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Practice
Research
Symposium



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Architecture
& Design

Australia
June
2 - 5 2016

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Program of Events

Thursday 2 June and Friday 3 June

PhD examinations, Project Rooms 1 and 2, Level 2, Design Hub, starting at 10am and 2:30pm

Please arrive 15 minutes early as no entry after 10am and 2:30pm

Friday 3 June

Welcome drinks, Project Room 1, Level 2, Design Hub, from 5.30pm

Saturday 4 June

HDR candidates' progress reviews, various venues, Design Hub, all day from 9.30am

Catering is provided throughout the day in the Long Room, Level 10, Design Hub

PRS Dinner (RSVP only), Multi-purpose Room, Level 1, Design Hub, pre-dinner drinks from 6pm

Sunday 5 June

HDR candidates' progress reviews, various venues, Design Hub, all day from 9.30am

Catering is provided throughout the day in the Long Room, Level 10, Design Hub

Closing drinks and informal discussion, in the Long Room, Level 10, Design Hub, 3.30-4.30pm

June 2016 marks a significant moment in the history of A&D's Practice Research Symposia. Momentously, after almost 30 years of directing the PRS Australia, Professor Leon van Schaik has passed on the Charing baton. His initiative and attention over so many years has grown into a model for approaching the Masters by Research and PhD process that is second to none. Our research community revolves around it and has expanded both within and well beyond Australian shores into an international phenomenon. Leon will still, of course, be an important part of the PRS, but this is a moment in which it seems important to thank Leon for the brilliance of his contributions to A&D culture. It also seems worth reminding ourselves, at this point, of the emphasis he has given the PRS as 'the tangible focus of a learning community – its home so to speak'. Being the home of a community, the PRS atmosphere of enthusiasm and commitment is the product of many, but as the first architect of that tangible focus, we have much to thank Leon for.

The PRS is an extremely precious thing – as a research armature it absolutely trumps other more bureaucratic forms of HDR governance that also strive to leverage quality practices in research and supervision. Having been involved in many negotiations around university higher degree policies and procedures in my previous role as HDR Coordinator, it has become stupendously clear to me that the ethos of the PRS manages the complexities and richness of the research process in ways that policies and procedures never could, as important and necessary as they may be. Even amidst all the graphs and chartings of data, it's hard to miss the impact, where completion rates of schools who ground their research candidates in biannual PRS presentations are shown to be notably higher and more resilient. Quite beyond these kinds of quantitative measures, those of us who engage in a PRS community understand the immeasurable value of the experience.

The next two years of the PRS Australia will have a key role in the DAP_r (Design and Architecture Practice research) project, funded by the Australian Office for Teaching and Learning and led by our Dean, Professor Richard Blythe. This will bring supervisors and candidates from 13 other Australian universities into the PRS proceedings and events. We look forward to this engagement and the fresh perspectives it is likely to offer us all. I extend a warm welcome to all our guests.

This is the first booklet shaped by the new PRS graphic identity, designed by Sean Hogan, Trampoline. This adaptable identity framework will now shape all A&D PRS booklets – Australia, Europe and Asia – visually connecting these learning communities as they each continue to develop in their own unique ways.

Amidst the many changes and new initiatives that June 2016 brings, not all of which I can mention here, one crucial thing remains unwavering: the generosity, commitment and community spirit that drives the PRS ushers us all into a process of collective learning, and rigorously shared knowledge production. Enjoy.

Pia Ednie-Brown
Director, PRS Australia

Higher Degree by Research Examinations

08	Roger Kemp	PhD (Architecture & Design)
09	Anthony Fryatt	PhD (Architecture & Design)
10	Juliette Anich	PhD (Architecture & Design)
11	Rachel Hurst	PhD (Architecture & Design)

Abstracts and Posters

14	Pantea Alambeigi	PhD (Architecture & Design)	
15	Penny Allan	PhD (Architecture & Design)	
16	Michael Banney	PhD (Architecture & Design)	
17	James Barbour	PhD (Architecture & Design)	
18	Claire Beale	PhD (Fashion & Textiles)	
19	Philip Belesky	PhD (Architecture & Design)	
20	Simon Bold	PhD (Architecture)	Newcastle
21	John Brown	PhD (Architecture & Design)	Europe cohort
22	Timothy Burke	PhD (Architecture)	Newcastle
23	Maud Cassaignau	PhD (Architecture & Design)	
24	Kate Church	PhD (Architecture & Design)	
25	Gyungju Chyon	PhD (Architecture & Design)	
26	Tanya Court	PhD (Architecture & Design)	
27	Jo Cramer	PhD (Fashion & Textiles)	
28	Kristof Crolla	PhD (Architecture & Design)	
29	Victoria Cullen	PhD (Architecture & Design)	
30	Andrew Currie	PhD (Architecture & Design)	Asia cohort
31	Norman A Darwin	PhD (Architecture & Design)	
32	John de Manincor	PhD (Architecture & Design)	
33	John Doyle	PhD (Architecture & Design)	
34	Campbell Drake	PhD (Architecture & Design)	
35	Loren Dyer	PhD (Architecture & Urban Environment)	UTAS
36	Scott Andrew Elliott	PhD (Architecture & Design)	Europe cohort
37	Laura Gardner	PhD (Fashion & Textiles)	
38	Jock Gilbert	PhD (Architecture & Design)	
39	Jenny Grigg	PhD (Architecture & Design)	
40	Jeremy J Ham	PhD (Architecture & Design)	
41	Ceri Hann	PhD (Architecture & Design)	
42	Jeffrey Hannam	PhD (Architecture & Design)	
43	Fiona Harrisson	PhD (Architecture & Design)	
44	Cecilia Heffer	PhD (Fashion & Textiles)	
45	Tania Ivanka	PhD (Architecture & Design)	
46	Emma Jackson	PhD (Architecture & Design)	
47	Mark Jacques	PhD (Architecture & Design)	
48	Gwyllim Jahn	PhD (Architecture & Design)	
49	Sarah Jamieson	PhD (Architecture & Design)	

50	Eduardo Kairuz	PhD (Architecture & Design)	
51	Christopher Kaltenbach	PhD (Architecture & Design)	
52	Sam Kebell	PhD (Architecture & Design)	
53	Jaffer AA Khan	PhD (Architecture & Design)	
54	Chuan Khoo	PhD (Architecture & Design)	
55	Louisa King	PhD (Architecture & Design)	
56	Chris Knapp	PhD (Architecture & Design)	
57	Mehrnoush Latifi	PhD (Architecture & Design)	
58	Michael Lavery	PhD (Architecture & Design)	
59	Alice Lewis	PhD (Architecture & Design)	
60	Paul Loh	PhD (Architecture & Design)	
61	Carey Lyon	PhD (Architecture & Design)	
62	Corbett Lyon	PhD (Architecture & Design)	
63	Lucinda McLean	PhD (Architecture & Design)	
64	Ben Milbourne	PhD (Architecture & Design)	
65	Jane Morley	PhD (Fashion & Textiles)	
66	Manuel Muehlbauer	PhD (Architecture & Design)	
67	Amy Muir	PhD (Architecture & Design)	
68	Miranda Nieboer	PhD (Architecture & Urban Environment)	UTAS
69	Simon Pental	PhD (Architecture & Design)	
70	David Pledger	PhD (Architecture & Design)	
71	Toby Reed	PhD (Architecture & Design)	
72	Jean-Paul Rollo	PhD (Architecture & Design)	
73	Saskia Schut	PhD (Architecture & Design)	
74	Rosie Scott	PhD (Architecture & Design)	
75	Donna Sgro	PhD (Architecture & Design)	
76	Robert Simeoni	PhD (Architecture & Design)	
77	Tal Mor Sinay	PhD (Architecture & Design)	
78	Nicholas Skepper	PhD (Architecture & Design)	
79	Simon Spain	PhD (Architecture & Design)	
80	Simon Twose	PhD (Architecture & Design)	
81	Tom Verebes	PhD (Architecture & Design)	Asia cohort
82	Benjamin Vielle	PhD (Architecture & Design)	
83	Simon Whibley	PhD (Architecture & Design)	
84	Phoebe Welman Whitman	PhD (Architecture & Design)	
85	Nicholas Williams	PhD (Architecture & Design)	
86	Eileen Zhang	PhD (Architecture & Design)	
90	Design Hub maps		

Higher Degree by Research Examinations



**June
2016**

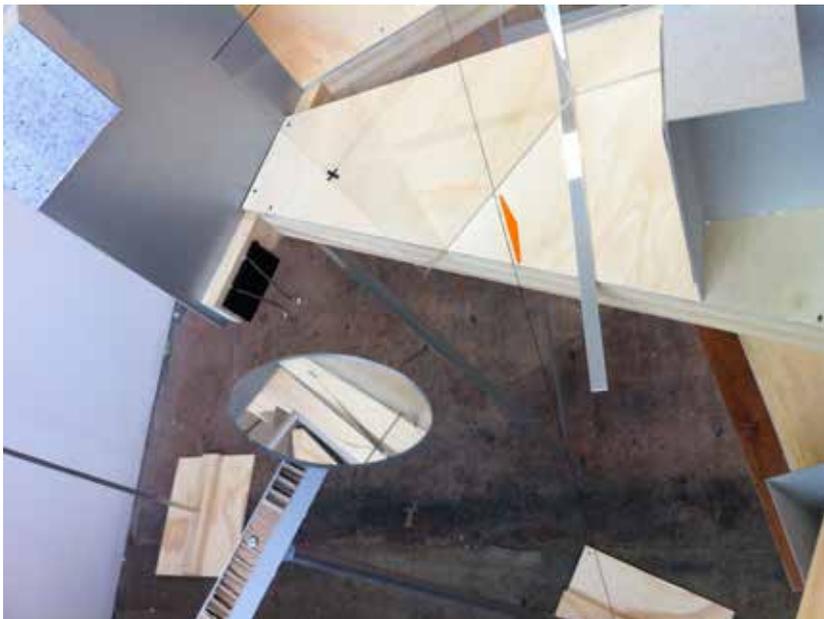


Negotiating Space: A Relational Approach To Interior Design

The central aim of this PhD is to develop an expanded practice of interior design, drawing on a more liberal understanding of interiority as a relational condition. This relational approach to interior design foregrounds the positioning of people relative to the physical and virtual conditions of a space, both perceived and experienced.

To pursue this argument a collaborative design practice titled *Making Distance* was established for the duration of the PhD. The body of work produced under the

banner of *Making Distance* carried two research trajectories simultaneously: that of *Negotiating Space* (Roger Kemp) and *The Mediated Interior* (Anthony Fryatt). Ultimately *Making Distance* acted as a framework and vehicle for a conversation between two designers, enacted through the medium of design.



Mediated Interior: Subjective And Empowering Productions

This PhD investigates interior design through the act of making. It is interested in the agency of a design practice that operates under the notion of flux. It is argued that interiors are in a continual state of production from an assemblage of physical and temporal conditions.

Through the collaborative practice *Making Distance*, a design laboratory that consists of RMIT University academics Roger Kemp and Anthony Fryatt, the research explores various design techniques within the work, including

the diagrams, scenography and image making. These are used to simultaneously provide both spatial cues and levels of indeterminacy.

Ultimately the PhD argues that these speculative design processes invite a subjective and empowering production of spatial experience. It positions the interior as a critical social tool, a mediator between the self and others.



Stealing is Sharing is Caring: Mapping Pathways from Angst to Love [Design interventions to explore a community scale, localized food system]

Contemporary manifestations of urban agriculture have become symbols of creativity, activism and sustainability in cities.

Originally designed to co-locate food and people, urban agriculture produces not just food, but draws people together for social interactions that may have not otherwise existed. What is interesting with these social interactions, is that shared interests don't necessarily translate to sharing other things.

This practice explores the social context around urban agriculture through a series of design interventions that challenge ideas of ownership, the boundaries drawn between private and public, collaboration and

cooperation, value and waste. This body of work offers both a mirror and a window into the current food and sustainability practices, and urban culture in Australia.

The practice takes place over 3 locations in 2 states: Newcastle NSW, Melbourne and Castlemaine Victoria. All of these places are hubs of creativity and social innovation, offering space to foster and incubate this type of collaborative, sometimes disruptive work.

As part of this reflective process, a model is created that provides a framework in which this work and other similar projects can operate on.



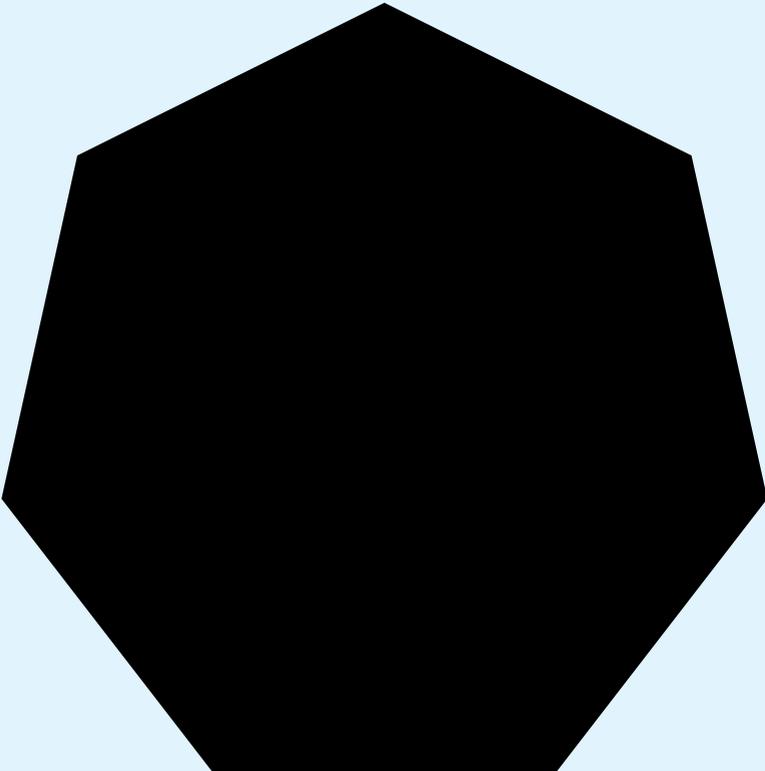
The Gentle Hand and the Greedy Eye: an everyday baroque practice in architecture

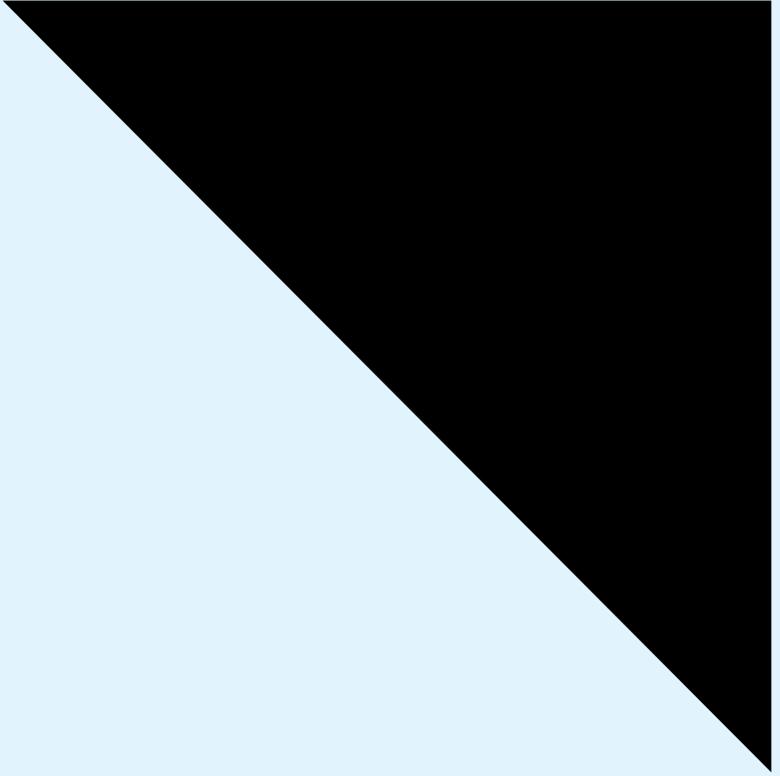
Through a hybrid practice of creative works – curation, critical writing and education – *The Gentle Hand + The Greedy Eye* investigates specific everyday settings, notably the table, to deepen the understanding of potential analogies for architecture. Three suites form the spine of the research. They are **TIMES/TABLES**, **Manual**, and **[re]situating: the Goodbye Table Road Trip**. Each has multiple components, different media, scales and collaborations. It is a journey of making and gathering from commonplace territories of home and work, exploring the embodied aspect of analogue crafts, with a 'baroque' attitude to hybridity, layered effect and the dynamics of daily life.

This PhD is motivated by an interest in the everyday as the sometimes-ignored companion to the practice of architecture. It aims to demonstrate ways to use the everyday as a productive source for architectural analysis, response, as an educational tool and, ultimately, as an agent for an expanded model of practice.



Progress Reviews



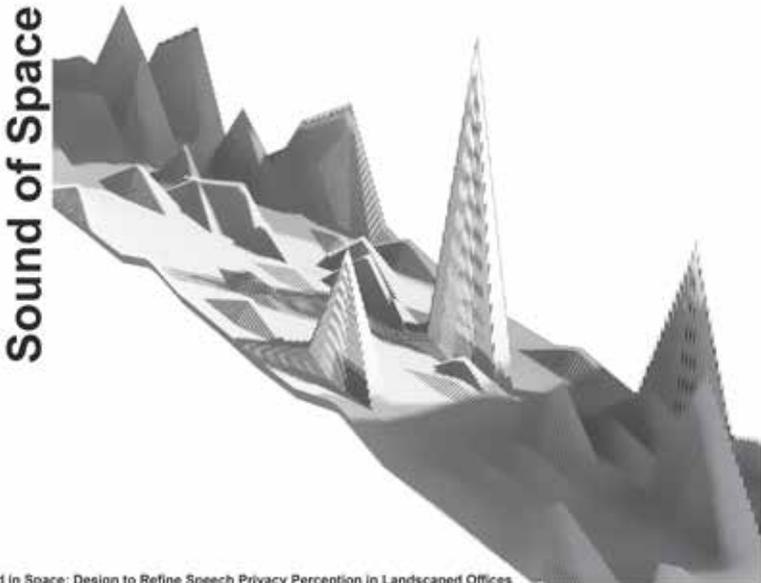


**June
2016**

Shape the Sound in Space: Design to Refine Speech Privacy Perception in Landscaped Offices

Acoustics is part of an architecture which designers rarely consider in the early stages of the design except possibly when designing concert halls. In the trend to have open plan offices in substitution of conventional cellular offices, acoustic comfort plays a major role in occupants' productivity. The requirement for a space in open plan fit outs, which provides speech privacy and intelligibility for meetings, is still an area requiring research by designers. The research addresses this problem in modern office areas by offering new design opportunities.

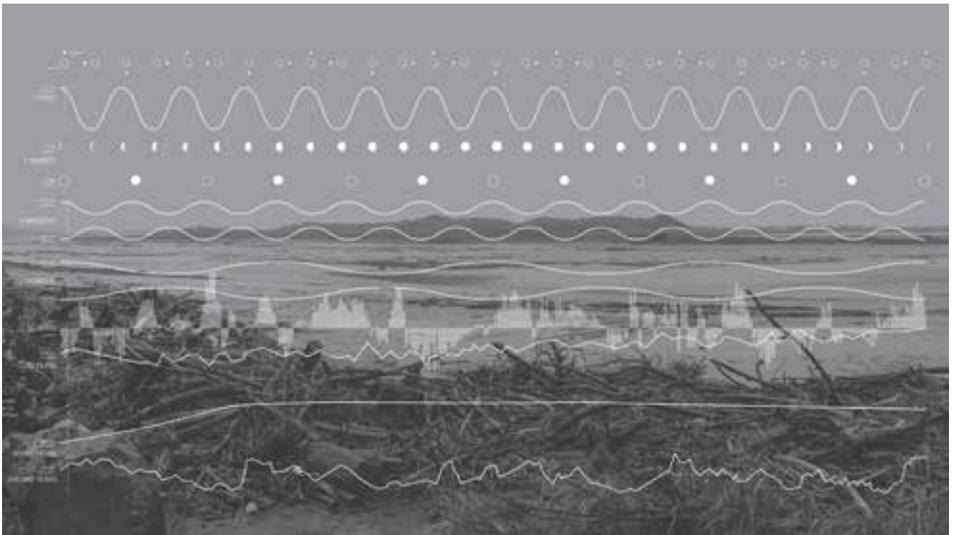
The project aims to investigate the magnitude of the impact of spatial geometry on human perception of the speech privacy in small and semi-enclosed spaces. The methods used to research this question combine subjective experiments with acoustic simulations and measurements. The research explores architectural approaches to the sound perception through studying case studies and feedback into further design iterations and evaluation cycles.



The Poetics of Systems

For the last 25 years, the discipline of landscape architecture has been obsessed with big landscapes, diagrams, data and systems thinking. I am too, but when I am actually in landscape something else happens that has nothing to do with data and systems thinking. I am struck by its quiet persistence. I've spent most of the PhD thinking about this conundrum and trying to figure out a way to understand and design landscapes that not only acknowledges the pulse and flow of life but also offers a glimpse of that other place.

To that end, I've been experimenting with ideas and techniques that encourage 'being-in' big landscapes. In what I hope will be my final PRS, I talk about what I've discovered, how dramatically my practice has shifted since I began the PhD journey, and the role of my new design research practice, OUTPOST in that shift.

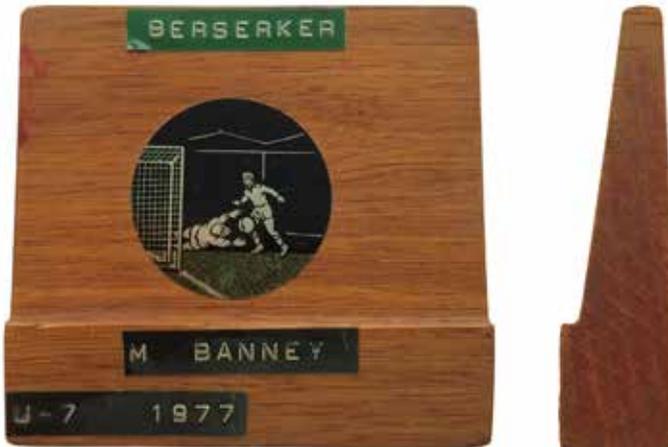


m3architecture – anecdotal evidence

In winter 1995 I met with my supervisor, Professor Leon van Schaik. I provided somewhat of a life storey, a long series of anecdotes – all of those things that I thought may have contained traces of my archi-DNA. Leon listened.....until the end, and then he said "You do realise what you have just done?" I confessed that I didn't.

Apparently (and unsurprisingly in hindsight) I had crystalized an approach to architecture - a method of storey telling, of finding the storey in the first instance, often a storey already written but lost.

The meeting with Leon was a mark in time. It was the moment we first discussed a PhD constituting a series of anecdotes that are interesting, testable and concretizing, that describe a personal history, a way of working and a body of work.....



Exploring Height in Acoustic Space

This research program is exploring our aural perception of sounds in three dimensional acoustic space, a key component of which comes from the height of a sound source. We hear sounds emanating from all around and over us, out to our acoustic horizon, and are immersed in a 3D soundscape. Every acoustic space through which we move has its own unique spatial identity, realised by the reflections from the surfaces in that space. My research is investigating our perceptual

response to the height of sound sources and creative techniques for producing a realistic a 3D soundscape with a true sense of immersion. My research is currently focussed on constructing soundscapes using field recordings, studio recordings and electronic sounds, to explore our perception of source localization, spatial movement, proximity and spatial identity.



Designing Conversation: Conversation and ideation in cross-disciplinary event curation and creative production (the metier of design is discursive and iterative)

How does a designer curate / design events? How does designing conversation enable our understanding of the iterative and discursive metier of design? By investigating the emergent community of practitioners that are developing methodologies and models in the space of cross-disciplinary event curation, this PhD seeks to extend the concept of design practice. Methods that inform this practice-led thesis approach includes a series of inquiries – case studies, interviews with practitioners, literature reviews and reflection on personal practice. If the metier of design is discursive and iterative, by investigating and developing a model for designing events that

is in itself iterative, scalable and collaborative, such model/s will make explicit the iterative nature of design practice, and inform the conversation about design. This research seeks to extend current notions of creative practice, and propose a new model/s for the design and curation of design events.



Testing Terrain: developing computational techniques for designing landscape systems

Few landscape architects employ computational strategies in their design process. When they do, most use it to design landscape forms by appropriating the techniques used to develop architectural surfaces. This highlights the lack of computational techniques for modelling the natural and artificial systems that underpin landscapes and much of the landscape architectural design process.

These techniques are underdeveloped partly because landscape systems have gradiented, scalar, and temporal complexities that pose different conceptual and technical challenges

to the problems of architectural geometry that comprise much of the computational design canon. This research aims to develop techniques that address these challenges by identifying and how computational design can be adapted to the medium and methods of landscape architecture.



The creating of an in-between moment

My PhD research involves self-reflection on my past and current practice as a photographic artist.

Here, I represent a reflection of my archives in order to mount a small retrospective exhibition in early 2017. A close examination of the archive has revealed repeating motifs in the images. My earlier student work reflected the industrial environments where I initially developed childhood spatial awareness, and subsequent images demonstrate a shift of interest to cities as social relationships.

Perhaps more importantly the mining of the archives revealed technological innovations to lengthen the pre- and post-production processes, and thus heightens visual awareness.

My current practice contributes to emergent photographic trends of the representation of spatial experience by condensing temporal dimensions.

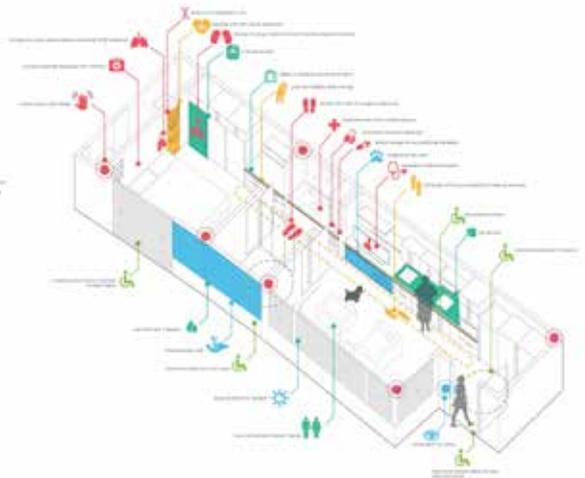
The creating of an in-between moment



Going Home
Future Adaptive Building for Aging-in-Place

Up to 95% of North American houses have not been designed by an architect. The result is what the Sierra Club calls the 'Dark Side of the American Dream' - a vast, formless, un-designed place where almost everyone lives. This research program explores potential strategies for architects to meaningfully engage this middle ground. It builds on a twenty year career in unconventional forms of practice that encompasses real estate, construction, architecture, interior design, retailing, writing, lecturing, video production, blogging, social media engagement, and public education. The project explores a new model of practice based on a modular mass customized system of interior components

that can be used to create both custom and mass produced homes that easily adjust to the evolving needs of residents. The system is particularly well suited for aging in place as older individuals typically experience greater, and more unpredictable, rates of change than the average homeowner.

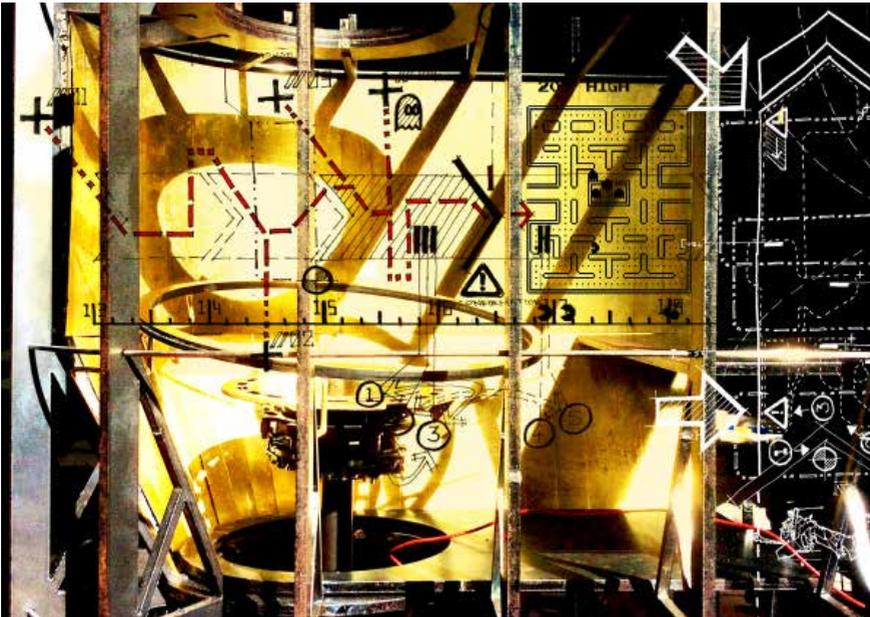


Gizmos + Ghosts: Speculating Machines

This research is interested in ‘the machine’ and its manifestations in architecture. The manifestations of interest take the form of the experimental machine or the “ANALOG”, where the instrumentality (in both senses of the word) of these contraptions may become a method of speculating architecture. Whether in the role of the inventor (architect) or the operator (participant), these machines are designed to question qualities of architecture or “not-architecture” through their creation and operation.

The concept situating this inquiry into the machine focuses on the shifting paradigm from “the ghost in the machine” to the “cyborg” where traditionally held dichotomies

of the mystical (ghost) and the rational (machine) erode in favour of more enigmatic embodiments. By this token, these curious gizmos begin to reveal the indeterminate, unfathomable, fractured and ‘other’ post-structural conditions of architecture.



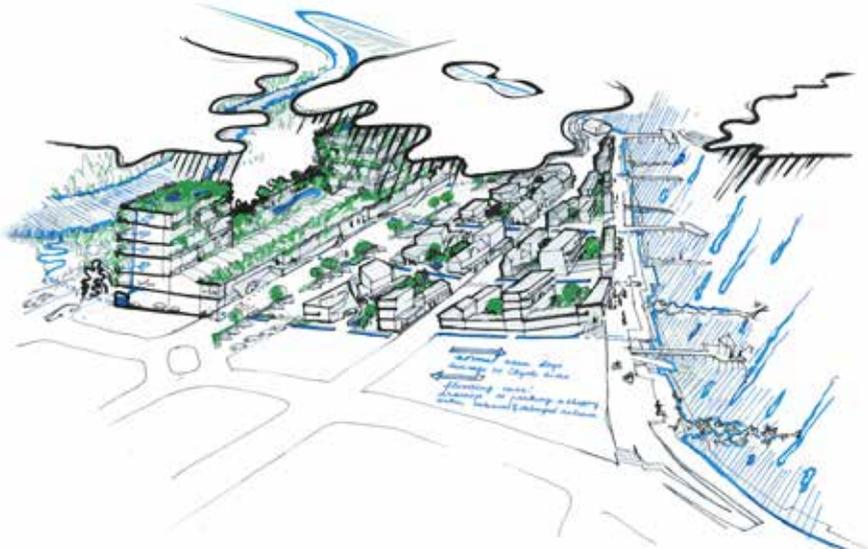
SITEGEIST – urban transformation: re-use, re-connect, re-value

My research investigates how urban transformation generates new potentials in postproduction landscapes, though projects in different scales and contexts (Europe, Asia, Australia). It focuses on re-using and re-connecting existing urban elements through new interventions, aiming to achieve new value, multiplied potentials, alternative readabilities and uses for stakeholders. These heterogeneous elements include industrial heritage, infrastructures and resource networks, to manmade landscapes....

The re-integration into larger networks and flows reveals potentials for future use and new relevance in singular elements of urban heritage. In return the re-use, re-connection,

re-reading can generate new acceptance for preservation and urban transformation.

These re-interpretations trigger a process of creative city transformation within larger landscapes. They allow identifying adaptation possibilities and seeds for urban renewal. By balancing the need for preservation and innovation, they take a critical position towards common approaches and interpretations of 'heritage' e.g. by UNESCO and Heritage Guidelines which privilege stiff conservation to adaptation.



Embracing Imminence: Land-Scape and its peculiar distances

Following the late-20th Century acceptance of Alfred Wegner's Theory of Drift: that not even continents are fixed or stable; the 21st Century has heralded a gradual recognition that the atmosphere too is changing. These instabilities contextualize three research trajectories that cumulatively foreground impermanence as an inherent characteristic of landscape's performativity. This frames landscape as a spatiotemporal condition emerging from a continuum of transition whereby change is imminent; always just about to happen. The articulation of these trajectories and their constituent 'acts' constructs a multi-modal praxis which does not position change in the landscape as a

'problem' to be 'solved' but rather enlists paradox and open structures as alternatives that embrace the imminence of change. Cumulatively this research champions landscape architecture as a discipline with the creative agency and technical scope to re-situate the predominant narratives around the discourse of change and respond to the key 21st Century preoccupation with uncertainty.



Animating Materiality

My research starts with the proposition that when we approach the objects around us as dynamic, correlated, and active co-shapers of our environments and us, they become animate. How does materiality play a role in making objects more animate?

Whereas modern ideas regarding materials tend towards a control, through reflection on my projects, I have identified three behavioural tendencies – unruly, sensing, and temporal – in consideration of the animate relationship between materials and environments. Each of these behavioural tendencies touches on a way of thinking known as wabi sabi. The principles of wabi

sabi read like countertendencies of modern thought, favouring relativeness, imperfect and impermanent.

How are the three behavioural tendencies and the principles of wabi sabi connected? How might that connection then be related to the current ecological thinking and principles of new materialism? If so, how might these shared principles help us to approach design differently? These questions are explored through examining the ways I balance and negotiate through animating materiality during design processes.



Shift

The research aims to explore the ever-changing notions of the civic and what these might mean for my practice. Is there a proposition that might also be important for others that ongoing suspicion, vigilance and redefinition means the civic can never be pinned down, trapped or tamed in a rigid definition?

As a noun 'shift' means 'movement to do something, a beginning' but also a device of evasion or subterfuge as seen in the contemporary use of the word 'shifty'. How

might this relate to my work in the public realm? If the civic no longer has the formal qualities or ceremonial programming of traditional civic realms what is it? If the civic is always contested how can the design response be opened and keep open a dialogue with the contexts?



The Living Wardrobe

How does a fashion design practice that takes responsibility for what it brings into being, operate? Is it enough to use 'environmentally friendly' materials and processes and instigate an ethical supply chain in the production of ever-increasing amounts of clothing? When a fashion practice asks of itself: "what will my designs design?" it invites a response that cannot do other than fundamentally redirect that fashion practice away from the accepted modes of practice towards one that prioritises sustain-ability.

In revisiting and rethinking traditional garment construction methods, design strategies are being developed to prolong the use of the garment. This approach considers adaptable

design features and participatory design processes as means to recode the garment from transient, disposable commodity to valued, personal possession.

Developed as an open source project, the intention of the research is to foster behavioural change in the fashion consumer and the fashion industry by demonstrating an alternative model of fashion practice that takes responsibility for the design agency of its products.



Building Simplicity

Current evolutions in computational design are radically expanding the design solution space available to architects. In principle, these trends should permit the more straightforward implementation of non-standardised, geometrically complex architecture. Yet, since the digital entered the architectural scene, it has by-and-large encountered non-digital cultures not through authentic dialogue, but through subjugation. As a result, a disjunction has manifested between the opportunities the virtual offers and their real-world implementation.

This PhD research investigates design strategies that deliberately introduce

project-specific material and construction idiosyncrasies into the digital workflow in order to practically achieve more ebullient architectural outcomes from limited means. It investigates how the impact of ubiquitous computational power can be locally mediated through architectural designs that focus on the friction between the virtual and the real. The study searches for latent architectural opportunities and design potential by merging traditional craftsmanship and local means of construction with digital design and fabrication technology.



Conversation-led approaches for designing sexual wellbeing in healthcare

This project sits in the intersection between the fields of Sexual Health and Design. I am investigating design within Sexual Health and Wellbeing because there is currently a lack of products, services and Human Centred Design (HCD) practice within this area. Sexual wellbeing is a core human need that is critical to high quality of life. Psychological literature demonstrates the negative effects to wellbeing when sexual health issues are ignored. I will undertake a series of Service Design projects focusing on conversation-led practice approaches. My first project will be situated within the prostate cancer population. Prostate Cancer treatment, leading to erectile dysfunction and

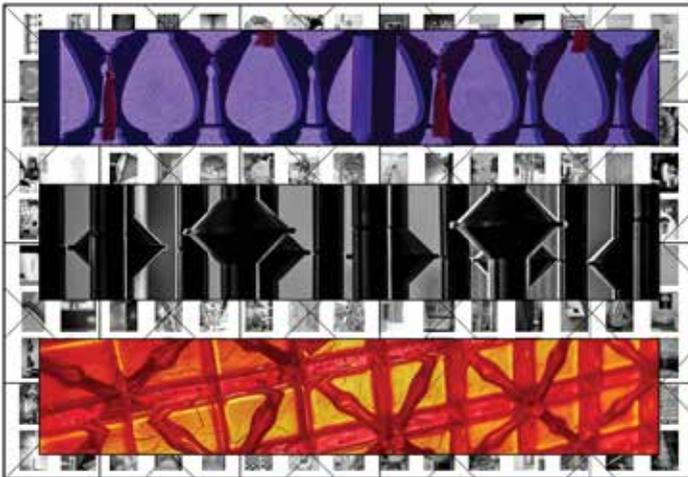
other sexual difficulties, is currently under-resourced within the Australian healthcare system. I am especially interested in exploring conversation-led practice with a view to contributing to practitioners who sit within other disciplines but identify themselves as 'design led' or 'design thinkers'.



The morphology of an alien practice: how cultural collisions and complexity inform design and practice

This research is framed from the viewpoint of a foreign architecture and design practice (OUT-2 Design) operating in the rapidly changing and unpredictable context of Vietnam. It has identified and reflected on, a selection of completed projects and artefacts drawn from them. This has reframed the way I view our practice. The artefacts, comprising architectural screens and other surfaces, have provided a common purpose and visual language shared with clients, contractors and other project participants, that help navigate the often complex cultural compositions of our projects. The making of these artefacts also provide a mechanism for extending our sphere of engagement through an intense process of identifying, cultivating, and incorporating the skills of local artisans and crafts people. At the same time, it stimulates our staff and clients to re-value the skills and contribution of local Vietnamese in a modern and commercial design environment.

This process situates our practice in its local environment and instils it with a sense of connection to an environment that is often impermanent for foreign practices. Curating and reflecting on these designed elements has also exposed a clear difference between our architectural projects and that of interior elements within them. The buildings are typically orthodox and modernist, being rational and driven by functional concerns, albeit inflected to local topography, climate and building techniques. Certain interior elements though, have exhibited a far more saturated and intense language that requires an effort beyond our design brief, and engages craftspeople operating outside their habitual practice. Why this difference exists, what the significance of these elements of the work might be, and what the impact might be on a broader architectural agenda are the key questions of the current research.

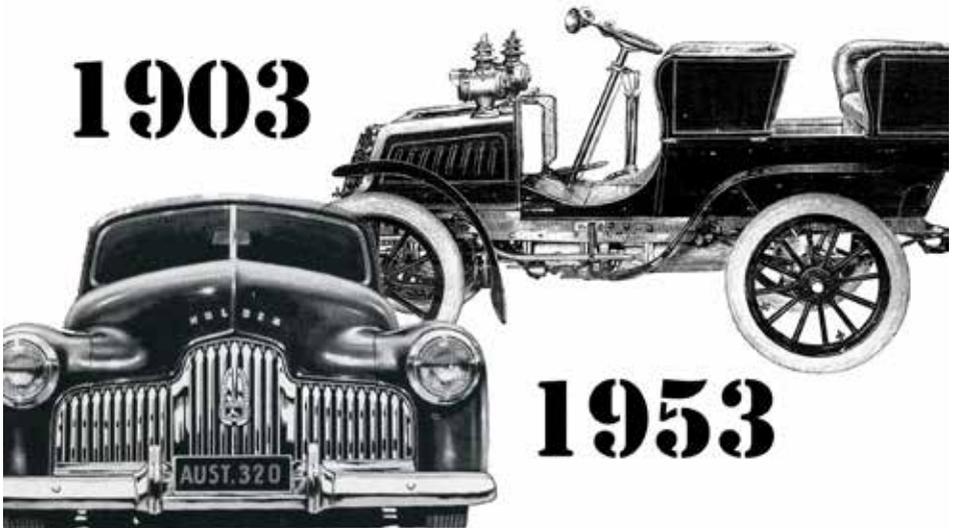


The Development of Automotive Design in Australia 1903-1953

The aim of this research is to reveal new knowledge about one of the most significant Australian industries of the twentieth century, the automotive industry. In particular it provides the first comprehensive account of the origins and early development of Australian vehicle design from the 1890s to the 1950s. Furthermore, by incorporating automotive design into the broader field of Australian design history, it paves the way for the future development of this field of research.

Five periods of Australian automotive design are examined; the early inventors, opportunities arising from a body embargo, design of post war Australian cars,

development of standardised motor bodies, variations and unique styles and impact of the World War II on design of an Australian car. The aim of the research is to reveal new knowledge about one of the most significant Australian industries of the twentieth century.



***SURFACE OPERATIONS:
MATERIAL LIMITS / SPATIAL BOUNDARIES / POLITICAL PROJECTIONS or
MATERIAL LIMITS + SPATIAL BOUNDARIES + POLITICAL PROJECTIONS =
SURFACE.***

Built form, that which defines urban places and interior spaces, is made manifest through the manipulation of matter. Surface is that moment where material limits and spatial boundaries meet thus surface defines programmatic configurations (typologies) whilst simultaneously producing affects (experience). Beyond the pragmatics of environmental and security concerns* a designer's manipulation of surface attempts to shape these perceptions for purposes of affect and identity - notions that Antoine Picon identifies as inherently political.** The material that defines, indeed is contained by surface, plays a significant role in the manipulation of perception - surface and

material are inextricably linked in relation to both affect and, consciously or otherwise, political agency.

This project seeks to examine this hypothesis and to unravel the tools and techniques that shape surface in the work of my practice as a possible method for design practice.

*Alejandro Zaera Polo makes multiple references to these terms in *The Politics of the Envelope*. Log (2008): 193-207.

**Picon, A. (2014). *Ornament: The Politics of Architecture and Subjectivity*. John Wiley & Sons.



Field Tactics

I am interested in understanding and developing generative tools and techniques that allow me to work at the scale of the city while developing outcomes at the scale of the architectural object and typology. Accordingly I am interested in how the relationship between the typological object and the urban field can be blurred, and the space of architectural design can slip fluidly between these two scales. I understand the city through a rheological or archaeological lens. Design starts from a condition of fullness in which new form is edited,

deformed and distorted from a pre-existing 'field' of matter. Buildings, urban formations, furniture and all built form have qualities that are observable, highly particular and not generalizable without the loss of specificity. The ambition is to develop a set of tools and techniques that allow me to capture this tacit material intelligence and redeploy it in new formations.



Performative Spatial Practice: Practices in spatial design and performance that renegotiate situations, subjects and environments

This PhD is a research project that investigates the practices of spatial design and performance to renegotiate situations, subjects and environments. The aim of the research is to reveal the political dimensions of space through the staging of performances situated within contested sites of historical significance. The research is carried out through a series of spatial investigations in which piano is deployed as a performative device to explore the relations between spectatorship, performance and spatial contexts. Central to the research methodology is the practice of inverting

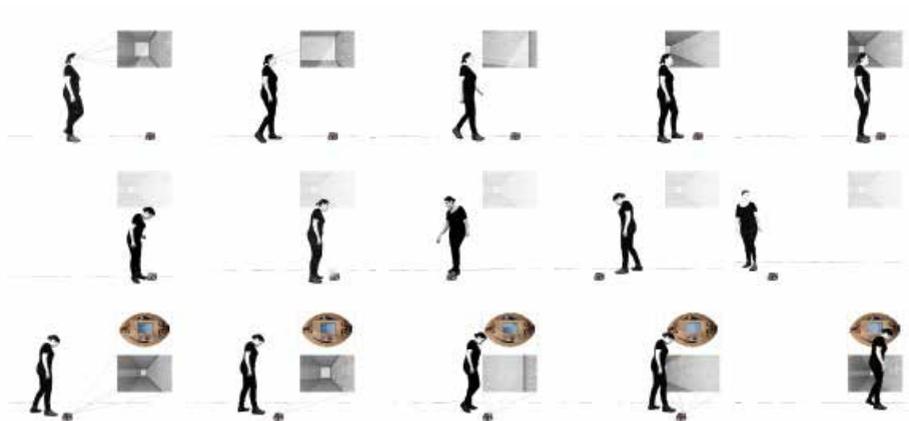
space to invoke immersive sensory engagements with the spatio temporalities of constructed environments. The research projects completed to date include Duration at Flinders Street Station (2012), The Princess Theatre Inversion (2014), Temporal Formal at Grosvenor Place (2014) and Instrumental at Culpra Station (2015).



By the Surface of the Screen

Screens bridge many of the dichotomies by which object relations are traditionally discussed. Their inherent spatiality makes them ideal examples for dissecting the interactions between people, things and space; and the role of design in these relations. This project began with a deconstructive exploration of the screen, leading to an approach that considers the materiality of the screen as a process of materialisation rather than an *a priori* quality of the object. Links are then drawn between this materialisation and similar processes of agentialisation and spatialisation within screenic encounters.

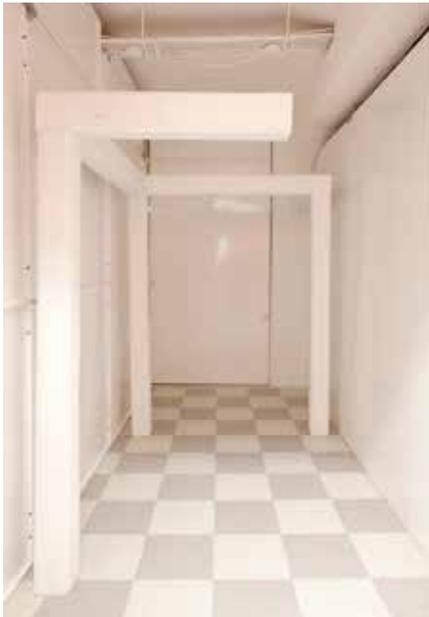
Approaching materiality and agency as active processes can pose problems for design methods. This project uses creative practice to test a relational approach to design which notes the role objects play in bringing themselves about. Rather than considering function or form, this process focusses on exploring (and exposing) tensions in materialisation and agentialisation to produce robotic, screenic 'things'.



Architectural and bodily extensions: raising functionality as a question

This research project examines the relationship between the body and utilitarian architectural elements. Through the production of site-specific art installations made as interventions into architectural environments, building into and extending from these environments, the installations raise questions about how we are constantly changing and adapting to our surroundings. Focusing on the encounter with specifically utilitarian architectural elements affords insight into the interdependent relationship between body and architecture, between organism and environment.

This research is situated within artistic and philosophical conversations about what it is to be a body and how this body interacts with other bodies and things. Reflecting on theories of material vitalism and material agency, and on examples of built surroundings designed to transform a body, I aim to deepen the understanding of the embeddedness of an organism in its environment and of the mechanisms through which this relationship operates.



Machines for Re-making Fashion: Contemporary fashion publishing as critical practice

Printed matter is an essential element of fashion practice with capacity to generate discourse by taking a critical perspective. My practice-based research looks at key contemporary editorial practitioners whose editorial projects present alternative modes of production and critical narratives. The independently-funded, artistically-motivated projects selected in my research will be examined through their context, form and content, to assess their function as cultural products within individual cultural settings. I draw from analysis of interviews as well as discussions on critical practice in

proximate fields of art and design, particularly the discourse around the genre of 'little magazines' in architecture and other projects categorised as avant-garde. This theoretical framework posits alternative print practice in fashion as a contribution to critical discourse, not only in terms of content and materiality, but modes of production and dissemination. Through this, I aim to highlight the significance of projects of printed matter within fashion practice, demonstrating fashion publishing as critical practice.



Working the Ground: Participatory approaches informing design research practice in Landscape Architecture

This presentation will present a number of 'projecttes' understood as vignettes or snapshots of three larger projects. The larger meta-project examines the relationship between formative notions of *landscape*, positioned as being grounded in the philosophy of the sublime, and the ordinary or the everyday. The *projecttes* reveal and locate this relationship in the sharing and exchange of everyday knowledge through direct experience. Geographically located within the Murray-Darling Basin, the larger projects explore techniques through which spaces might be opened in which exchange

is facilitated through direct experience and participation between the 'outside' practitioner, 'local' community members and 'country' or 'ground' itself. *Projecttes* to be presented will seek to examine the ontologies associated with these positions through the act of interpretive juxtaposition and a critical approach to mapping which positions the work in a contemporary field of 'ecologies of care'.



The significance of design method for design form: a case study approach

An enquiry into graphic design process, this thesis investigates how designers' methods of action during the design process inform design content. The collective case study methodology is designed to extend practice-led research to enable investigation of multiple design practices. Reflecting on my personal practice as the framing case study, I use tacit experience to investigate materiality, aleatoricism and the interconnectedness of

art and design. Designed as sites for analysis, a series of visual essays actualise design evidence of Schön's theory; reflection-in-action. It will be argued that self-generated methods are a sustainable resource for creativity and the characterisation of design practice.

Actualisation of Reflection-in-Action (Sketches)

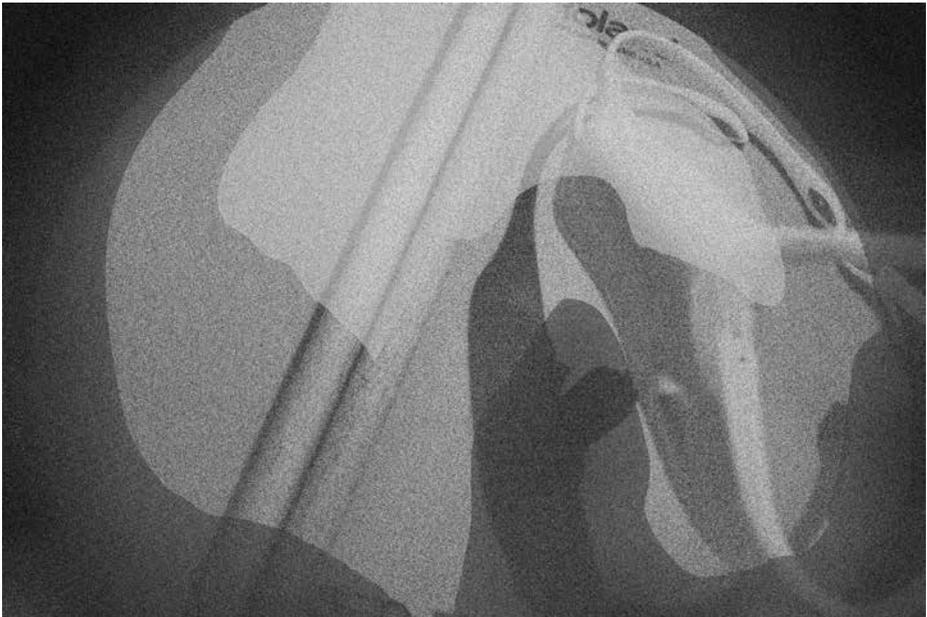


Improvisation in Musico-Spatial Creative Practice

My research operates at the intersection of the domains of music and architecture through a merged 'Musico-Spatial Design creative practice. Research is founded on the central question: **'What new insights into the 'infinite art of improvisation (Berliner 2009)' may be afforded through a merged 'Musico-spatial Design Practice' wherein spatial design knowledge informs musical performance practice and musical knowledge informs spatial design practice?'**

Improvisational performance practice is examined through project work in solo and group performance within an auto-ethnographic framework. This culminates

in the development of a 'Multi-Parameter Framework for Improvisation Research' (MPFIRE) that integrates parametric modelling, consumer level BrainWare and cybernetics to understand the complexities, synergies, form and flow of musical improvisation. Thus, my creative practice design research is founded on an affordance of novel insights into a merged musico-spatial design creative practice.



Performative Hermeneutics

This practice-based creative research operates across the fields of art, design and education, and is informed by and contributes to the 'educational turn' in the arts. The = research has explored the use of object-based metaphors through performative artistic processes to generate active engagement in reflexive enquiry and philosophical ideas. A sustained practice of gifting ambiguous objects to instigate open-ended conversation has been key to performing explorative interpretations of the technologies that constitute our contemporary condition as being a form of text that writes us as we read ourselves into it. Through the iterative

practices of firstly, initiating social exchange by gift-giving object-based metaphors, and secondly, of building meta-fictional structures to yield unpredictable experiences, the research provides a model for a generative auto-didactic creative practice, one that, in turn, actively contributes alternative modes to generating reflective enquiry in contemporary creative arts education.



Journey for the ear; exploring the aural experience for pedestrians

As we traverse the busy streets of Melbourne our ears are constantly bombarded with sound, from all directions, and at varying intensities. Yet this cacophonous mix of sound carries with it an immense array of information that can help us gain knowledge about the physical environment. Through a series of transect walks and interviews with blind participants, this research continues to explore relations between sound and place, and how a sense of place emerges through an active engagement with the urban environment. Currently, this project

based research has two intentions; to gain a deeper knowledge of the relations between sound and place, through a blind-centered knowledge on sound, and, to develop an approach for the design of sound, where community participation plays a key role in the design process.



Garden COSMOS: Living Landscape, Being Bodies, Knowing Ways

This research explores design as a participatory process undertaken over an extended duration of time. The term participation implies reciprocity, or a push/pull between the designer, the land and other human and non human beings. Acting as both designer and maker, the process will be iterative and undertaken at the one to one scale. These ideas will be explored through working with a 1700m² piece of land, also my recently acquired residence. This will become a microcosm through which to test and develop participatory practices, which engage

with larger landscape issues. The garden is one creative output and modes of practice will be another.

Research question: In what ways might the design process change if the landscape itself was imagined as a participant in the process [rather than a recipient]?



Re-imagining Lace: practicing place through textile making

Over the last decade interdisciplinary engagement with lace has opened up a new emerging space for designers to engage with new materials and technologies that question conventional forms of textile making. *Re-imagining Lace* draws from my contemporary lace practice spanning over a decade, the PhD project is concerned with observing and documenting place through a series of complex textile making processes. Research is informed by critical spatial theory as a means to understand how the lace-making process becomes a form of practicing place.

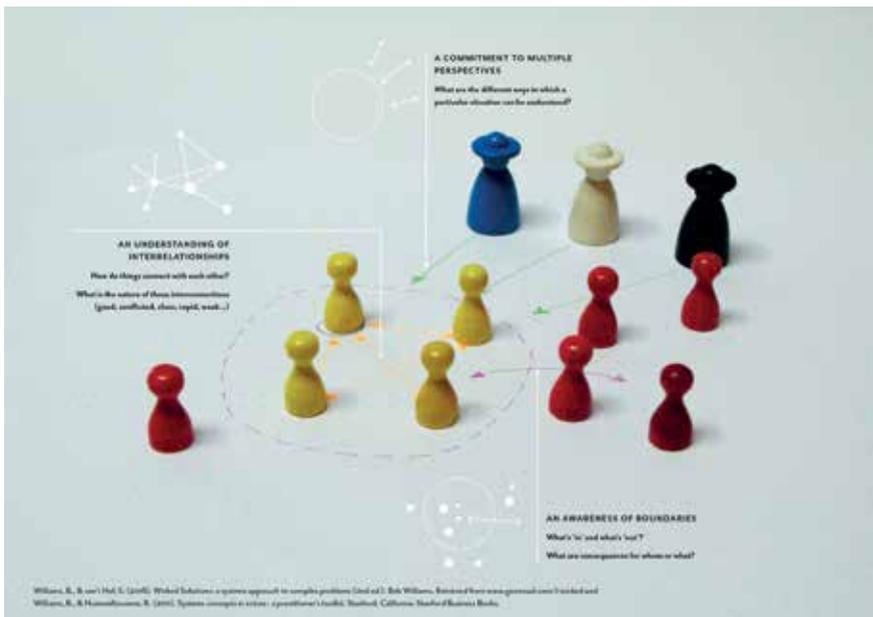
The project is framed around a dynamic, mobile engagement with particular ephemeral experiences observed through a number of selected sites. Notions of absence and presence explore lace as a genre for cultural narrative and place making. Research breaks away from traditional lace construction and motif and looks at the use of immaterial form in textiles. How can a lace environment embody the ephemeral qualities experienced in our unique landscape?



Using systemic thinking principles to make sense of complex social situations through collaborative mapping, visualization and sense making

My research aims to explore the space of co-design and participatory design to develop tools and methods to engage stakeholders in collaborative mapping, visualisations and sense making of complex social situations and systemic issues. Systemic thinking principles (Williams & Hummelbrunner, pp.18–23, 2011) will be used as an initial framework to guide the collaborative mapping. Visualisation tools may include the use of playful objects such as Lego, Duplo and Lego Serious Play methodology to engage stakeholders in metaphorical story telling, or other custom designed artefacts to

help draw out conversation and mapping of relationships. As part of the CoDesign Group this research will be undertaken in the context of the Austin Hospital. Focusing only upon the point of view of the patient as a user potentially misses out on aspects that are intrinsic to the experience. Thus one aim is examine the experience of healthcare from a multistakeholder perspective.



Turn and face the strange

In biblical terms the wilderness represented a place inhospitable and hostile to humans. It was a home to Satan and wild creatures and if Jesus was present; angels. The Hon. Brendon John Grylls MLA has a different view on the desert of the Pilbara and was a key figure in the Royalties for Regions initiative that is currently being rolled out in WA to grow and deliver viable cities that are not dependent on the mining industry.

The focus of this research is to investigate the imagined futures of these cities and through architectural speculation make explicit the anxieties and opportunities inherent on their peripheries.

The cultural significance of the desert and the extreme and unstable forces present in the Pilbara are used as a design processes in my research. The isolated towns that await their civic promotions become ideal incubators to investigate and test a spectrum of imagined futures.



Something About Nothing / Something From Nothing

The preliminary focus of this research is to investigate the strategies and approaches used within my practice in the undertaking of its work in the design of public and urban spaces and, through speculation, to reframe its behaviours and operations such that they can become generic knowledge that is not tacit or exceptional, but repeatable and scalable.

This exploration will take the form of both iterative and reflective engagement with my practice and my roles and actions as a practitioner through the production of a number of synthetic experiments which

will attempt to distil certain relationships in the work, testing them unbound from the influence of collaborators, commercial practice and a client to see what, if any, autonomous character they possess.

For PRS2, I intend to present the first of five speculative exercises - a re-examination of a completed project where spatial design decisions are questioned and their consequences amplified.



Slow Futures: Autonomous paradigms for architectural robotics and speculative design

My practice, *Elseware*, explores qualities, effects and conditions that flourish at the intersection of digital and physical models of reality. The practice embodies a shift in emphasis away from the understanding of design as a conclusive process of problem-solving, towards the “abandonment of anthropocentric narratives”* and the acknowledgement of design’s own autonomous agency. The challenges that face responsible architects today operate over increasingly long timescales and within the mind-boggling complexity of semi-autonomous systems (economies, cities, infrastructures)** . This research explores design systems that leverage unpredictability, long construction periods, redundancy and

volatility in pursuit of architecture that is capable of directly revealing and engaging with artificial complexity and gradual change.

*Bogost, I. *Alien Phenomenology, Or, What It’s like to Be a Thing*. Minneapolis: U of Minnesota, 2012. p. 41

**Fry, T. *Design Futuring: Sustainability, Ethics and New Practice*. Bloomsbury Academic, 2009.



Techniques for streaming interiors as space-time arrangements

This proposal works with interior as a relational condition that is produced through the formation of space-time arrangements. In this context, space is understood as a movement or event and time is wild and real. The interior designer becomes involved in a live encounter with temporal and spatial conditions and the process of designing interiors can be framed as a practice of streaming relations. This research positions the designer inside a set of relations and never controlling a space-time arrangement

from the outside, never following a pre-determined plan. The project will continually flex back to critically understand the moves of the designer in the process of making project work. This reflexive process will be oriented to develop a practice of interior-making that has a likeness to the approach of a surfer to the sea.

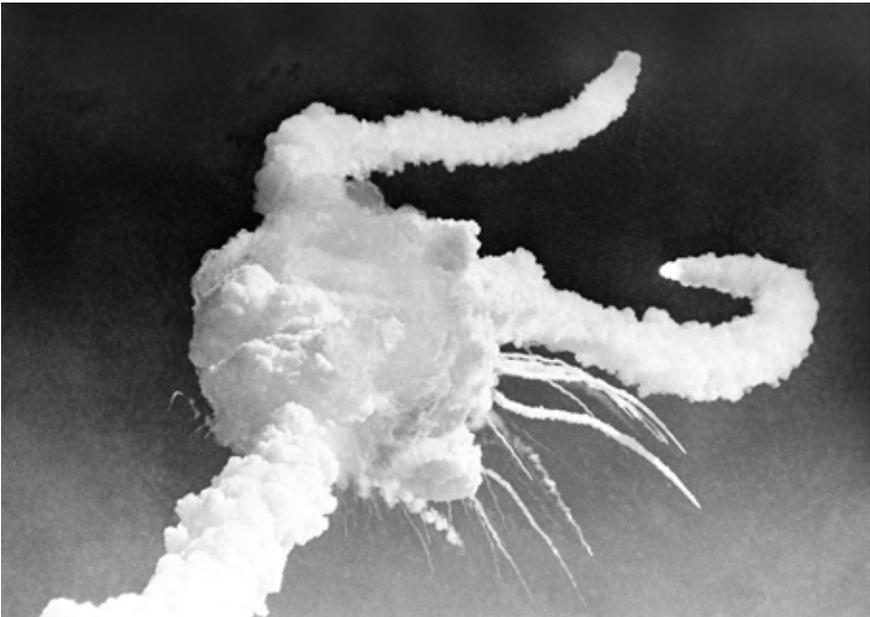


Undisciplined: Subversion and Bifurcations in Spatial Practice

This research is concentrated on the articulation of an *undisciplined* model of spatial practice. A subversive platform from which to engage with the problem of space, this model seeks to adapt and react to the challenges and complexities of an ever-mutating world. To do so, the research has focused on examining what seems to be an erratic career, unveiling surprisingly consistent processes where the notions of *elasticity*, *retrosynthesis* and *abjection* play key roles. While *elasticity* refers to the mutating capacity of the model and *retrosynthesis* to its instrumentality, *abjection* refers to the quality that is frequently present in the objects that the model creates and transforms. From this framework, the research has entered a phase

of deliberate project-based interrogation, where two very different projects — that nevertheless share complementary approximations to the notion of *subversion* — are underway. This will be the focus of my presentation in this PRS.

IMAGE: Michele McDonald, The Challenger Explodes.
Virginian-Pilot, 1986. Available from:
https://www.washingtonpost.com/news/morning-mix/wp-content/uploads/sites/21/2016/03/pace_Shuttle_Challenger_30th_Anniversary-08096.jpg



Insectum: the sound of awakening

To date there are few precedents in the use of insects as drivers for design and design methods. This PhD explores insects as a source for ideas pertaining to systems, agency and biomimetics, to name a few. It envisions the micro and macro environments required to raise these animals for a multitude of purposes, including food and biochemistry production, as well as pets. What does it mean to live and work in close proximity to a large number of captive insects? How can design elevate the understanding and appreciation of insects? The research is positioned in Japan

as it is a country with rich cultural precedents for many types of relationships between insects and people; this provides critical insight into ways of enhancing and expanding our relationship to these animals. A suite of speculative design interventions/provocations, that include interior installations, products and services, are currently being developed.

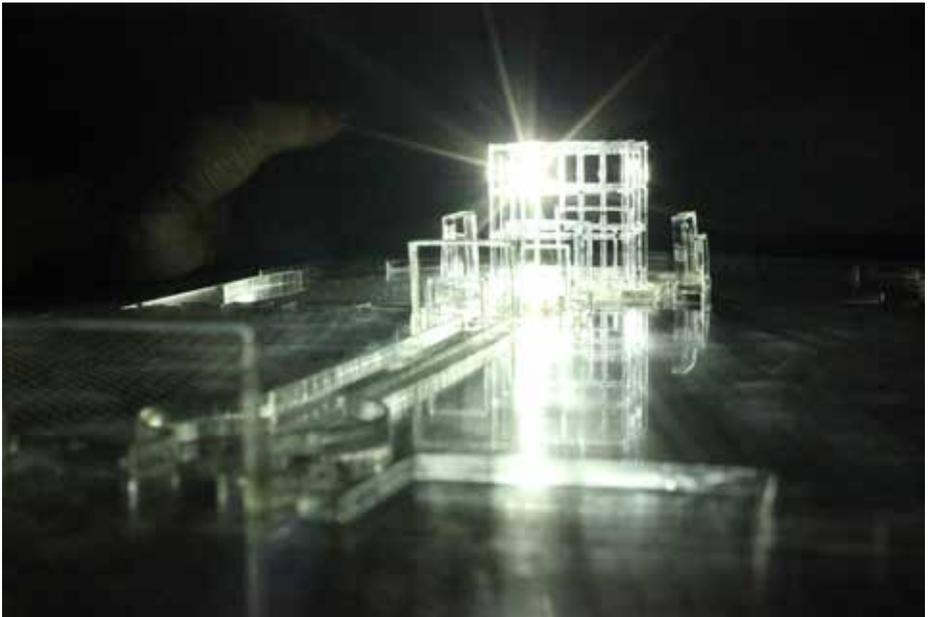


Coherence of tradition in practice

Early influence was by Philip Rawson's book *Tantra* in 1984. This gave a deeper understanding of the geometrical extrapolation of cosmos through "Yantra" and its interpretation through the idea of "Evolution of Life and Involution of Life".

The IGNC-Indira Gandhi National Centre for Arts, New Delhi in 1986 was an experiment understanding these principles. This simple mathematical diagram represents cosmic relationship with life. The Courtyard became the representation of the seat of Brahma and the source of light and energy. This central point is "Bindu" the creative energy.

It is interesting to discover how the ideas of "Bindu" for centuries have been adopted by vernacular culture. The "Bindu" within the "Mandala" forms a divine grid which reflects the sacredness of space. During the formative years, the practice was able to experiment the concept through competitions. This Ph.D allows me to investigate the influence of this concept through my practice for nearly three decades and the way "Bindu" is interpreted, to be adaptable to the contemporary architectural thought.



Empathic Things and the Digital Ether: speculating calm relationships with electronic objects

Ubiquitous digital experiences and transactions are embedded in our daily lives. We see a continuous emergence of wearable electronics, mesh-networked sensors, smart-somethings, and a rhizomatic web of inter-connectable online services to link our virtual, functional digital selves. My creative practice research integrates multiple fields of ubiquitous computing, industrial design and digital media culture.

In this landscape, I'm attempting to discover, or rediscover, human experience, relationships and mappings between the analogue and digital worlds. Through design

of objects and augmented environments, I want to tease out subtle, affective narratives in the things we surround ourselves with, and the role of empathy as interaction philosophy and design typology for human-computer and human-human interaction. Of particular interest are themes of calmness, embodiment, affect, preciousness, and identity.

What are the new modes of interaction between ourselves, the analogue world and the digital ether? How might we design calm electronic objects?



Practicing with immediate temporality of very ancient things

Emerging from a diverse range of creative practices can be perceived a contemporary drive to question the *mixture* of spatial, material and temporal and corporeal subjectivities, as we encounter the Anthropocene. This mixture, Christoph Rosol refers to as 'mud', rather than a uniform stratum. In asking what landscape architectural practice contributes to encountering the 'mud', this research is concerned with *excavating* and *exhuming* the vast spatialities, deep temporalities and disparate materialities of landscape, concealed within the built landscape project.

This *builtness* of a landscape project denies metaphysical ruptures and is fundamentally at odds with the 'mud'. Alternatively this practice is engaged in producing encounters with landscape, through manoeuvring, through and across temporal, spatial, material and corporeal realities, towards the rupturing landscape encounter.



***BUILDING +/-
Tangible Speculation into Making and Representing Architecture***

The PhD examines a practice harnessing digital fabrication to augment conventions of design and construction, in an attempt to reconfigure the standard apparatus of architectural enterprise and its resultant output of “buildings” (architecture, objects, or systems). In each instantiation of work, a new variable or condition is tested, with primacy given to the creation of prototypes or smaller scale commissioned work as a testing ground for larger projects. This is a form of tangible speculation, where questions are explored through engaging in

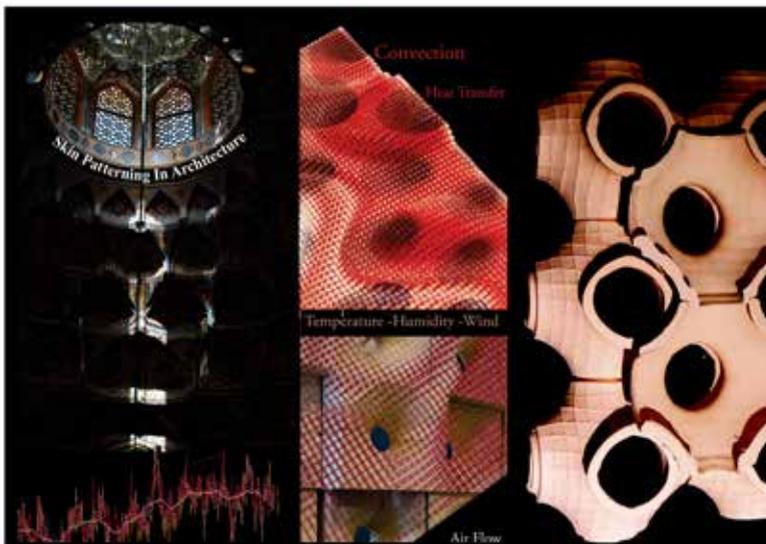
the physicality of production. This tactic is not motivated fundamentally by an affinity for craft, but about developing a reservoir of tacit knowledge that can be obtained through iterative making, forming a feedback loop between a wide range of collaborators, multiple forms of representation, and possible manifestations of design intent. The practice is concerned with optimising material logics, confronting issues of tolerance, and producing cultural, experiential resonance.



Skin Patterning in Architecture: Towards morphing microclimate through surface articulation

This research investigates the potentials of surface articulations, termed as 'patterned skins', in the modification of wind flow, humidity, and temperature towards shaping pleasant thermal microclimates. My proposition is that patterned skins, shaped through harmonic repetition of colour, material, and geometry, are powerful scientific-artistic tools that can be designed as an integrated performative system for passively modifying the meteorological elements of their surrounding environment. However this requires a sophisticated understanding of the invisible environmental phenomena. Within this research project I explored different methods and techniques to collect dynamic feedback about the interaction of the patterns of this invisible microclimate which informed the design and development of new aesthetic and

performative components for building skin application. Accordingly, I develop a novel but practical architectural framework by instituting well-planned and original strategies in the design for the analysis of dynamic thermal phenomena. Through a series of reflective design investigations, I demonstrate how such provocative inquiries of visualising, observing and understanding of the thermal dynamic phenomena around the surface has led to the design of innovative 3D ceramic tiles. These 3D sculptural crafts have capabilities to modify temperature and humidity and generate micro turbulence for breezes. All in all, this research calls for a shift from the design of visible objects to the design of both visible surfaces and the resulting invisible microclimate through empirical studies of convection, conduction, radiation and wind flow pattern.



Engaging Connections

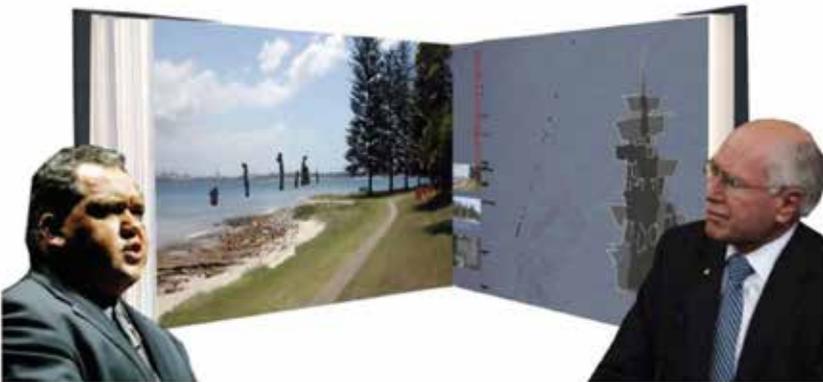
My own project work seeks to connect the often disparate conditions surrounding a project (e.g. cultural, political, pragmatic, historic, etc.) by allowing each condition to have their own relevance and position in the resolution of the new built form. The buildings encourage conversation, rather than provide didactic truths.

The projects engage by making the connected conditions evident in the work. This occurs through experiences, form and or detail embedded in the work.

This work can be linked to a shared practice of Specificity that Surprises. (m3architecture)

In the case of my own work the specifics of a project situation are drawn together, with the surprise residing in;

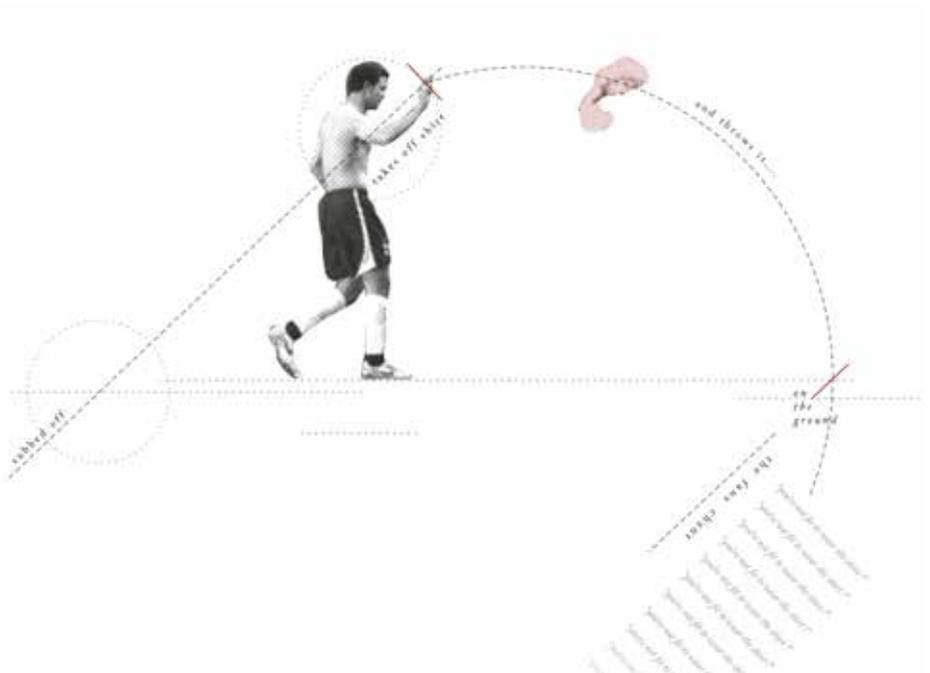
- the unexpected breadth of the connections,
- the new forms and experiences that are a result of making these connections physical objects, and
- the way the best buildings seek to actively engage the users.



Performative Environments : enquiring into the affective dressed body (a user's guide)

This research explores the affect of the body and worn garment as coextensive, performative components of the environment for the development of an ephemeral design practice working through the dressed body and its inherent yet changeable garment cladding. The work negotiates three interrelated scales of investigation, beginning at the feedback loop between the body and the material-making process, then expanding to focus on the affectual relationships between body and garment and into the wider environment, inclusive of other bodies.

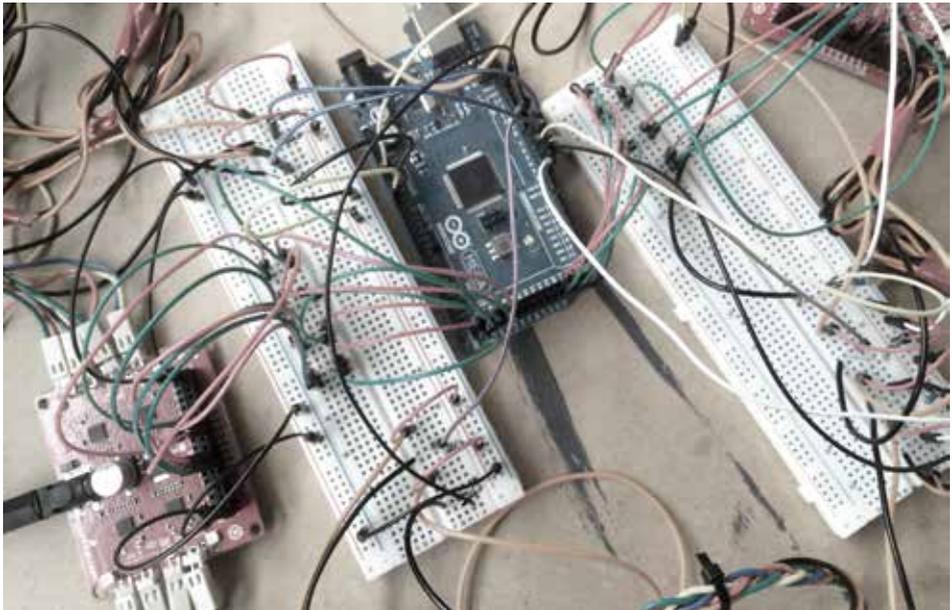
Predominantly focusing on participatory research and collaboration I am prompting an active, embodied engagement with the practice, with the intention that the individual is then able, through the temporal, spatial and material agency of their own dressed body, to affectively shift the environments they are in.



Machining Aesthetics; formation of craft in computational design and digital manufacturing

Can making be part of the generative design process in architecture and how? This research focuses on the potential for craft and making as generative activity in the early twenty-first century architectural design process. Through examining craft as a mode of design innovation and production, the research aims to explore the formation of craft through material experimentation and design projects using CNC technology. The research explores material based design practice and how craft procedures and thinking can inform architectural design processes. It examines manufacturing techniques on the scale of

furniture and architectural components; seeking an understanding of the shift of relationship between craft and technology. The research looks at how aspects of craft workflow, in particular the relationship between materials, tools and techniques, can be transferred into an architectural thinking and how this can further informed the theoretical framework around digital manufacturing and computational design in architecture.



Thinking Public Architecture – strategies for making public architecture through speculative ideas, language, expanded spatial fields and local specificities

My design practice has been consistently focused on public architecture; public by reason of program or funding, but also engaging with public architecture as an idea, irrespective of a particular public or private purpose.

Design strategies will be researched via Lyons completed and current projects, through which an idea of public architecture is evidenced by an explicit sense of speculation and engagement with a public architectural language.

Yet the idea of public architecture at the start of this century is contestable; as the traditional public agency of government shifts to hybrid forms, globalization impinges on the notion of the citizen, and social or mass media blurs the boundaries between public and private realms.

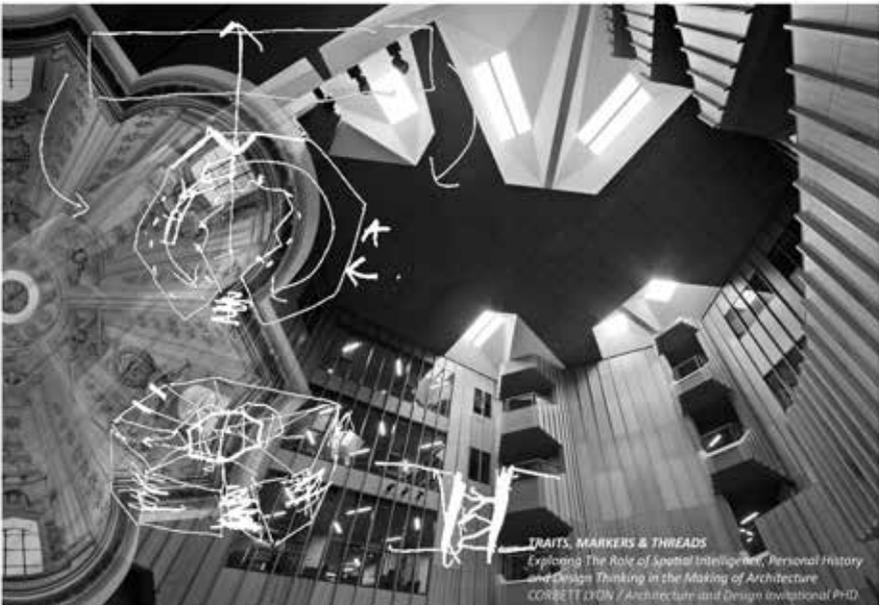


TRAITS, MARKERS & THREADS – Exploring the Role of Spatial Intelligence, Personal History and Design Thinking in the Making of Architecture

This project is exploring the relationships between a designer's personal history and spatial intelligence, design thinking and built work through a critical examination of selected works designed by Lyons in the period 1996 to 2015.

The project is seeking to identify distinguishing attributes and 'genetic' markers in these projects with a view to understanding how these might provide indications about the work's making. What can these discovered attributes and markers in a body of work reveal about the designers' spatial intelligence and design thinking? Can a study of personal histories, spatial intelligence and thinking processes reveal other hidden attributes in the work?

Each of these three terrains – personal history/spatial intelligence, design thinking and built work – will initially be explored independently. This will be followed by an analysis to identify interlinking threads across the three terrains, highlighting the discovered interdependencies and interrelationships.



In Time: Architecture across multiple time + spatial scales

In Time: Architecture across multiple time + spatial scales, studies an approach to architecture which aims to link building space with landscape space to reveal and connect specific and changing qualities of the site with the building occupation. This approach requires time to understand the site and time for projects to be slowly realised through the interaction of inhabitation with natural and urban systems. The study is of both the way that architecture can be a hinge

between different time and spatial scales and how it can be realised by working across and overlapping different modes of practice, each with their own time scales of operation -from hands-on nurturing of flora and fauna biodiversity, teaching, built works and long term urban and landscape frameworks.

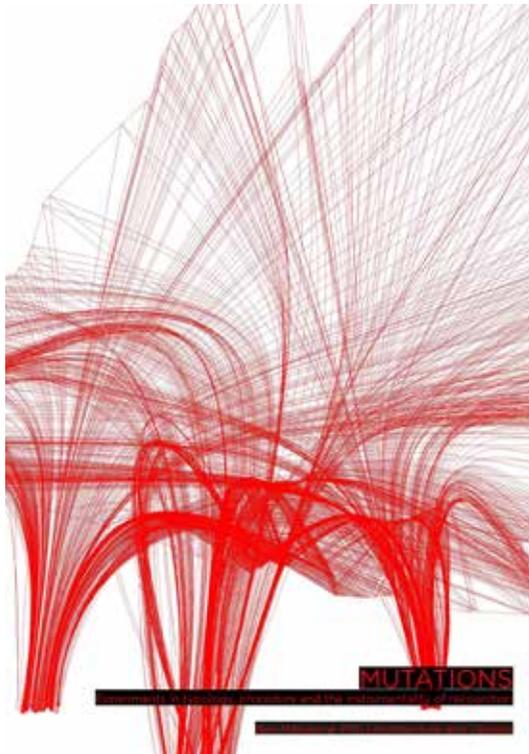


Mutations

Experiments in typology, procedure and the instrumentality of recognition

A reflection on the creative practice of Ben Milbourne, exploring a notion of context as the underlying systemic structures of an urban condition. Where the city is understood as an emergent system and 'new' constituent elements are not introduced as radical departures from existing situations, rather as mutations of existing conditions. Experiments in typological deformation explore how existing base urban or architectural types can be 'evolved' via mutation, hybridisation or grafting of these systems and forms in response to new demands. Process and generative based strategies explore this

notion of mutation in urban and architectural propositions, both to un-earth underlying structures, and to implement mutation, in formal, programmatic and organizational terms. In each scenario the exploration investigates how the transformed condition can remain recognisably related to its original condition and effect greater resonance via the instrumentality of recognition. Recurring interest in the work explores the translation of digital/analogue methods and the subsequent oscillation between procedural and explicit design strategies.



The Disrupted / Disruptive Body in the development of fashion process and form

This practice based PhD project seeks to expose and develop the tacit knowledge associated with the body in fashion design, including how it is positioned, experienced, adorned, represented and produced. To explore my own tacit knowledge and investigate new opportunities for working with the body and form in fashion I will introduce disruptions into my design process. New and traditional technologies used to manipulate form and clothe the body will be used to disrupt my existing methodologies and tools of practice. I will investigate alternative ideas of the body by examining

inter-disciplinary theories of the experiential and material body as well as practitioners who disrupt the way fashion design processes engage with the body, such as Simon Thorogood, Issey Miyake, Dai Rees and Rhian Solomon. By introducing new, disruptive concepts of the body and technologies into my practice this research seeks to expand my own design processes and understandings about tacit knowledge surrounding the body and form in fashion.



Interactive generation of building components through multi-criteria optimization

This research addresses the challenge of integrating multi-criteria optimization strategies into the processes for designing the built environment. Generative strategies are applied in design and optimisation processes, offering the potential to quickly create a wide range of feasible solutions for well-defined problems. Applying multi-criteria optimization strategies based on interactive generational strategies will extend the design space for development of building components and the potential for designer interaction during the optimization process.

The research aims to establish an extensive body of knowledge that explores potential encoding strategies for building components

in early design stages. Based on genetic programming methods, this research establishes a human centred design methodology at the intersection of computer science, engineering and architecture. This implementation facilitates strategic evaluation of building components based on designer perception.

In conclusion, the goal of the research is to review encoding strategies and develop a transparent, guidable strategy for design of building components.



Curating the observed

This PhD reflects on the architecture, teaching and research based practice of Amy Muir. This practice is described through 5 years of teaching and a collaborative practice MUIR, formerly Muir Mendes.

The practice is described through a limit of requirement. The stripping back. The remnant. The observed conditions and constraints that are then defined. The narrative.

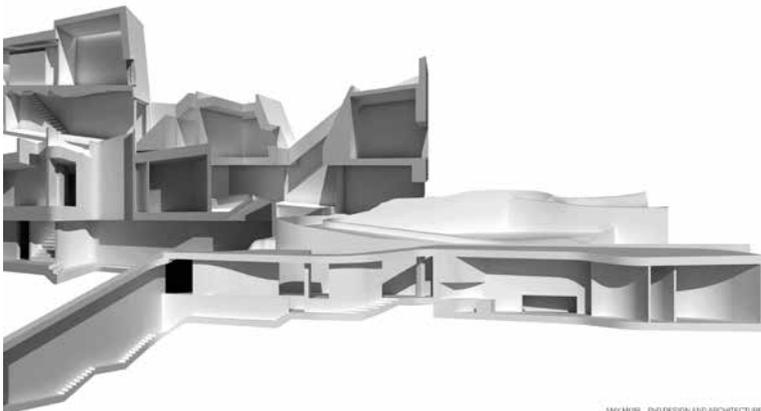
Site, context and place are used as conditions and devices to frame the work of the practice. The embracing of constraints. Sculpturing that which limits us. Nuances are observed and reconsidered. The abstraction of these parts are brought together to make a whole.

The carved, the cast forms a line of enquiry.

How are the conditions that inform place navigated and expressed through the use of singular materials?

The perspectival section is utilised as a tool through teaching to assist in building and understanding the defined narrative. In practice the section has been used to define the relationship between spaces and the formal conditions that result. The singular finish applied to the cut model assists in understanding the relationship between various unbuilt and built projects.

The PhD becomes the vehicle for exploring these conditions and their relevance in the pursuit of a singular, unifying language used to define an architectural response specific to place.



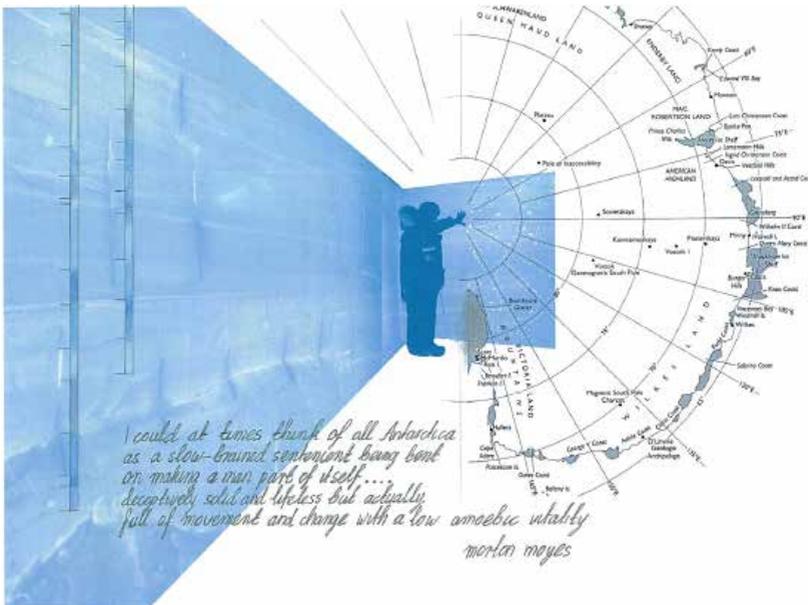
Antarctic Interiors

Antarctica is the only continent without indigenous people and has therefore no longstanding tradition of habitation. The interior spaces of the first built structures in Antarctica served primarily as life support systems. However, the significance of the interiors of current stations reach beyond their role as pure physical shelter.

The definition of the word interior has variously designated personal subjectivity, territorial space belonging to a nation and the inside of a building. The extreme Antarctic environment and the multi-scalar definitions

of the word 'interior' that have ranged from the geopolitical to the individual are the starting points for my investigation.

My research objective is to develop an understanding of how the spatial concept of interior within the Antarctic context is constructed on different scales. I combine interpretive studies of Antarctic (non) fiction narratives and art focused on interior(ity) with visual analysis of Antarctic interior territory and interiors.



Entrainment: An Architecture of Feeling and Thinking in the work of Simon Pental Architect and Pental and Neille

This PhD posits three major findings through the Perth-based architectural practice of Simon Pental Architect (formerly Pental and Neille). The first is a binding-together of feeling and thinking into a singular *entrained state of being*- a heightened suspension in the moment, a flooding of past impressions and the production of lingering impressions that act as a projective force in the making of new works of architecture. The second major finding of the PhD establishes a fuller picture as to how individual projects evolve a specific *tonal quality*, how projects reside within a curated body of work and what causes them

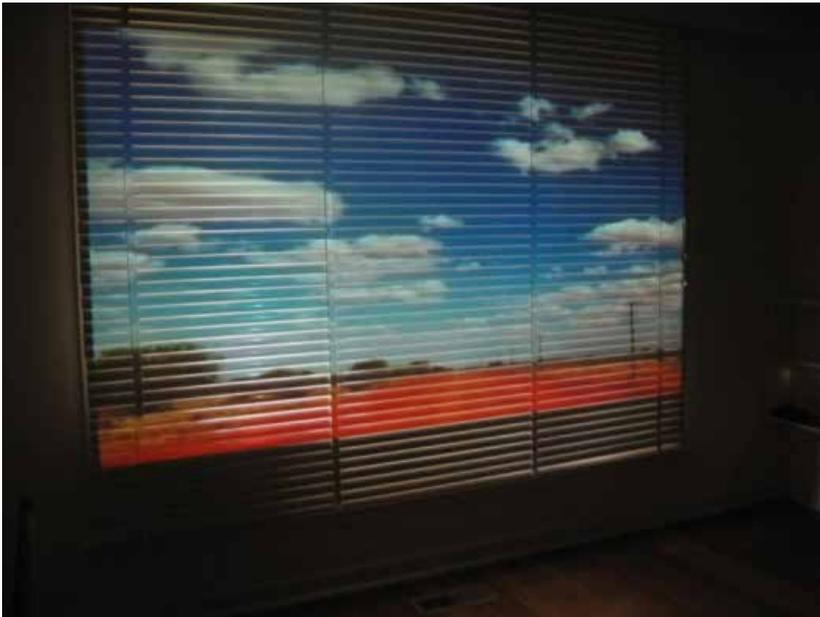
to be located in that way. The third major finding of this PhD sets out a clearer use of the term 'atmosphere', the quality at the core of the practice's endeavours. Greater clarity of this pursuit is developed in the context of the body of work and the role of *entrainment*.



Sensing the body Socially, Processing the body Politically

In the frame of the question: how does the body connect with the world to create and communicate knowledge? I will interrogate the links between art making and knowledge creation by exploring the body as a site (process) and a generator (processor) of knowledge. As a contemporary artist working on the body, public space and the digital realm, I will identify how our physical sensibility resonates and reverberates with the integration of the things we know and the things we try to know, and how

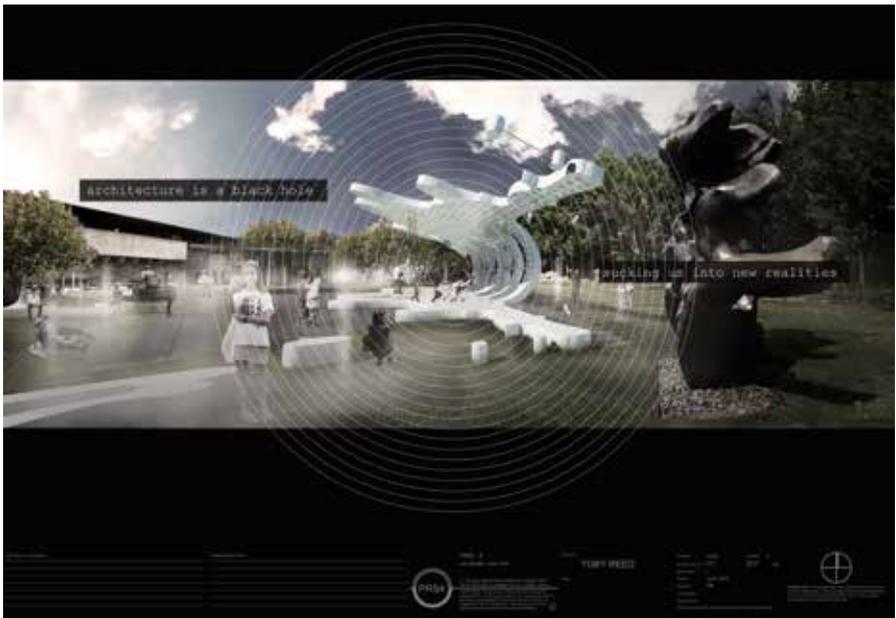
the body retains, organises and processes this information. The investigation will consider how this knowledge is distributed through social, political, artistic and cultural interventions, flows and movements and how it is central to our capacity to be human and engage in civil society.



Screen-ness / architecture is a black hole

Buildings are like black holes within the urban fabric, channelling us through to alternate visions of reality, helping create a universe consisting of multiple view-points or 'worlds'. These 'worlds' or 'realities' are created by each individual's perception of, and interaction with, the physical environment. Architects design buildings to fit into, or help manifest the world as they see it, or as the possibility of the world (or fragment of reality) they see could exist, or does exist, but are often hidden.

Each building becomes a mini 'reality-monad' in this heterogeneous reality of multiple shifting points of view. This is what we design and build. This is the situation our design actions are inserted into, intentionally or not. The buildings we design and build allow people the possibility to heighten their experience and awareness of reality, as well as assess their relation to reality/realities.



XL, L, M, S

Architects are often faced with working on multiple projects across a range of scales. Regularly the Domestic project is a laboratory for experimentation beyond an intrinsic interest in the House as a dwelling. This research speculates on the composition of small projects and the conception of an architecture that is monumental – small buildings doing big things, amplified through the experience of large practice and the relationship of the Domestic and the Public.

Through an examination and reflection of my practice and using a series of built, unbuilt and speculative works as the vehicle, it will attempt to interrogate this condition of size; unpacking the process of design

and investigate the juncture of a backlog of personal experience, memory and the observed.

This inquiry into design situates itself inside a theoretical framework of architects that have sought to interrogate the medium of design itself and question how architects work.



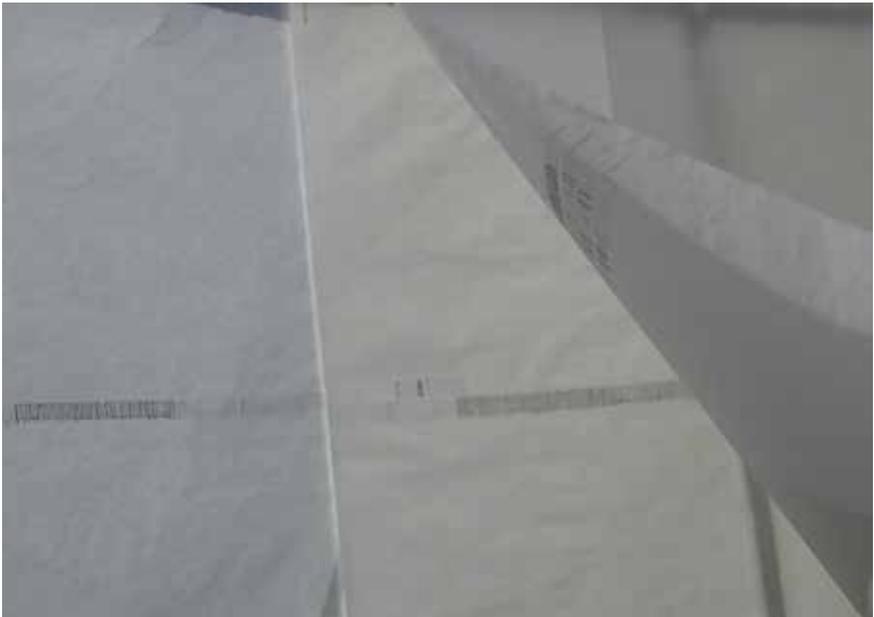
landscape practice and meteorological, atmospheric and celestial events

This study is exploring a range of ways of experimenting with landscape architectural processes and landscape, that open up notions of vast-ness, nebulous-ness, unlocating, unfixing, elusiveness, multifariousness.

It is approaching landscape as meteorological, atmospheric and celestial events in actualisation with processes of the practice. Processes and acts, that are dispersed across and through various durations; daily and intermittent drawings, temporary events, process installations and films, weaving concepts from earth sciences, loosely coalesce into projects. These processes and approach are starting to propose alternatives

to spatio-temporal material notions that are bound in the terrestrial tend to fix, locate, solidify, homogenise landscape and are raising questions around subjectivity.

Knowledge and the production of knowledge is being seen to emerge through the study, as dynamic, dispersed and manifold and in continuum with landscape, opening up questions around how to maintain the coherence of a body of knowledge that is elusive in character.



Situation (beyond): responsive interior design as a practice of care

In response to the notion of a 'situation (beyond)' as an interior condition, this research explores a *practice of care* for interior design and the mannerisms and methodologies of such an approach to find out what they might offer when addressing complex or challenging situations.

Watercolour painting is explored as a *practice of care* and an interior practice, whereby a situation is studied through attentive observation. Working in response to (rather than in reaction to) the situation, potential for sensitivity and creativity is opened up. Here

'situation' is considered through the lens of '(beyond)'- as a methodology for operating beyond the evident physical parameters of site, to consider the complex relations and forces within/around/through a situation. '(beyond)' is in brackets to suggest operating further than the site, but not outside of the situation - it is a kind of working further within.



Metamorphic Fashion: a transformative practice

Metamorphic Fashion describes a journey of transformation of practice which is based on corresponding metamorphosis research. Metamorphosis is a process of change through which something undergoes a complete transformation. However closer study reveals it also to be evolutionary and transitional. Metaphor involves the use of analogy as a structural device, revealing habitual methods of practice, while also repurposing them through experimentation. In this research, qualities of ambiguity, movement and relationality shift the focus from product to process, where change is

activated. While change is acknowledged as a defining characteristic of fashion, it is rarely theorized from the perspective of the practitioner who makes. This research draws together theory and practice in novel ways, revealing genealogies and hybridization. This research reveals methods which are used to visualise tacit making and thinking, both reflectively and critically, in ways not ordinarily made publicly accessible by fashion designers.



Between Observation and Design

The intent of this study is the exploration and documentation of the relationship between observation and design. Through examination of the process within my practice, the study attempts to delve into, and further elucidate the winding passage from observed moment ('catalogue') to realised design (building).

Expressed through a collection of images and observations of spatial interventions that, at first glance, may appear to be ad hoc and unplanned, upon closer investigation exhibit a complex and poetic realisation.

This inquiry into observed moments takes on a further expansion through the addition of 'on site' (reflexive) images. A growing interest in abstraction will be considered and tested through a series of architectural models, built moments, discussions, and other devices.



Informal Memorials

The memorial is an object which reflects and represents people as part of a society or as individuals in a certain time in history. As such, I am interested in these objects as a petri dish which exhibits human culture. The focus on informal memorials derives from their distinctive but diverse visual and contextual characteristics.

This project based research will consist the design, planning and execution of a set of projects which will explore possible forms of informal memorials. They will take in

consideration and respond to the local needs, the limitations and possibilities which will be encountered along the way.

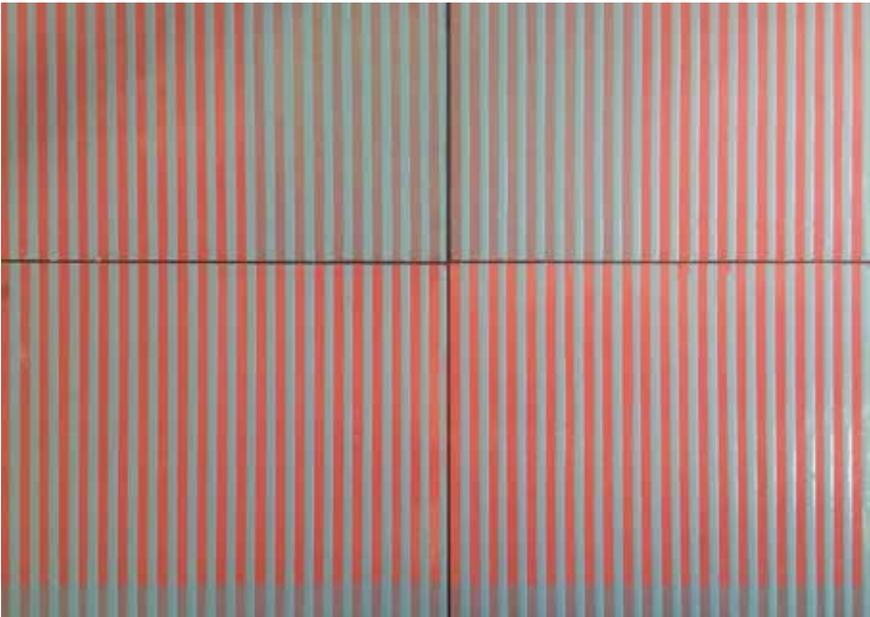
The exploration of the memorial realm is set to provide a better understanding of the role of the creative practice opposite to the varied "clients" of these objects, meaning the mourners, the public, the stakeholders.



Forms and Ideas Materialize: Material Agency of the Design Medium in Architectural Practice

By engaging with immediate material contingencies through drawing and making, the PhD is developing an understanding of architectural practice where the material agency of the design medium directs the evolution of forms and ideas. Examining my practice through a set of seemingly straightforward questions – How and why do I make?; What do I make with?; What have I made?; and Where do I make? – my hope is to form a contribution by articulating a way of working that is particular and specific, and

in doing so, address issues more broadly relevant to the discipline, including the nature of the design medium; the status of the made artefact; and an understanding of the web of spatial relations that bind the materials and actions of making processes. The research questions the primacy of architectural representation, and the relationship between representations and the generation of knowledge in the act of making.



Citizen: Artist

Can postmodern, post-anarchist society reclaim the art of *making* into the world of *being* where a holistic creative practice is essential to survival?

By acknowledging the social significance of creativity this study interrogates the place of the contemporary artist, their social value and their capacity to embrace critical responsibilities in reshaping our global society.

Centered on the practice of the artist engaged in collaborative and co-creative arts experiences with communities, this exploration will map opportunities to redefine

the role of artists to support social creativity as a key to connecting to self and community.

This practice-based enquiry will reflect on my thirty-year practice of designing arts engagements with children and families and of making visual art and will refer to contemporary social-practice artists while referencing key ideas from post-industrial activists, educators, writers and artists.



Title: Drawing / Building / Cloud: Studies in Speculative Practice

This work addresses drawing's connection to building and proposes the two to be mutually constituted, merged as if in sfumato-like relation to one another. The formative force and infinite renewal of ends in drawing, and the implacable scale and presence of building are traced together. This has sprung from a close look at my practice and is a distillation of my spatial thinking – and is put forward as a restless way to pursue perpetually restless and evasive knowledge.



URBAN-isms: Paradigmatic Narratives & Instruments

This PhD research is developing a theoretical and historical foundation for computational design approaches to urbanism. Given the recent proliferation of innovative and experimental design methodologies, the line of questioning in this research aims to substantiate these instrumental modes of design practice with descriptive narratives of urbanism, in the form of a taxonomic investigation of past, present and future paradigms. As such, my form of practice is as much engaged with design as it is with textual narratives in various formats, and editorial and curatorial practices. As a research approach, this PhD queries the relation of the description of conceptual

paradigms as ontologies for urbanism, to their associated experimental design approaches and methodologies, and the ways in which both are related, communicated and disseminated. The basis of three sequential taxonomies of urban paradigms I have researched, namely *Parametric Urbanism*, *The Adaptive City*, and *Mass-Customised Cities*, are now seen as mutually dependent, rather than independent ontologies with discreet methods. In the debates which have arisen, a research problematic on the limitations of urban masterplanning forms the core of this investigation on the notion of an interactive, intelligent urban model, and the emerging discourses and methods of the *Smart City*.



Systems Thinking m3architecture – the Concept of Yield between Ideas and Pragmatics

Through reflection and research into my practice at m3architecture I am beginning to surface ways of describing my architectural sensibilities and design process. I am using "Systems Thinking" to describe this approach, whereby we distil the project situation, arriving at ideas and pragmatic systems for guiding the design process. The design act occurs at the intersection of these systems whereby the systems are caused to yield through my decisions. The PhD explores the multiple use of "yield" through the work of the practice.

Growing up in the practice of m3architecture, as student, graduate, architect and director, I have developed ways of applying this Systems Thinking to practice. The PhD is an opportunity for me to develop this way of working to be more potent in the ideas formation of the project and practice.



***Drifting in Place:
Participation, Contexts and Propositions***

Architecture that enhances participation often carries with it a reduction in spatial or material proposition. Coinciding with this valuing of the subject is often a valuing of everyday types, traditions and vernacular expressions, taking the place of iterative or propositional design.

My interest is how the subject can be seen not as purpose, but as crucial, contributory, spatial content. I am also concerned with how context can be seen more broadly as associations with, and use of, the spaces of things encountered across scales and ambivalent to location.

Drawing these interests together is the idea of cultural residency, as both a spatial concept and as a metaphor for conducting design. By considering my projects as both on and in residence, I hope to outline a position for architecture between the actions of the subject, the utility of infrastructure, the force of a proposition and the noting of an observation.



Surface Encounter

Surface Encounter is a practice-led PhD engaged with experimentation, research and practice of surface. Surface is considered a complex condition, composed of varied materialities with varying tendencies.

The practice intends to make apparent the subtle manner in which surface performs and transforms in time, through the relationship to exterior and interior conditions, such as light, atmosphere and milieu.

The research considers surface as a place of event and engages through techniques of provocation and arrangement to incite a surfacing of qualities that transpire in relation

to surface, as a means to open to 'the new' and produce the potentiality of surface.

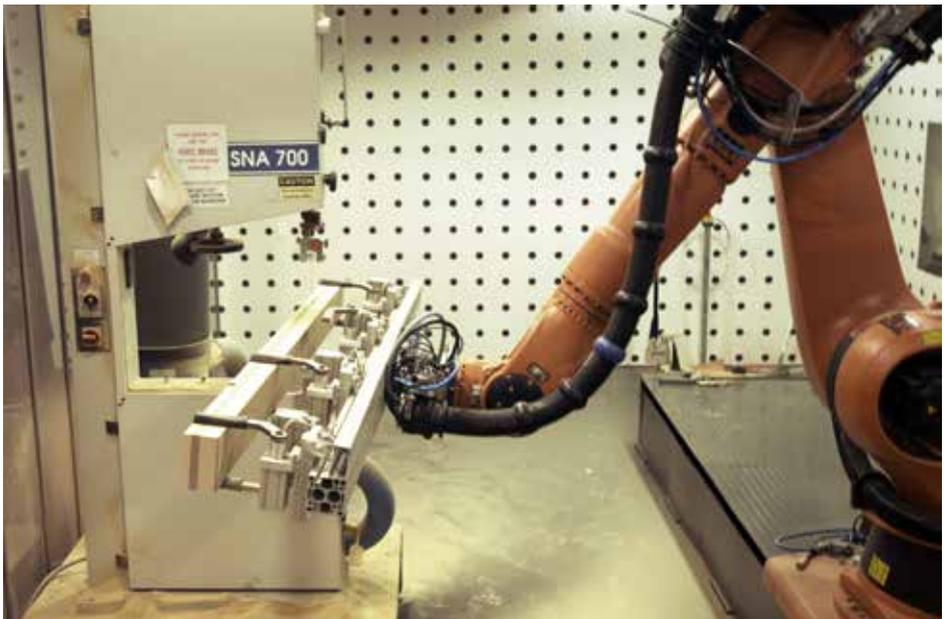
Surface is approached through a multiplicity of materialities, engagements, and activities in attentiveness, modes of encounter, observational techniques, material arrangements, sites and installation processes. These processes are explored in relation to critical concepts such as disruption, sensation, and encounter.



Platforms and Prototypes: Recasting Modularity for Architects

The discipline and practice of architecture has always been a potent milieu from within which to interrogate tensions between design and manufacturing. Architects design across scales and processes, buildings and structures are themselves collections of heterogeneous elements, designed and manufactured within a broader industrial context. Recent rhetoric from architects professes great enthusiasm for digital fabrication technologies. Far from removing obstacles, however, the speed and flexibility which made these tools make available to architects, demand new strategies for design.

This research centres on a series of small architectural works designed and fabricated to engage contemporary digital tools across design and fabrication. In each, a design platform is created to connect information across the domains of geometry, material and performance, and to enable design across scales. These platforms provide an infrastructure upon which architectural design and material prototyping can occur. Built outcomes are persistent prototypes challenging conventional approaches to performance and materialisation.



Considering Modularity as Design Approach for Landscape Urbanism

In recent years, landscape ecology emerged out of the change we perceive landscape theory and practice methodology. This influenced the development of landscape urbanism, which provided new terms of how we can cope with the fast-changing conditions and complexity in contemporary cities. My research therefore focuses on the complexity and dynamic processes of urban landscape in the practice of landscape urbanism. Since Modularity is recognized as a method to deal with complexity and uncertainty in design, I'm trying to explore if we can also see landscape as modular system and use the methodology developed in other fields, to rethink the way we design and construct urban landscape.

By redrawing my past work and designing new projects, I will investigate the similarity between landscape urbanism and modularity, examine the possibility of designing landscape as a modular system, and also look into the whole process of design, construction and organization happens correspondingly.



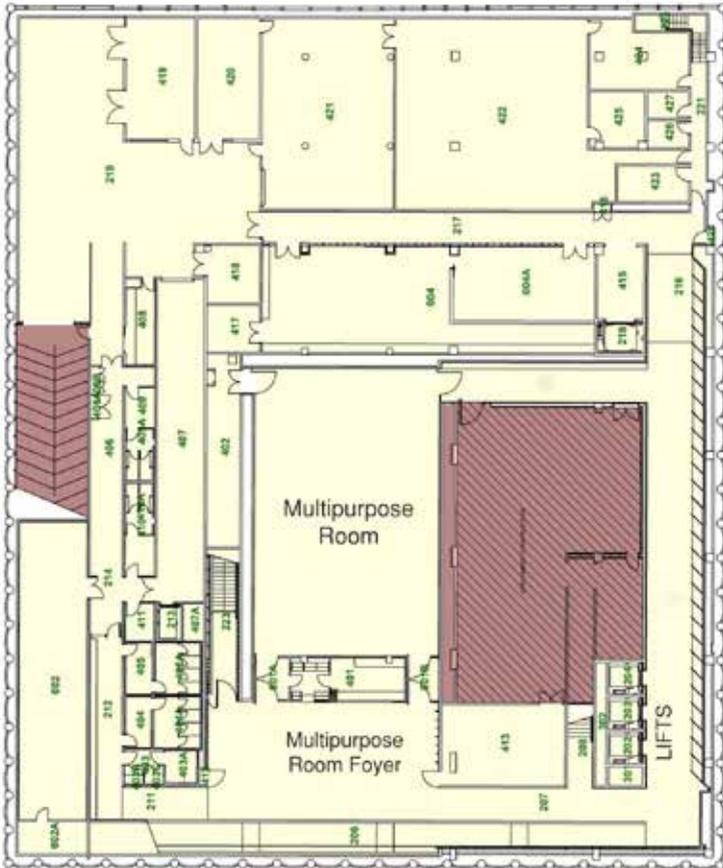
Design Hub Maps



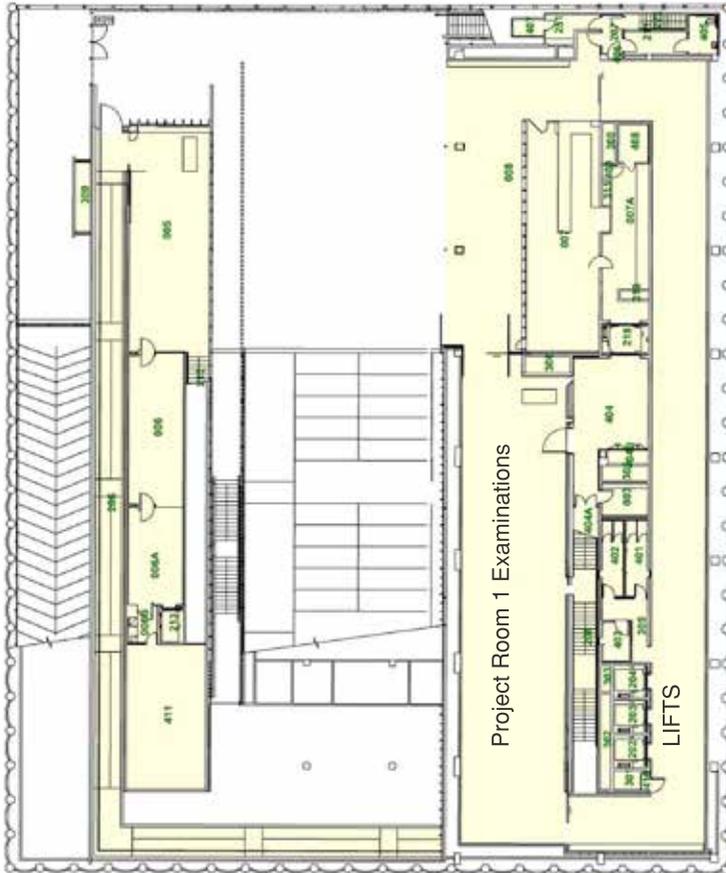
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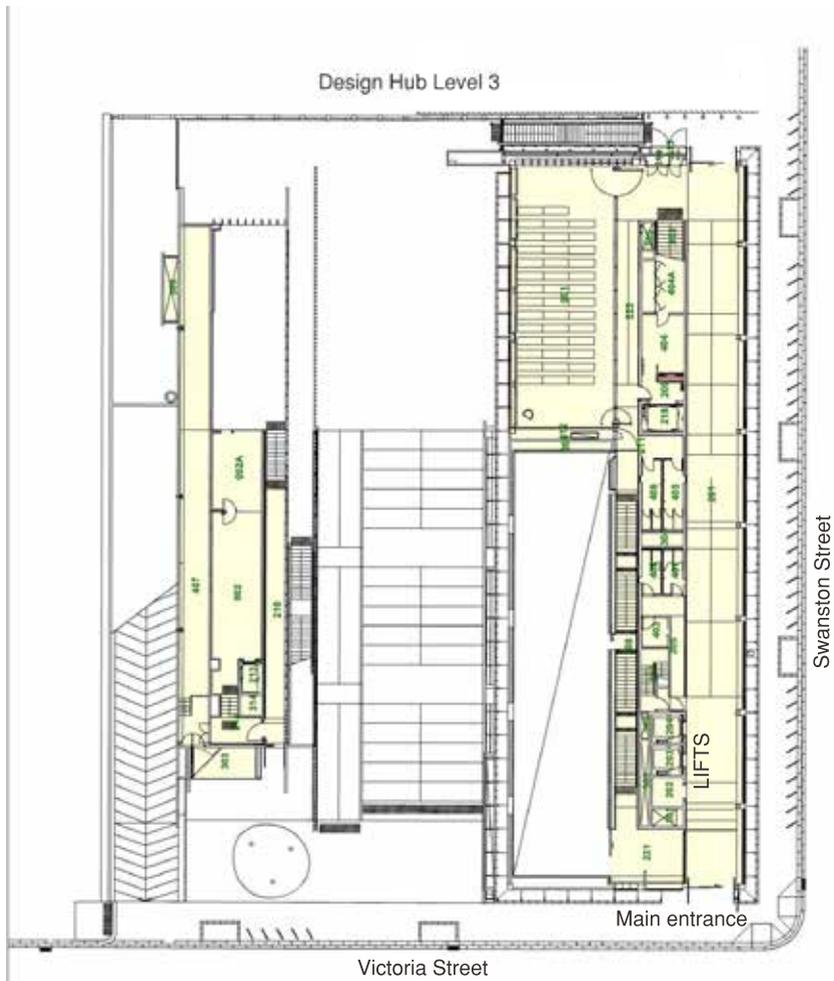


Design Hub Level 1

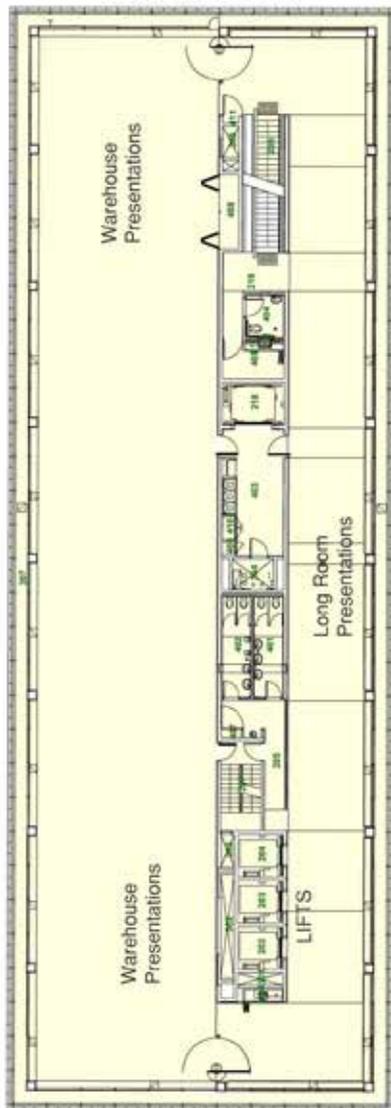


Design Hub Level 2

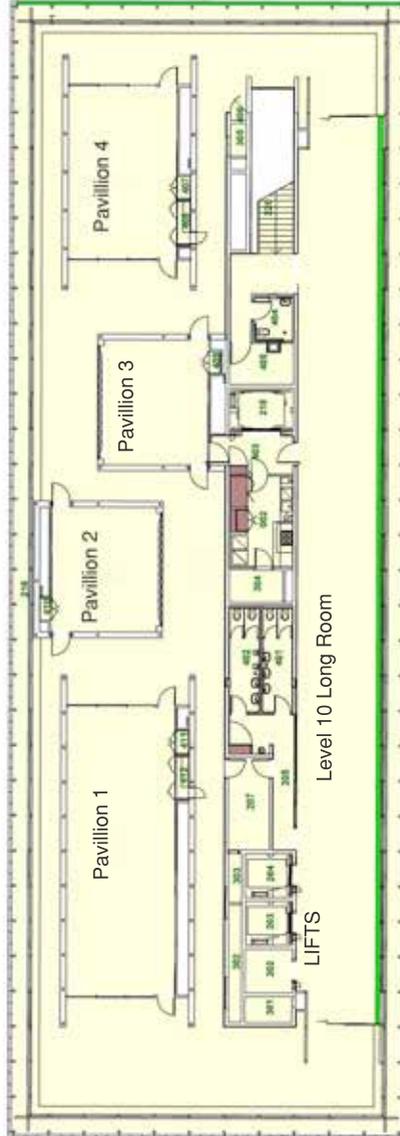




Design Hub Levels 4-9



Design Hub Level 10 (& rooftop)



DAP_r Partners

RMIT University



Charles Sturt University



University of Adelaide



University of Canberra



University of New South Wales



University of South Australia



University of Technology Sydney

University of Tasmania

Monash University

University of Western Australia

University of Newcastle

Queensland University of Technology

Deakin University



Bond University

