name for that part of the body just above the hips.

14 Kellerberrin Latitude 31° 38’ S Longitude 117° 42’ E
Kellerberrin is a townsite in the central agricultural area, 203 km from Perth on the Great Eastern Highway. The railway line from Northam to Southern Cross was constructed through here in 1893-4, and this section opened for traffic in 1895. Kellerberrin was one of the original stations when the line opened. By 1898 there was a demand for small blocks of land in the area, and the government surveyed a number of 20 acre lots the same year. The area was gazetted as Kellerberrin townsite in 1901, and the government soon made more land available for settlers.

The name Kellerberrin is Aboriginal, and is derived from the name of a nearby hill. The hill was first recorded as “Killaburing Hill” by an explorer in 1861, but in 1864 the explorer C C Hunt recorded it as Kellerberrin Hill. One source claims that Kellerberrin is the name for the fierce animals that are found in the area, while another gives it as meaning “camping place near where rainbow birds are found” – “kalla means camping place or place of, and “berrin berrin” is the rainbow bird.

15 Doodlakine Latitude 31° 37’ S Longitude 117° 53’ E
The townsite of Doodlakine is located 218 km ENE of Perth, in the eastern wheatbelt area. An area of agricultural land was set aside as the Doodlakine Agricultural Area in 1894, and land on the road to the Yilgarn goldfield was gazetted as the Doodlakine townsite the same year. However, the railway to the goldfields was built and opened soon after, and passed 3km south of the townsite. The government decided to subdivide land at the railway, and in 1899 a second part of the Doodlakine townsite was gazetted. The portion on the railway is today the main part of Doodlakine.

Doodlakine is an Aboriginal name for some granite rocks about 5km NNW of the townsite. It was first recorded by explorers in 1864, and the spelling of it has been variously recorded as Dodolakine, Dudulukine, Dodlakine, Doodlekine and Doodlakine.

16 Baandee Latitude 32° 35’ Longitude 117° 59’
Baandee is a townsite on the Great Eastern Highway near Doodlakine, between Kellerberrin and Merredin. It was gazetted in April 1912, and is an Aboriginal word, sometimes spelt “Barnit”, and possibly meaning “to smell”. “Barny” is also a word for “swan” in one SW dialect.

Note: C. W. Massingham, a very early settler in the Merredin district, recorded the Aboriginal name of Hines Hill, a hill about 8km NE of Baandee, as “Baandee”. He was of the opinion that this was where Baandee got its name.

17 Hines Hill Latitude 31° 32’ S Longitude 118° 04’ E
The townsite of Hines Hill is located on the Great Eastern Highway between Merredin and Doodlakine, 240 km east of Perth. The railway line from Northam to Southern Cross was constructed through here in 1893-4, and this section opened for traffic in January 1895. Hines Hill was one of the original stations when the
line opened, and the government subdivided land in the area. The townsite is named after the siding, and was gazetted in 1910.

Hines Hill is a nearby physical feature, and C.W. Massingham, a very early settler in the Merredin district, has stated that this feature was named after Jack Hines who collected sandalwood around there. Massingham recorded the Aboriginal name for this hill as "Baandui". Other records show the name as Bainding.

18 Nangeenan Latitude 31° 31’ S Longitude 118° 10’ E

Nangeenan townsite is located in the central agricultural region, 245 km east north east of Perth and 15 km west of Merredin. The area was opened up for farming in 1893, and a railway station on the main railway to Southern Cross established here in the late 1890s. In 1899 settlers requested the Department of Lands & Surveys make land available for a townsite, but it was 1904 before a subdivision was designed, and 1905 before lots were surveyed. The declaration of the townsite took place the same year. It is not known why this Aboriginal name was used for the railway station and the townsite, as there are no nearby features with this name. There is a Nangeen Hill, but this is over 50 km away, south of Kellerberrin. The meaning of the name is not known.

19 Merredin Latitude 31° 29’ S Longitude 118° 17’ E

The townsite of Merredin is located in the central agricultural area, 260 km east of Perth. The townsite is located on the Great Eastern Highway, and a little south of the original road to the eastern goldfields. When the Yilgarn Goldfield around Southern Cross was declared in 1888, the road to the goldfield passed just to the north of "Merredin Rock". A well at the rock made it an important stopping place, and in 1889 the Lands Department surveyed 20 lots there, and the following year, 1891, gazetted the townsite of Merredin. None of the lots ever sold, although a hotel was built just to the south of them. In 1895 the railway to Southern Cross was opened, and a station named Merredin was established a short distance south west of the original townsite. In 1903 a decision was made to establish a locomotive barracks at this station, and it was felt there would be demand for land. Lots were surveyed in 1904, and in 1906 the area around the railway station was added to the townsite of Merredin, and lots made available for sale.

In 1906 the Chief Draftsman in the Lands Department commented that Merredin was now spelt 3 ways - Merreden for the nearby state forest, Merredin for the railway station and Merreden for the townsite. It was decided to adopt the railway spelling for all names, and all plans were corrected, but it was not until 1907 that official gazetteds were using the Merredin spelling. Merredin is an Aboriginal name which means "the place of merritt’s", a locally abundant tree, the trunks of which were used for making spears. The name was first recorded in 1889 for Merredin Rock.

20 Burracoppin Latitude 31° 24’ S Longitude 118° 29’ E

A townsite on the Great Eastern Highway east of Merredin, Burracoppin was gazetted in 1891. It takes its name from Burracoppin Rock, a nearby granite rock, the name of which was first recorded in 1864 as Burancooping Rock. It was also shown as Lansdowne Hill in 1836. It is an Aboriginal name said to mean "near a big hill".

21 Walgoolan Latitude 31° 23’ S Longitude 118° 34’ E

The townsite of Walgoolan is located in the eastern agricultural region, 290 km east north east of Perth and 8 km east of Burracoppin. Located on the main eastern railway, Walgoolan was established as a siding between 1895 and 1899. Land was set aside for a townsite here in 1913, and in 1922 lots were surveyed, and the townsite of Walgoolan gazetted in 1923. In a report on Aboriginal names of the Southern Cross district compiled around 1900 the meaning of Walgoolan is given as "a place where short bushes grow".

22 Carrabin Latitude 31° 23’ S Longitude 118° 41’ E

The townsite of Carrabin is located about 43 kilometres ENE of Merredin, on the railway line between Merredin and Southern Cross. It was gazetted in 1912, and took its name from the already existing railway siding located adjacent to the townsite. It is an Aboriginal name of unknown meaning.

23 Yerbillun (Not Available)

24 Bocallin Latitude 31° 22’ S Longitude 118° 51’ E

The townsite of Bodallin takes its name from the railway siding of this name, established between 1894 and 1897. It is located about half way between Merredin and Southern Cross. The townsite was gazetted spelt Boddin in 1918, and was amended to Bodallin in 1947. The name is believed to be a corruption of Booddlin, the Aboriginal name of a soak about 23km NW of the station, and one source gives the meaning as "a big round soak".

25 Noonjar Latitude 31° 20’ S Longitude 118° 58’ E

The townsite of Noonjar is located in the eastern agricultural area, about 334 km from Perth, midway between the towns of Merredin and Southern Cross. Noonjar was originally a siding on the Northam-Yilgarn Railway, and is included in a list of sidings on the line in 1899. When the railway sidings were being located on this line in the late 1890s a list of Aboriginal words from the Southern Cross district was used as a source of names, and Noonjar was selected from the list. It is stated to mean "a big tree near a small waterhole"
By 1924 agricultural development in the area resulted in pressure for a townsite to be declared at the siding. Lots were surveyed in April 1825, and the townsite gazetted in September the same year.

Nulla Nulla (Not Available)

Moornine Rock

Latitude 31° 19' S Longitude 119° 08' E

Moornine Rock is located in the eastern agricultural region, 347 km east of Perth and 22 km west south west of Southern Cross. It is located on the Great Eastern Highway and the railway line from Northam to Southern Cross. When the line was opened in 1895 a railway station was established here and named Parkers Road after a nearby road. The road led to Parker Range, an area where Mr W M Parker made a gold find in 1888. In 1923 the district surveyor for the area reported there was a need to survey some lots at Parkers Road station. The survey was carried out the following year, and in 1925 the area was gazetted as the townsite of Parkers Road.

In 1926 the local member of Parliament advised the name of the townsite was causing confusion because it was too similar to Parkers Range, a nearby goldmining area, and was also the name of a road in Southern Cross. He suggested the alternative name of Moorine, after Moornine Rock. This name was too similar to Moora, but was accepted with the full name Moornine Rock. The change of name of the townsite was gazetted in 1926. Moornine Rock is the Aboriginal name of some rocks near the townsite, first recorded by an explorer in 1865. The meaning of the name is not known.

Garratt

Latitude 31° 16' S Longitude 119° 15' E

A railway siding initially named "Doongin", the Aboriginal name of a hill near Tanmin, was established at this place in 1924. Land at the siding was set aside for a future townsite to be known as "Doongin", but within 12 months the Commissioner for Railways had requested a name change due to the similarities between “Doongin” and Dangin, a siding in the South-West. Because of this, the siding name was changed to Garratt, which was understood to be "the name of a gentleman who first took up land in the vicinity". The townsite was gazetted in 1931.

Southern Cross

Latitude 31° 14' S Longitude 119° 20' E

The townsite of Southern Cross is located in the central agricultural region, 369 km east north east of Perth and 109 km east north east of Merredin. Although now in an agricultural region, Southern Cross began as a gold mining town, gold having been discovered here in 1888. The original prospecting party to find gold here named the area after the Southern Cross constellation they had used at when travelling at night. Further rich finds of gold in the area resulted in Southern Cross booming, almost over night, and the townsite was gazetted in 1890.

Yellowdine

Latitude 31° 18' S Longitude 119° 39' E

The townsite of Yellowdine is located in the goldfields region, 402 km east of Perth and 33 km east of Southern Cross. It is located on the Southern Cross to Coolgardie railway which opened in 1896, although the Yellowdine Railway Siding is included in a July 1895 list of stations and sidings. Gold was discovered at a number of locations from 9 to 30 kilometres south of Yellowdine Siding in 1934, and as Yellowdine was the nearest rail point, the government decided to develop a townsite at the siding. At first a new townsite at the nearest gold find was to be named Yellowdine, and this townsite Duladger, but when the gold field townsite was named Mount Palmer, Yellowdine became available. Yellowdine townsite was gazetted in April 1935. The name is most likely Aboriginal, and the one-time misspelling of Yalladine may be a more authentic spelling. One of the earliest industries in the town was a plaster works built there in 1934. The meaning or source of the name is not known, as it does not appear to be a local Aboriginal name.

Boorabbin

Latitude 31° 13' S Longitude 120° 19' E

Boorabbin is a townsite about half way between Southern Cross and Coolgardie. It is an Aboriginal name, derived from nearby rocks of the same name. The name of the rocks was recorded by the explorer C. C. Hunt in 1865, but Hunt did not record a meaning. The townsite here was gazetted in 1896.

Bulla Bulling

Latitude 31° 01' S Longitude 120° 52' E

A goldfields townsite west of Coolgardie, this place was gazetted as Bulla Bulling in 1898. The spelling was amended to one word, Bullabulling, in 1944.

Coolgardie

Latitude 30° 57' S Longitude 121° 09' E

Coolgardie is one of the major towns in the goldfields of Western Australia, and is located 510 kilometres east of Perth. Gold was discovered here by Bailey and Ford in 1892, and the townsite of Coolgardie was gazetted in 1893. At its peak in 1900 it had 23 hotels, 3 breweries, 6 banks, 2 stock exchanges and 3 daily and 4 weekly newspapers. The population then was 15,000, with 25,000 more in the area.

Coolgardie is an Aboriginal name of uncertain meaning. Different sources give it as meaning "a rockhole
surrounded by mulga trees’ (the mulga tree is named “koolgoor”), from “coolgabbi” meaning a tree near a waterhole, or after the large Bungarra lizard, pronounced “Coorgartie” by the Aborigines. It is claimed that Warden John Finnerty was the first to record the name, having asked local Aborigines the name of the place. The name was difficult to spell, and what some claim is “Golgardi”, was spelt by Finnerty as Coolgardie.

39 Mungari Latitude 30° 51' S Longitude 121° 17' E
Mungari is an abandoned goldfields townsite located 16 km south west of Kalgoorlie on the original railway line to Coolgardie. In 1897 a number of lots were surveyed here and a hotel quickly erected. The place was sometimes spelt Mungarrie, and there was some discussion about the name being too similar to another mining town, Mulgarrie. However, when a reserve for a townsite was gazetted in December 1897 it was spelt Mungari, as this was the name used in the railway timetables. But, when the townsite was gazetted in 1904, it was spelt Munngari, the double ‘n’ being used because of spelling rules adopted by the Lands Department. In 1974 the spelling was amended to the locally used original spelling, Mungari. Mungari was also the site of a military training camp during the World War I.

40 Kurrawang Latitude : 30 49 S Longitude 121 21 E.
The townsite of Kurrawang is located in the eastern goldfields region, about 15 km south west of Kalgoorlie. The townsite was gazetted in 1910, and although in a gold bearing area, owes its existence to timber rather than gold. Kurrawang was first established as a railway station on the eastern line to Kalgoorlie in the early 1900’s, and was a junction with one of the main timberlines in the area. The timberlines were used by firewood companies to reach out into the forested areas to gather firewood for burning to condense fresh water from saline and brackish water. Kurrawang is an Aboriginal word of unknown meaning, perhaps related to “Currawong” the name of a common Australian bird.

41 Somerville (Not Available)

42 Kalgoorlie Latitude 30° 45’ S Longitude 121° 28’ E
Kalgoorlie is the major city in the eastern goldfields region, and is located 596 km east north east of Perth. It was gazetted a townsite in September 1894. Paddy Hannan, Daniel Shea and Thomas Flanagan made a rich gold find near Mt Charlotte in June 1893. The find soon led to a gold rush with thousands of diggers prospecting the rich alluvial field.

When the government decided to declare a townsite here in 1894, the place was locally known as “Hannan’s Find”, and at first the name “Hannans” was nominated for the townsite. In suggesting the name Hannans to the Commissioner of Crown Lands, the Under Secretary for Lands, R Cecil Clifton, noted that the “native name of the place is “Calgoolie” but this is rather too much like Coolgardie and if adopted is, I fear likely to lead to postal mistakes”. R Cecil Clifton supported “Hannan”, but Cabinet chose “Kalgoorlie” in August 1894. Although local preference was for Hannan’s Find, Kalgoorlie soon came to be accepted as the name of the rapidly developing town. An alternative spelling of “Kalguri” was also used unofficially on occasions.

Just when the name Kalgoorlie was first recorded and the precise meaning of the name is unknown. Various sources give it as either meaning: Aboriginal dog chasing a kangaroo; the Aboriginal name of a shrub from the area (“Galguri”); or the Aboriginal name for the local edible silky pear (“Kulgoolu”).
Northam, Rosanna Blacket

Lil held the crochet hook between her thumb and index finger and wrapped the green wool around her other hand. What was the pattern again? A line of chain, that's, let me see, five plus one plus five plus three, that's fourteen and multiply by twenty. Should be enough to make a good sized rug. Turning the wool she began the pattern in earnest. Five triples, for the five vertical courses of brickwork. Then a window, put three triples into the next chain. Five triples, for the five horizontal courses. Then a window, work the next three triples into one chain. Then back to the five triples, for the five vertical courses and the three triples into the one chain for the window. In and out the hook went and with an even tension the pattern grew and began to zigzag across her lap. At least this was one pattern she wouldn't forget. The points of reduction and increase of the crochet reminded her of the shifting, tension in the ceiling, or was it the roof. Those two words always got a bit mixed up. Her son Gerard would know. He knew about buildings though he wasn't too sure about this one. "Where's the structure? The wall looks as though it can't possibly stand up. Don't sit too close to it Mum." Still she rather liked the building and the wall always reminded her of the calm of crocheting with a group of friends. Surely those big beams could support the delicate pattern. And it was interesting how the building had cheered up the club. Visiting C.W.A. groups kept saying "Northam must be doing well!" And in fact Northam thought the same things. Surprising really, given that it was the middle of winder and the middle of a drought. The landscape seemed so hostile that the possibility of habitation seemed impossible, implausible, impractical. But Northam was there. It was more than just there, it was there with confidence. Enough confidence to employ an architect for this latest public building. Just as it had five years ago, and five years before that and five years before that, right back to Victorian times. Lil selected a ball of orang wool and began to crochet it into the green. Rather a strong combination but the tones were right.

Grass Valley, Jo Case

In the context of this rural town, surrounded by sheep, cattle and wheat, lies Museum Park. A log corral describes its cartographic boundary within which the grass grows freely around the weathering collection of antique farm implements.

Looking to the north-east, the traffic on Highway 94 travels west to Perth, 1.5 hours, and 6 hours east to arrive in Kalgoorlie. The land surrounding Grass Valley, as for most of Australia, shows signs of fatigue, erosion and salination. This is a result of farming practice perpetuated since colonial occupation. It has produced a contemporary strong need and awareness for land care. Connection. Historically, urban and country dwellers have seen little common ground. This proposal for Museum Park creates a stage for the connection, using history as the lure. The existing antique farm implements become the vehicles for the progressive revelation of the land: past to present, culminating in the framing of farmland from the picnic shelters. At this point, the 'line of sight' intersects with the reservoir, leading to the tree nursery. The future: a view towards local land care and land repair. Self-containment. The wealth of free resources: sun, rain and history are combined to provide solar powered barbecues, a reservoir for irrigation and a constructed connection through time.

Meenar, Hannah Lewi

Ordinary places, made extraordinary, by their adjacency with this heritage pipeline are to be put on display, and therefore assume a need to be interpreted and annotated. For visitors will seek, not only to see this pipe, but also to be told what it really is they are looking at, and to be reassured that their journey was worth their while.

Is it a historically significant pipeline?

Is it an original pipeline?

Is it a big pipeline?

Subsumed with all this interpretation and annotation, perhaps the visitor then yearns for the time when they could bump into this pipeline unannounced, or drive by unnoticed. Perhaps less information and more speculation? Perhaps less accessibility and more invisibility? Perhaps less intention and more accident?

Meckering, Domenica Giancola

On October 14th, 1968 at 10.59am, Meckering was shattered by one of Australia’s most severe earthquakes, registering 6.9 on the Richter Scale (Newcastle 5.5 / San Francisco 6.9). The quake was centred 9 km southwest of the town with shockwaves being felt as far away as Geraldton, Perth and Albany. It left in its wake a scar in the ground 32 km long and up to 2 metres high and extensive damage to almost every building in the area. The railway lines were stretched and buckled, major roads leading to Meckering were ruptured, telephone and power lines were disrupted and the Mundaring to Kalgoorlie water pipeline burst. ‘Information Station’ is intended to replace the existing gazebo located in Gabbedy Place, Great Eastern Highway turn-off. Historic photographs, statistics and a salvaged section of the damaged railway line are
to be displayed in an open planned pavilion adjacent the Town Hall and parallel to the pipeline and wheat fields beyond.

**Cunderdin, Philip Goldswain + Melinda Pain**

house for the caretaker; house 1 / haʊs/, n., pl. houses / haʊzɪz/; /ɪhaʊzɪz/, n. v. housed, housing; / haʊs/,
adj. — n. 1. A building for human habitation. 2. A place of lodgement, rest, etc. 3. A household…

Typically the focus of ‘dwelling’, the caretaker’s house, must invert these traditional imperatives of habitation. An outward orientation must be achieved rather than an inward focus, in order to provide the caretaker with maximum opportunity for viewing the object of his attention.

The rail line, the powerline and the pipeline are linear marks that inscribe and order the sprawling hinterland of Cunderdin. In the pursuit of a contextual intervention within the landscape, the chosen model for the caretaker’s house is a settler-era tin and timber cabin that still stands in the own. The cabin is re-sited to a location distinguished by the conversion of these lines at a point on the eastern fringe of the town centre.

The inversion of the traditional program of the house is expressed by the formal inversion of the house – literally a ‘turning inside out’ of its skin. Interiority is emptied to permit continuous passive engagement with the landscape and the pipeline.

The house stretches along the linear datum provided by the pipeline, thereby providing maximum surface area for viewing. The roof is inverted. The original weatherboard cladding is re-used as internal lining. This timber panelling fragments into a perforated filigree when stretched across the interior walls. Openings rent in the cladding are appropriated as view slots. The fibro lining of the interior is relocated to the exterior skin as fibre cement sheeting and translucent acrylic. Fibre clads the rafter line side of the house and acrylic sheets the pipeline elevation. The new cladding mimics the assumed dimensions of the original material and is therefore inadequate to span the extended meter of the structure. Gaps result at their edges, offering more surreptitious glimpses of the pipeline. Indeed, the walls themselves are ‘windows’.

The linear spaces of the house are punctuated by the bathroom. The settler’s cottage had no provision for internal ablation, hence through our inversion process, the facilities are pulled into the centre of the plan from outside. The form of the bathroom makes reference to Cunderdin’s Pump Station no.3 and its now redundant but richly resonant brick steam chimney.

The house is a modest intervention within the linear landscape of the wheatbelt. Discreet but slightly indistinct; stretched and blurred by its site and program. Meanwhile the countryside passes by, distended and flattened onto the windscreen of a moving car as a subtle patterned surface.

**Wyola Station, Errol H. Tout**

This is wheat country where the plains go on forever. The plains are muddy and almost have a lunar quality to them. Something is a little spooky, quiet but noisy. You can hear the vehicles on the Great Eastern Highway coming from miles, the flash of the Doppler effect, and then the decaying sound that seems to last for ages. The wind howls across the unprotected plains and sounds like the ghosts of the souls that once were here.

The small foliage is more horizontal than vertical. A lonely tree sits at the front of a shack that has lost a bitter battle with the elements. I do not feel welcomed by it. Maybe it’s the ghosts. Some distance away there is a watering trough sitting forlornly next to a fence that died many years ago. The posts make a line that describes a journey that waits to be taken.

This project provides a place to: touch the muddy ground gently, while trying to keep its feet clean; compose music; and not upset the ghosts that inhabit the space.

**Tammin, CODA**

The view from the road to Tammin is dominated by the silos. They emerge from the horizon as an inscription in the landscape.

Tammin is clustered around the lifeline of the road and railway. These are the connectors to places beyond the horizon.

In order to remember this place, a photo-opportunity is created. The silos, being the dominant feature of the landscape, are reframed and represented as the World’s Biggest Six Pack.

The experience of getting to Tammin is memorable – personal – something that cannot be captured in a photograph.

The viewing platform is the venue for the physical proof of the journey. The single image becomes the only memory, complete and convincing once the film has been developed.

**Kellerberrin, Andrea Vecchia-Scavalli**

Three new buildings complement and build upon a hypothetical set of existing buildings, with the intention of creating an Arts Precinct Ensemble. The new buildings are situated on ‘the other side’ of the railway and pipeline – north of the main town site and attempt to ‘bookend’ the main street. The projects borrow from existing spatial conditions that exist immediately around the sites or within the town.

The Courtyard, the Covered Way and the Object in a Field.
The three buildings in the ensemble abstract the models of: Courtyard, Covered Way and Object in the Field, through various means such as scale, subversion and repetition. The Accommodation / Studio pavilion builds upon and reinforces the spatial rhythm of the existing courtyards of the School. The new building grafts additional space onto the school, and creates a venue for further appreciation of art. Cladding is made up of combinations of fibreglass sheeting and timber boards. The Restaurant / Hall pavilion acts as an ‘inhabitable Avning’ – lifting the occupants above the street and gesturing towards the main town site. The clear and opal fibreglass cladding enable the civic shadows within the building to contribute to its tectonics. The project is positioned between the two other parts of the new ensemble and alongside an existing housing development, creating a new semi-rural civic garden. The Gallery pavilion is located below a disused fire fighting training runway. The two ends of this linear project extend above ground. Acting like periscopes, they provide disconnected views of the surrounding landscape. A new civic contribution is provided by the developed site – a realm for the display of art.

The 3 new buildings reinforce the mass(less) and use(less) north side of the town by engaging with existing situations and objects in the town.

Doodlakine, Jonathan Lake
Sustainable Agricultural Research Facility
A sense of place in architecture exists when built spaces embody the historical and present day condition of the environment and speculate on possible futures that begin to rejuvenate fatigued landscapes.

Doodlakine is a typical rural town with a single building primary school at its centre. Schools have provided a centre for many rural towns. They often participate in extra curricular activities, such as research, to assist local farmers. As a result of this history, this project seeks to extend the notions of education and research to suggest a possible alternate future for this rural community.

A Sustainable Agricultural Research Facility has been proposed for the town. This would begin to engage with the town through its dedication to developing better ways of working with agriculture in the environment.

Architecturally, the building responds to the openness of the rural landscape. Sheds are often the most prominent built features in wheatbelt towns. This project proposes a literal interpretation of a shed as a place for storage or protection. In this case, the shed has a series of habitable spaces assembled within. These provide distinct ways of engaging with the landscape. Changes in materials and structure articulate different uses for each space.

Hines Hill, Felicity Dowling
a place to appropriate 1. to take possession of, esp. without authority
“The town’s dying out”, Lynne says. “There used to be twenty men in this town”. Gary and Lynne have got a brand new place waiting for them in Mandurah.

“Not my ideal home”, Lynne says. “But less work, modern, a place to retire to.”

The boys are going to live in the house, they work locally. Their daughter is going to renovate, take up the carpets and polish the floorboards.

She’s watched too many of those renovating shows on tv, we joke.

This town is not dying, it’s becoming a destination.

Gary is not sure of his name, Jack? He doesn’t see him around much, so it’s not just in the city that you don’t know your neighbours. Apparently he bought the shack as a place to retire to. He moved further and further out from Perth for some peace and quiet, people kept visiting until he moved here. He bought the lot with the line running straight through the middle of it. His shack, shed and car are on a small patch jammed up against one side of the embankment, the rest of his land on the other side of the road and the railway reserve. He’s doing the shack up.

Jack’s place reminds me of the filmmaker, Derek Jarman’s, fisherman’s cottage in Dungeness, Kent. Only instead of the nuclear power station and beach, there’s the railway and salt lakes. This could be the first appropriation.

Jarman created a garden out of barrenness. Intensely personal, found objects and created totems and garden beds rise out of the shingle.

I imagine that it would be nice to build a kind of garden for Jack, a sort of signpost along the journey. Maybe there are beds and walls built up out of the sleepers, providing protection from the winds. Maybe Jack’s got a dream.

It is as if he possesses the road and the rails as they pass through his lot, capturing the lines running through the landscape, tuned into the connectedness of it all. Jack moves his boundaries as he wishes, demarcating a space of varying configuration between the railway road and the beginning of the salt lakes. Sometimes he marks out more than is rightfully his. Sometimes the ranks of markers retreat to the line of the boundary wall.

Our instinct is to mark out our territory, defining a site for potential inhabitation.

The land is accessed, documented, gridded and graded, scraped and disputed.
The land is appropriated in readiness, readiness though for what? The land given over to the townsite seems the least utilised land, the least productive. Here Jack appropriates reserves and land marked out but unowned. He creates a temporary landscape and the illusion of ownership. In this project the definition of territory is the inhabitation Jack continues the appropriation of a landscape.

Nangeenan, Stephen Neille + Jurek Wybraniec

Typically, there is no reason to stop in Nangeenan. In order to bring the sublime quality of this non-town into appearance we have slightly altered the existing features and geometry of the place. We have left all of the existing (remnant) vegetation and played with the geometry of existing elements - pipeline, road, and town survey plan - to construct a new perceptual experience.

Two concrete walls are constructed on either side of the highway to form a public room that runs for 800 metres, east/west along the entire length of the town. Opening to the sky, the road/room contains a single, 50 m long, bench that faces north across the highway to a window opening a large expanse of remnant vegetation. The entire room compresses the speed/space of the road journey that runs as a counterpart to the 550 kilometre long water pipe line.

The pipeline itself is bent, ever so slightly, to shape and reticulate (cultivate) two new colour-fields of pink and purple wildflowers. These seasonal colour-fields foreground and expose the altitude of the remnant vegetation that currently fills the limit of the Nangeenan surveyed boundary, exactly in the place where the anticipated town never happened.

Carrabin, Hazel Porter

("ARE WE THERE YET?") The sign on the roadside at Carrabin confirms your place along the highway; "1/2 WAY FROM PERTH TO KAL" or "1/2 WAY FROM KAL TO PERTH" Depending on which way you're headed. Good place to fill up the tank, stretch the legs, have a bite to eat. There used to be a pub here, burnt down some time ago, no-one bothered to rebuild it. Just your typical roadhouse here now - a couple of petrol bowsers out front, and weathered prefab motel rooms. Not much to look at really. The crossroads disappear north and south, heading off to find other pockets of habitation, but none that we can see. The pipeline, its contents heading east, waits silently for something to happen, for someone to notice it.

A picnic shelter / BBQ spot now resides just off the roadside - a place to watch road trains thunder past. This place provides a more intimate scale to the expansive nature of its situation. It makes gestures off towards those other places out yonder, but refers everything back to what is close at hand. The wrapping surface of the seat-tables makes forms that rise out of the ground, the roof structures take cue from the roadhouse driveway - one welcoming Kalgoorlie, the other Perth. A remnant bit of pipeline has lodged itself into the picture. The obligatory brick BBQ makes the place familiar. A good place to have a rest and have a bite to eat.

Boddlin, Simon Pendal + Rebecca Angus

Garden in a semi-arid landscape. Reservoir house and gardener's residence In the journey from Perth to Kalgoorlie the town of Boddlin represents only an instant. Boddlin is crossed by a pipeline, a railway line and a highway. The lines that define it have shifted over time. Fifty years ago we believe the pipeline ran underground, past the town and the railway ran through the town centre, along the reserve. Today, the pipeline is a single 36 inch main that runs above ground along the southern side of the highway. The railway crosses the main road at the western end of the town and its station and silo have been relocated further south-east. It seems that the site for the town was originally chosen for its potential use as a watering stop for the steam powered railway in the 1890's. Its position was within the necessary distance between stops. More importantly, an existing soak (Boddlin Soak) was able to be utilised as a source of water. The presence of water in Boddlin becomes the driving force for a new project which uses the natural Boddlin soak now that the steam railway has long since been replaced. The ground along the original alignment of the pipeline is excavated and a garden is introduced. It is terminated at the town's boundaries.

In order to 'grow' the garden, the section of land within this strip is flooded, seeded, and allowed to take shape at will. Within this space, the combination of water and shade creates an environment that is in contrast to the surrounding parched landscape. The 'gardener's house' is sited at the intersection of the town grid and the irrigated strip. It sits opposite the existing town store. The building is part reservoir, part gardener's residence and acts as an intermediary condition between the soak and the garden. The house, whilst situated within the public garden, is embedded within the reservoir, providing an introverted series of spaces. These spaces are conceived as being much darker and cooler in comparison with the environment beyond. The public can enter the north-eastern half of the garden by moving downwards, through two dark corridors that divide the spaces of the residence. This requires all internal pathways for
the gardener to be at a higher level, perpendicular to public pathways.

Noongar, Greg Cowan + Khoa D. Do
Although the townsite of Noongar appears deserted today, it is a focus for
the Yilgarn people in Western Australia's wheat belt. The conference centre proposed for this place
alludes to the ephemeral yet rich cultural heritage, both prior to and following the mid-twentieth century set-
tlement that gave the place its present name.
Conferences may take many forms - reconciling the ancient with the modern in
rural Australia. The feral meets and informs the civilised through: a football oval (dirt surface);
informal auditoria (one open, one covered); and a 'clinic' for visiting sport, legal, or public health consult-
ants.
The place called Noongar is celebrated with a collapsible architecture.

Southern Cross, Michael Patroni + Dimity Walker
Driving for hours and hours through monotonous landscape, occasionally punctuated by buildings and
always accompanied by the water pipeline - an endless silver ribbon, oscillating gently, racing our car, an
anchor line or fateful trajectory?
The flickering light through the trees has a hypnotic effect - almost to trance... and the daydreams begin
- some momentary fragments - others prolonged and expansive. Our car, travelling @ 120 km/hr is a place
to daydream - inducing a state of reverie... wide street ... like a Paris Boulevard... without the traffic... wide enough to turn
a camel train! Frazer's abandoned open cut mine - part filled with ultra saline ground water - dazzling blue - inverted mountain - industrial intervention - horizontal strata geology - on the main street... WHAT IF
a bathing pavilion clung to the steep slopes, negotiating the transition from road to waters edge - solitude - suspended without effort - floating......
Constellation Park - a former drive-in cinema, transformed into banal parkland using the town's recycled
grey water - local council initiate without poetry...
WHAT IF the drive-in was landscaped intact to create an open air cinema venue, a unique site
for an international film festival - a world focus on SX ... and a portal for the community to
dream of other worlds...

Ghooli, Colin Armstrong
'A PLACE TO MEET NEW, INTERESTING PEOPLE'
Ghooli, when viewed from a passing car at 110 km/hr, provides a brief but clear impression of its physical
nature. The way of travelling through the town raises many questions about Ghooli as a place. There are
only three houses, all occupied, a pumping station and the pipeline.
Who lives there?
What do they do?
Why do they live there?
The pumping station and pipeline have occupied their place for many years and have faithfully continued
to provide service and significance to Ghooli. However, their physical contribution to the town is static and
monumental only. They do not interact with the inhabitants of Ghooli. There is no identifiable place for the
residents to interact together with others.
Nobody stops at Ghooli, there is no reason to. The road is only 70 metres from the closest house. Two
places currently constitute Ghooli, the fast road and the still buildings. The distance between these two
distinct places could very well be 1 kilometre and nothing would change. It seems appropriate for this
duality 'of place' to be maintained.
The place at which Ghooli residents and road residents meet should itself be distinct and independent, a
common ground, another plane! The Ghooli "Drive To" is a raised plane that is in contrast to the places
below and their histories. Like the pipeline, it physically imposes itself and places itself in contrast to its
environment. Similarly, it is in contrast to the unfortunate practice of constructing by-pass roads around
small rural towns. The new building makes vehicles stop and meet the town.
In an odd manner and like the pipeline, the building develops its presence and significance as a place over
time. This new place however serves no particular function other than to physically provide the opportunity
for the occupants of three houses to meet those that have always flown past and blended.
It seems inappropriate for this place to have a prescriptive use. It could do so many things it would be a
shame to type cast it.
A place designed for one use at the same time restricts a variety of uses. Some of the greatest public
gathering places don't have prescriptions.

Karalee, Robert Jennings
DAM POOL - The town of Karalee is just past Southern Cross, 5 hours drive, east of Perth. Population
zero. A large ancient convex-shaped rock formation in the vicinity was used to collect water more efficient-
ly with the construction of stone perimeter walls in 1896. The water was transported from the rock to the railway’s steam trains in three kilometres of steel aqueduct. Travellers used to swim in the rock’s reservoir.

This historic use of water has been reinstated in this project, Dam Pool. The form of the pool is derived from the aqueducts, lifted off the ground to reveal the planar nature of the surrounds and the linear cuts in the land. The drive to the pool also explores these conditions.

The form and the function of the pool contrasts with the dryness and the flatness of the bush.

**Boorabin, IPH Architects**

Country Cleanser. Boorabin; a town that never was; the cross-road to Paynes Find; the ghost of a future town; a town that may never be.

This installation is inspired by the processes of collecting water at Mundaring Weir and mining metal at Kalgoorlie; filling an artificial vessel and making new holes in the earth. The materials for the installation are all sourced from Mundaring Weir and are metaphorically piped to the site.

The event attempts to illustrate the contamination of the country by exotic pests (the cost of development) and acts as a decontamination unit for the insect and freight-spheres. It also becomes a horizontal reservoir to collect water and compost contaminates beneath the vehicle washer.

The road becomes the dam and the sky becomes the water; an ocean of purity.

0-1 Minute - Speed: 100 km/hr +

Theme: Dam shoreline; dead trees killed by inundation

Purpose: prelude to the installation

Materials: salvaged lengths of cast iron pipeline

1-2 Minutes - Speed: 80 km/hr

Theme: Ghost of the future town

Purpose: European Bee filter; allows Native Bees to escape

Materials: steel screens and timber hives

2-3 Minutes - Speed: 60 km/hr

Theme: Vehicle wash/decontamination unit

Purpose: vehicles travel over enclosed metal grid bridge, vibrating like a cattle grid, for the duration of the section while being sprayed with recycled water stored in cast iron pipe cisterns below bridge. Contaminated soil, seeds etc. fall to concrete spillway below and compost in cisterns.

Materials: steel grid-mesh, railway track, cast iron pipes, concrete, timber pedestrian walkway.

3-4 Minutes - Speed: 60 km/hr +

Theme: The road becomes the dam and the sky becomes the water.

Purpose: vehicles travel up enclosed bridge and exit onto raised and ramped concrete road, with the land dropping out of view and the sky filling the windshield.

Materials: concrete road, dry-store pitching.

**Bulla Bulling, Glenn Russell**

PumpingStation9@BullaBulling2000.com Architectonic pieces. Futuristic? A technological art installation animated against the red earthed landscape. It distracts the curious passer by, speeding, destined for Kalgoorlie an hour away.

Interact: Enticed to stop and observe the invisible boundaries blurred by the shimmering 40°C Heat and the strands of their paralleled traveller. Just another waterhole alongside the pub that has the Last Chance Beer…. for a long, long Time.

A millennium project? Object: Vessel. Slick and shiny, shimmering reflections. A road train pulled aside to, get that Last Chance Beer. Luminous lime… pop art …Warhol meets BP tanker. A pod luminous and enriched against the ochre dirt - reconfiguring one’s perceived views of the landscape.

An object cocooned around the Pipeline…. the lifeline to Kalgoorlie. A robust frame provides foundation to the observatory platform… a space minimally defined by shelter and a handrail.

Shell bodies come standard… or with GTI detailing. Embossed with graphics. Corporate advertising? A watertank alongside the ‘Rock Tavern’ also graphically marked … Hanman’s Lager.

The shell-like, almost inflated forms, provide segmented views of the internal mechanics. Projections at night appear like flashlights across the façade … detour … and stop for a minute.

**Kurrawang, Sophie Giles**

A line of absence is seen in its fleeting presence, a solid twist to the ends of these corridors for the eye

1km from Great Eastern Highway - a place to gather - the speeding glance

An Aboriginal Christian Community - a place to gather - as a community

An entry to the town - a place to gather - thoughts of perception (+) embrace

The pipeline - a place to gather - the connectivity of this life giving land line

The horizon - a place to gather - within the expanded horizon