

Sheds for Antarctica

The Environment for Architectural Design and Practice

A project submitted in fulfilment of the requirements
for the degree of Doctor of Philosophy

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Sheds for Antarctica: The Environment for Architectural Design and Practice

Declaration

I certify that except where due acknowledgement has been made, the work is that of the author alone; the work has not been submitted previously, in whole or in part, to qualify for any other academic award; the content of the thesis is the result of work which has been carried out since the official commencement date of the approved research program; any editorial work, paid or unpaid, carried out by a third party is acknowledged; and ethics procedures and guidelines have been followed.

Graham Crist

30 March 2010

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I consider all the projects cited in this document to be co-authored. My partners at Antarctica – Brendan Jones, Peter Johns, and Simon Whibley, along with all members of Antarctica, in particular Nicola Garrod and Ben Inman – are acknowledged. Each has contributed to the projects and to the development of a unique practice environment. Before the establishment of Antarctica, Stuart Harrison was a significant collaborator and design partner, as was Sarah Cope.

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Antarctica's virtual shed.



fig. 1 Antarctica's loose space, Melbourne 2009

Abstract

This document frames the architectural practice of Antarctica; a young practice environment characterised by loose collaboration and participation in diverse activities.

The architectural projects forming this research have surfaced these three central ideas; about a mode of practice, a type of architectural space, and an ethical position towards architecture.

The document reflects on these through the lens of a series of themes: noise, junk, longevity, and participation, and through the architectural model of the shed, which is characterised by loose and robust space. Together these reflections form a position towards sustainability that is applicable to architecture. That position foregrounds participation in the breadth of building's imperfect environment, accommodation of change in that environment, and an open robust design process. It sets out a territory for Antarctica's ongoing design research.

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The form of the document

a user guide for the research

The method for this research is a reflection on architectural practice via the design of architectural projects. The process of extracting this PhD from my design research commenced in late 2005, coinciding with the formation of the architectural practice Antarctica, and with the start of a position as Program Director in architecture at RMIT University. These environments formed the context for the design work.

Juggling the demands of the practitioner academic, negotiating the development of a new practice structure at Antarctica, along with a new program structure at RMIT, have strongly influenced this research and my position toward architectural design. Questions of negotiation and participation have grown from the projects, while questions concerned with the organisation of this body of work into a legible story have grown into the structure of this document and its exhibition.

The Graduate Research Conference (GRC) at RMIT gives structure to the process of research development via its biannual critiques. In that context the process is like a chronological diary of the working method. The practice context developed in a more haphazard way; with a growing pile of projects starting, stopping and restarting, remaining unfinished, being revisited, or being abandoned.

This document weaves together the techniques used for extracting the PhD, namely, thematic essays, a record of the the GRC process, and a diagramming of the body of design project work, with drawn and written descriptions. The essays form a linear thread to the document and structure its sections. Alongside these, the descriptions of the projects form an expanded set of margin footnotes that are partially independent of the thematic essay. A chronological record of the GRC process also sits in the margins of the text, recounting the fitful search for useful insight from the projects. This parallel text aims to retain the miscellaneous information which is often helpful in describing the design process, and which forms an analogy to that central task of the architectural design process – keeping a number of balls in the air at the same time. The project images and drawings form a parallel thread interacting with the argument. Just as design books are rarely read in a front to back sequence, a casual reader of this document may start where its visual material draws them. Project images and drawings form another thread augmenting the argument. At the same time, each forms an interrupting reminder to the other that those thoughts are not pure, but are heavily dependent on all that happened in practice.

There are five thematic sections structuring the document, around which the projects congregate. They are Noise, Junk, Longevity, Accretion, Participation. Each forms an essay, and these are roughly chronological with the projects, though not entirely. Each section is generally an expansion of the previous, broadening the reflection, folding new projects into the argument, and accounting for earlier projects. In organising the work in this way, I have attempted to avoid the suggestion that one project follows another and is an outcome

fig.2: Lo-fi crit wall at Antarctica offices.



1. Noise >

of the previous, or that one theme supersedes the other. Rather, each group of projects has been gathered under the umbrella theme which most fully encapsulates the dominant ideas within. Yet, to varying degrees, all of the works embody the collection of ideas described. Delineation is provisional.

Noise addresses the problem of too much information – the project observations and the mess of practice which make a simple story difficult. It includes the observations of colleagues and mentors; the cultural context of the projects. It grows from the need to gather together the body of design work and make sense of it rather than propose a project as emblematic of that body. It aims to diagram the inadequacy of any one overarching idea in explaining a body of architectural work.

2. Junk >

Junk is a revisiting of old design work which lay dormant without proper reflection. Its review has resurfaced an unfinished interest in the unfinished; in discarded and reused information, or built fabric.

3. Longevity >

Longevity describes the ingredient of time in the design process, accommodating the loose and contingent qualities of architectural space. It describes the projects which first responded overtly to this field and which grew out of design studios at RMIT dealing directly with questions of long life in building.

4. Accretion >

Accretion is a development of Longevity and an expansion of Noise, observed as the practice body of work grew, where new ideas were added to old ideas still in place. It continues a discussion of the role of things outside our direct control, in the making of architectural form.

5. Participation >

Participation sets out another layer and identifies themes already discussed as part of a broader agenda; of why questions of time and noise might be useful in expanding architecture's field. It discusses projects which engage directly with questions of sustainability and of collaboration.

These sections aggregate to an outcome which is the reflective description of a developing architectural practice embodied in its design projects. The shape of the argument follows an arc where at its centre, a close examination of some key projects mark a turning point in my thinking. They have in turn allowed the broader sweep of projects to describe the noisy environment for that thinking. That description is found in the exhibition of the work, and in this document.

The Proposition

A camel is a horse designed by committee. This little cliché is a warning about compromise, and about collective bungling and unnecessary complexity, against the purer or rigorous design process. Even when I first heard this expression I had two thoughts. First, a camel looks better than a horse; second – it is better to work in a committee than to work alone.

The camel/committee proverb embodies two key interests of this architectural research; the form of the camel (the form of the impure design project), and the process of making that camel – the committee that produces such a particular form. The projects in this work aim to demonstrate the form of the camel, and the nature of the committee that produces it.

What is a committee? I mean this very broadly; it is the people who surround the table and participate in the design process; it is the physical environment which makes up its context; the mental space which forms its backdrop, and a wide range of pressures which surround that space – dull administrative things and annoying things such as money. It is not one more than the other, not a matter of choosing; it is the juggling of each of these in varying degrees. The committee is the social complexity of the design process. It is full of noise.

Jeremy Till¹ describes these conditions as contingency, and argues the importance of being responsive to contingency. That narrative is coupled with a suspicion of form-making and of the professional values which protect the activity of making built form. My ambivalence toward those views forms a key question of this research. Participation in the contingent world has a form, though it might not be the form we expect. So: what is the architectural form of contingency, or: what does the camel look like?

A camel is known as a survivor. It is the animal navigating the desert without need of water. Where the thoroughbred horse is precious and delicate and high performance, the camel we imagine as robust and resilient; adapted to a hostile environment. These are important and recurring themes of the design projects; how the design process survives and adapts to the committee or to contingency, how resilience is a vital quality of the designed object. It is a quality that allows it to adapt to social complexity, and to the pressing needs of its environment.

Camels are all around us – perhaps most visibly at the fringe of architectural culture, perhaps especially in Melbourne. They have been well described locally with other animal analogies – as the mongrel, as the sow's ear, or as the by-product of the Autistic Ogler.² They are part of an immediate context of the city which is important to our design work.

A committee takes time. It is a stereotype of the committee that it wastes time, that it delays, dithers and refuses to decide. But at its best, that time is a consideration of complexity – a process that produces something robust and enduring. This contrasts with the understanding of design as an inspired moment, or as something rapid and automated. The framing themes of the projects are elaborations of time; junk, longevity, accretion, and sustainability. Each talk about altering the use-by date for architecture. One of the main shifts produced by the work of this research is a consideration of questions of time. How can the design process be understood as elongated in time, seen through a longer time frame? How can it account for the 'before and after' of momentary design actions?

In the work of carrying out these projects and of subsequently reconsidering them, the aim was an adjustment of our design process – a recasting of the camel and of the committee – to better understand the work of one design practice, and what that practice might tell us about questions of participation in design. It aims to provide some tools to talk about architectural form that are not dependent on purity, and at very least, allow for an exploration of the difference between the applied environment of practice, and that of pure research.

1. *Architecture Depends*, 2009
2. refer; *Mongrel (Issue/Subaud)*, Melbourne, 2005; and Shane Murray, *The Sows' Ear*; Ian McDougal 'The Autistic Ogler', in Leon van Schaik(ed) *Transfiguring the Ordinary*, 1995.

fig.3: Greenhouse at Federation Square, Melbourne, construction 2008





Noise

**Introduction:
Being open
to Noise>**

There is a gap between the way architectural design is often described and the experience of architectural practice. There is a gap between the things with which architectural practice must contend and the forms and methods we often employ through design. That gap has to do with the environmental noise that surrounds the design process. I like the noise of the environment around me because I like to be in the world; fully in the world. I want to be open to the noise of the environment around me, and I need to be open to the noise of that environment because I have a responsibility to listen and to respond. This work will attempt to describe what I mean by noise in this sense, and what implications this has for architectural design.

abOut 1948 or 50 the number of people
liVing
all at oncE
equaled the numbeR who had ever lived at any time all added together
the Present as far as numbers
gO
became equal to the Past
we are now in the fUture
it is something eLse
hAs
iT doubled
has It quadrupled
all we nOw
kNow for sure is
the deAd
are iN the minority
they are outnumbered by us who're living
whAt does this do to
ouR
way of communicaTing

Architectural design and research are usually described in clear, coherent stories, neatly tied up. Architectural practice is often not like that – just as it is not like the traditional descriptions of work used to teach us professional practice. Those neat narratives are told in chronologies, in styles and around the signature author. They describe a progression of one thing to another. This is not my experience of the design process. Chronologies get messy as projects overlap, slow down and get overtaken. They go backwards, they pause and then restart. They are left unfinished. We return to them again and again, even after we think they are finished. Similar complications emerge when asking who is responsible for the work. We rarely work alone, yet so often the architectural story is told in terms of solo authorship. The rules and conventions which governed design – classicism, decorum, styles – have partly been replaced by the authority given to the individual – the significant practitioner. The history of twentieth century architecture was the history of a handful of great architects who were differentiated from their surroundings. It is though, rarely this simple.¹

Excising & Suppressing>

The way architecture is described affects the way it is practiced. It is my contention that for a number of reasons, the noisy environment for architecture is very often excised and suppressed, and that architects also employ this tactic in thinking about design. Describing architecture is made simpler and cleaner by excising it from a context. This is clearly evident (for example) in architectural photography and publication – cropping out urban neighbours, removing signs of activity or the mess of a building's interior, and carefully framing the context of a work by selectively removing its actual context. Some of the more extreme examples of this phenonemon come from the contemporary techniques of digital enhancement. Similarly, architectural drawing tends to place its objects on a neutral background. The keenest example of this is the rendered 3D model on a black background. It is a technique which foregrounds isolated composition, and suppresses its environment. Published photographs of architecture and drawings alike are edited and enhanced. Design journals carefully frame images, removing most evidence of the everyday. They focus instead on the skills of the architect in creating a better version of reality.

John Cage, Overpopulation and Art, 1992 in Perloff & Junkerman (ed), 1994

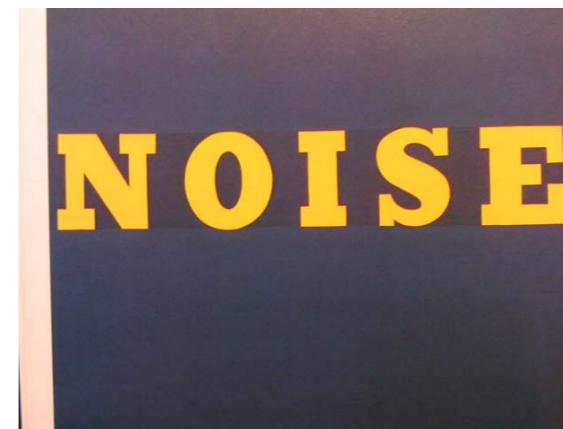


fig. 4: Ed Rusha, *Noise* 1963, source: Marshall, 2003

1. for example: Beatrice Collomina, *Collaborations: The Private Life of Modern Architecture* (1999)

The Fullness of Noise>

Another way to describe noise and ambient environment might be through its fullness. I have a sense of being in the middle of a large cloud of information and life. I sit in a studio at a central corner looking North, East and South into the physical heart of the city – at its Parliament, towards my University, straight into the windows of rooms I don't know. That corner is surrounded by a metropolis of four million people, hugely spread out but dense with architects and ideas. This is of course just one of hundreds of cities, many bigger and denser. They are part of a world which continually explodes in population, where the living outnumber all of history's dead². We know too that all this is part of a system of planets – evidence of their number grows rapidly, and evidence of the conditions for life means that we are in all likelihood in a universe similarly dense with life. The explosion of information that lets us know all of this also gives us a big perspective on time – we can see back five thousand years of well documented history and know also that settlement in this country stretches back another forty or fifty thousand years. We can imagine a thousand years into the future as a realistic life for the work we produce today. At an everyday level, I am likely to make several thousand digital photographs this year. Others in my office are likely to do the same – each file with anonymous names, and many replicating images available instantly via Google.³

It would seem strange then that we would seek to differentiate ourselves so markedly from our context. Perhaps it is a need to demonstrate the originality, the uniqueness, the new knowledge in a design work, or simply to demonstrate, in marketing terms, a point of difference. Perhaps it is that the full environment seems excessive, degraded, repressive; that design can offer the antidote to this. It is my experience however, that the noisy and full environment is inescapable.

The practice of Antarctica has become an environment that adds noise to the design process simply by having several views available at once. This is unlike a team of specialists committed to a single agenda – or an environment driven by a single personality. Questions of participation and critique are more prominent. The working methods for the projects, the forms of co-authorship and collaboration are varied. The point though is not to interrogate the methods or the characters in order to predict new outcomes, but to accept this environment as contingent, and therefore more like the environment to which it is likely to respond.

All design processes have a context; they exist in an environment. The question might be; how can I respond to this environment, how much can I let it flood in, for the design process to be drenched in it? Rather than excising the design process from its context, or differentiating itself from it, I think of Ian McDougall's words in his thesis: 'Why is my head full of media images?'⁴ Noisy images are many and varied. They are of places – cities like Melbourne that feed us with a cloud of new images and old memories; they come from people; and via collaborations, which add layers of complexity. They emanate from the

Antarctica

When Antarctica was established, we were unsure as to what extent we as partners would collaborate. It was a merging of separate small practices. Our intent was to provide an environment with few rules and test what would happen; to allow the unknown – for ourselves, and for others to be added later.

Antarctica Group Pty Ltd commenced formally in July 2005 as a company with five directors: Graham Crist, Brendan Jones, Simon Whibley, Peter Johns, and Dianne Peacock. Dianne Peacock departed around a year later and four directors remained. Two architects, Nicola Garrod and Ben Inman, have been with the office since its establishment.

In our case, a conventional company structure had the attraction of creating a person – one separate from any of the personalities – that owned everything. For a time we carried out a complicated system of separate sub-practices within the company. Giving that up was a liberating moment – loosening the relationship between work and money. Though to talk about architectural practice without thinking about money is naïve or deceptive, and the pursuit of a viable living remained a priority within the new structure.

The physical location of the practice was unclear for some time. We considered it operating virtually – sharing only a web space. The group operated briefly in separate locations, then in two offices – Port Melbourne and the Melbourne CBD, and then two separate offices in the same building, before finally consolidating into a single space. The name Antarctica was like a shelf company – a place where none of us lived, where none of us were from. A place we could inhabit equally. The continent of Antarctica is currently under shared multi-national administration. That name was one of many floated; in a classic committee vote decision, no-one chose it. Everyone had chosen it second. No-one can remember the other contenders.

We were conscious of the professional split in practice between large corporate offices (several locations big resources) and small

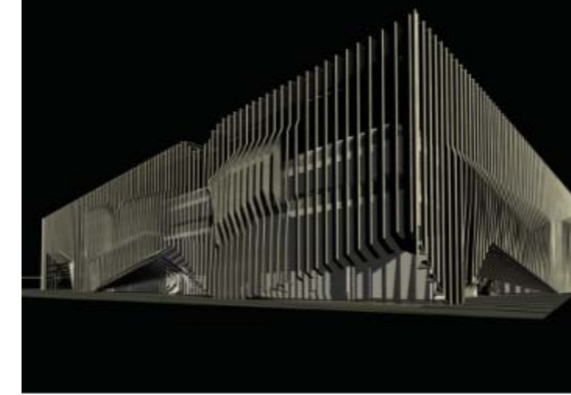


fig. 6 Shane Murray, GOMA project, Brisbane, 2002

Purity & the ideal context >

Preferred context>



fig. 7: Spray Street, Elwood, Melbourne.

The 'Edwardian' cottage is viewed as the appropriate context; the flats are one of several and the majority of the streetscape

Rule based process>



fig. 8: Code, Form Space symposium, New York, 2007

5. Contingency can not be tolerated in the modern project; be it architectural, political, social or philosophical.

Jeremy Till, *Architecture Depends*, 2009 p.38

university environment and its students conducting hundreds of tiny experiments. Noise comes too simply from the mundane interferences of a project; the sense that as architectural participants, our work is subjected to the weather like any other natural ecology. These experiences, like tourism, remain as monuments noisily filling our heads, sometimes forever. These things are more than 'influences or references' – they become the body and constitution of the projects.

A number of architectural narratives are described in terms of responsiveness to an environment. That is, they claim to result from or be informed by the noise of the environment and process. The extent to which they are in reality open to their noise needs questioning. Instead, might their tendency towards purity and away from contingency be just as prevalent?⁵

The general notion that architecture responds to its physical context and that a form is influenced by its context is a reasonable one. That idea, at least in the Australian urban context, has been frequently confused and conflated with its opposite, the ideal city. In an attempt to control the redevelopment of urban fabric and its scale and to reign in the effects of modernity, the rhetoric of the contextual is brought to bear as a constraint, but is framed by an ideal of a consistent urbanist model. The logic then is contradictory; operating in a 19th century urban village, design should respond to this contextual model; when operating in a heterogenous urban fabric, then design should conform to the previous ideal model. The discourse is even more blurred in a practice environment, where this notion has found its way into town planning codes, using terms such as 'preferred context.' It has given architecture responsive to context a restrictive connotation, since it exists not because of the acceptance of the built environment, but because of a set of beliefs about urban decorum and purity.

Design processes with their own rigorously applied internal rules have the potential to shift the focus away from the single authoring mind, and toward a set of environmental circumstances, or even to chance. Letting noise or contingency into the process, it is even less predictable. This goes back to the automatic drawing of the Surrealists. Contemporary examples often focus on the generation of form through digital processes responding, in particular, to functional data. Again, two contradictory tendencies are conflated: the element of surprise and chance, and the rational or maximised response to data. In such processes, the questions of the starting point and the stopping point often arise – questions of where the conscious author cannot help but invade the process. These are questions of judgement versus unpredictability; chance versus formal preference. That is, to what extent are the results pre-determined by a set of formal preferences? How much noise was really let in? An example is the Mobius House by UN Studio. It is widely published and used to exemplify process driven strategies. It is often described by Ben van Berkel in terms of

boutique firms (specialist and often centered on an individual architect). We were wary of the faceless blandness of big commercial offices and the narrow agenda of offices based on a single personality. We had seen large local practices form into national groups, and mid-sized offices disappear. We saw a lot of people leave practice altogether in a recession. We did not take the model of practice for granted.

Melbourne was the common link between us, though none of us grew up in Melbourne. We are each from a region loosely related to the Southern Ocean. Like the cities of the Pacific Rim, Perth, Hobart, and New Zealand form a rough Southern Ocean rim. Melbourne is its mental centre.

We spent a lot of time testing our modes of communication. The idea that all key decisions should be shared; that they should happen around a 'public' table was important. Early on, there were a lot of meetings and a lot of minutes – a bureaucratic model applied to a studio. Out of exhaustion and remoteness (someone was always away), we experimented with 'quicklinks' – an online communication software which we treated like a private chatroom. Software bugs meant that people dropped out of it. The closed loop meant that we were really treating it like email. Some worried that it was replacing face to face communication. We moved to a hybrid – formalising the informal, meeting weekly with no notes, followed up via email. What remained was to build a culture of presentation and critique. Working through the shortcomings of a wiki, and with long, live design reviews, we arrived at a system of posting current work in progress on the wall as it happened, and allowing informal review by all.

It took time to arrive at some very straightforward procedures. Participation, without a pre-set agenda, is an accretion of trial and error on the part of every collaborating personality.



fig. 5: Centre Pompidou (Piano & Rogers) & crowd, photographed 2003

2. John Cage (1992)

3. David Weinberger, *Everything is Miscellaneous: The Power of the New Digital Disorder*, 2007

4. Ian McDougall, *The Autistic Ogler*, in L. van Schaik(ed) *Transfiguring the Ordinary*, 1995

a functional diagram – a responsive mapping of a set of circulation relationships. Looking at the visual evidence it is strangely silent on the activities of the family inside, while the discussion is curiously silent on the formal or material preferences.

Pure Ordinary>

The argument for the 'ugly and ordinary' by Venturi and Scott Brown in *Learning from Las Vegas* (1972) began as a critique of the irrelevant heroics of modern architecture, and exposed a modernist predilection for austerity and sculptural form (flipped by Venturi and Scott Brown into 'ornament and plain form'). The elaboration of the ordinary as found by the Smithsons for example, retains that sense of austerity. It is perhaps an observation of life which was austere; yet contemporary versions of this value such as austerity with all its precision, as an antidote to the formal and material excesses of the contemporary world. It describes the ordinary not as noisy, but as a retreat from the spectacular world, with all its impurity. For Caruso St John's Brick House (2005) or the Walsall Art Gallery (2000), their austere beauty is the enemy of their ordinariness. They must be closed to contingency if they can remain in the realm of the pure ordinary.

Participation & Community Architecture>

The community architecture movement has delivered significant empowerment to a number of people. It offered a critique of modern architecture's inability to properly engage with large sectors of society and a set of professional values focused on the architectural commodity and its form. Cedric Price's famous proposition that 'the best solution in architecture may not be a building'⁶ is a re-orientation of the architect away from a definition of its role as a refined builder. Though when such a critique becomes an orthodoxy it revels in its marginal place, and becomes suspicious of mainstream profession and practice. It is a subtle but critical slippage to say 'the best solution in architecture must not be a building.' (At the very least, not a building of the architectural variety.) If such an orthodoxy accepts being marginal, and it avoids form or even built objects, then it has closed itself to the noise of the constructed world in which it sought to participate.

Contrariness>

The tendency is for a position to become a brittle orthodoxy if it is not exposed to its counter-argument. To be alive to the possibility of being wrong, means to sometimes flip, to seem contrary, or simply to seem middle of the road. Or to find the third answer – the 'both/and' or the 'neither/nor' view. It is the reason for operating in a group – for having the contra-view nearby. This can be a noisy and unclear situation. The practice environment at its best can be a tool for preventing observations settling into idealisations. It can provide evidence to contradict what we think.

Local Noise Feedback>

What noise am I tuned to; what noise resonates and provides feedback? Much of the answer grows from debates taking place in Melbourne over the last thirty years, seeking to expand the territory into which architecture could properly operate, and superseding orthodox modernism. Those debates confronted two situations.

The desire for a practice of several disciplines had been present from the start. This has evolved slowly. First, it took time and effort to consolidate an understanding of our own discipline, for ourselves. Second, we increasingly viewed the diversity of architectural practice as a form of multi-disciplinarity. Third, it was perhaps not surprising that web design became the allied discipline. More than structure, landscape, or building, the web was, like architecture, a mode of communication.



fig. 9: John Pawson, Monastery, Czech Republic, 2004. Designed in accordance with the strict monastic principles.



fig. 10: Caruso St John, Brick House, London, 2005 (source: www.carusostjohn.com)



fig. 11: Caruso St John, Walsall Art Gallery, 2000 (source: www.carusostjohn.com)

うど建築家の作品ばかりを集めた東京の建築ガイドブックがベストセラーになっていたが、そこには我々が肌で感じている東京は載ってなかった。そのガイドブックは自分

Da-me Architecture

The buildings we were attracted to were ones giving a priority to stubborn honesty in response to their surroundings and programmatic requirements, without insisting on architectural aesthetic and form. We decided to call them 'Da-me Architecture' (no-good architecture), with all our love and disdain. Most of them are anonymous buildings, not beautiful, and not accepted in architectural culture to date. In fact, they are the sort of building which has been regarded as exactly what architecture should not become. But in terms of observing the reality of Tokyo through building form, they seem to us to be better than anything designed by architects. We thought that although these buildings are not explained by the city of Tokyo, they do explain what Tokyo is. So, by collecting and aligning them, the nature of Tokyo's urban space might become apparent. At that time there was a best selling guide book of Tokyo full of architect designed works, but it did not show the bare Tokyo which we felt. It couldn't answer the question of what kind of potentials are in this place we are standing in? What can it mean to think about and design architecture which must stand beside da-me architecture?

Atelier Bow Wow >

One, that the vast majority of our built environment was dismissed as ugly or worthless. The other, which follows, that our design culture was built upon the observation of other, more important cultures elsewhere. Each condemns architectural design to the role of an observer; watching and whinging, or watching and applauding. The situation became spatialised (or caricatured) in a city composed of a central business district of corporate towers by international offices, surrounded by a low rise wasteland.

The sustained interrogation of the suburban environment by Edmond and Corrigan, and the fringe polemics of McDougall and Raggatt, register a desire to participate rather than observe; to whip up some noise in the silence. To do this, all the noise around us was drawn into the effort. It involved close observation of that noise, all the feature-filled junk buildings around us. The tough minded pragmatic blending of modernism and vernacular I had seen in Perth looked entirely different from the polychrome gymnastics for which Melbourne architects were growing a reputation. Yet it asked the same question – how to make sense of what we have, that is, how to be open to the noise of our own cities? The sustained practice based research which developed and expanded this debate in Melbourne,⁷ seeded a built culture of the city. It filled the huge middle ring lying between a CBD of monuments and a sprawl of cottages; a space for a big community of architectural practice.

All of this I saw as an invitation to participate; to take seriously, like others had, the life of ordinary buildings. It was an invitation to participate in a distributed design culture. That is, not just a few chosen winners and not just the marginal (neither the Capitalised nor the Socialised), but a widely distributed ownership of the design process. There is, in those small and low budget public buildings of 1980s Melbourne, a definition of architectural participation. It is a lens filtering my horizon, and it is a debate asking to be carried on.

Made in Tokyo developed a comparable debate for Atelier Bow Wow. There it was argued that to build convincingly in Tokyo is to make sense of that city via the general urban fabric. So the architectural radar widens its frequency to include the 'no good' (*da me*) junk of the vast metropolis.⁸ That catalogue draws countless anonymous authors of Tokyo buildings into the debate, placing them in contact with self conscious designers. So successful is their reading of the city that each building in their catalogue seems representative of a hundred others. So seamless is the knitting of their work into that city, a pause occurs as you view Tokyo. Were Atelier Bow Wow here? Did they do this? This perfect joining of discourse and practice provokes another question – is there anything wrong with Tokyo? Do we need to do anything? That question can be sidestepped if it is considered as particular to its context. To a foreign viewer the environment is at a slightly different frequency to their own, as if tuned to the wrong noise. It requires testing in other conditions.

pathetic insight holds out against pure form, hoping instead, if only for an instant, or under conditions where judgement is mostly guesswork that instead of some easy delusion of new beginning or mere private contemplations there might remain, somehow outside, somehow on the street and not just between friends more than the spectacle, trying instead whether bitter or comic, adoring or contemptuous, democratic or hopeful, to find in homage, or to find in criticism, or, even in cringing, relief from invention, relief from the New if only for an instant, release to a space where time is somehow suspended and not merely experienced but seems still to be coming, still arriving from the past, still bringing the message like all the twinkling stars at night, and unforgettable too.

Raggatt, 1993, 'Notness: Operations and Strategies for the Fringe,' in *Fin de Siecle*, RMIT Press, pp.113-172



6. cited in JeremyTill (2009) p.167

7. refer v Schaik, *Design City Melbourne, or Backlogue: journal of the Half Time Club*, 1992

8. Kajijima, Kuroda, Tsukamoto 2001, *Made in Tokyo*, Kajima Institute publishing, Tokyo, p.9



fig.12, fig.13: VCA Drama School (Edmond and Corrigan, 2006), and Melbourne Recital Centre (Ashton Raggat McDougall 2008). These buildings have negotiated the noise of the metropolitan periphery transferred into the urban centre.



fig.14, fig.15(left): ever present and embarrassingly close up - RMIT Building 8 (Edmond and Corrigan, 1993), and Storey Hall (Ashton Raggat McDougall 1994) are part of our experience of the everyday. They are impossible to ignore.

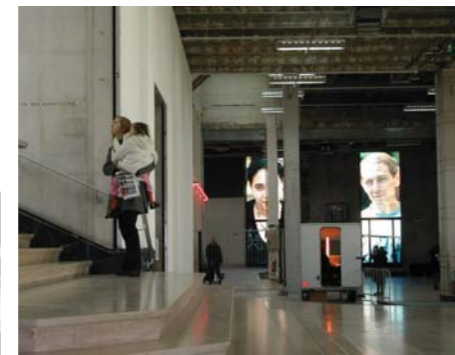


fig. 16 Lacaton & Vassal, Palais de Tokyo, Paris, 2000



fig. 18 Lacaton & Vassal, Maison Lapatie, 1992



fig.22: Anomalous building Kumamoto Japan, not Atelier Bow Wow despite resemblance to the Aco House (2005)



fig.17: UN Studio, Villa NM, Bethel, New York, completed in 2007, destroyed by fire in 2008



fig. 19-21: UN Studio, Moebius House, (source: <http://www.unstudio.com>) images of the generative Moebius strip expressing patterns of domestic habitation; inhabitation either absent or idealised. The claims that daily life generates this form masks a set of predetermined and pure preferences.

Lacaton and Vassal >

The 'no good' quality of Lacaton and Vassal's work in France perhaps comes from the experience of Africa – an environment hyper-conscious of resources and an antidote to the completeness of the French environment. It was the ready-made shed houses (fig.18) that first drew my attention to this practice, and to its resonance with my own. The unfinished and incomplete is a stated invitation to the user, or anyone else, to complete the experience; to fill in the holes. In the case of the *Palais de Tokyo*, that incompleteness is a provocation to the artwork, and a realisation of the spatial generosity of the ageing recycled building. It is possible to imagine the architect here as a kind of observer – who has swung their vision around to watch those in the building; watching and hoping as they try to provoke participation in an interior.

Diagramming >

The attempts to draw together projects and make sense of the resultant set is driven by the formation of a group with a shared mental library, and a group participating in a broad set of design activities. It is an attempt to describe the multi-focused environment of design. The tension lies in describing a set of ideas without clipping those ideas from their context. As data accumulates, the picture does not get any clearer or simpler, rather the opposite. The diagrams here aim at least to provide a picture of this situation.

The cloud >

Assigning each project a point in a set makes them appear, superficially at least, to be random. Each is of equal value, each equally related to all others. The size of the set is important. In a very small set, it is possible to see each project as emblematic of a strategy; perhaps as it reaches a certain mass, certain trends appear in the set. Neither is really the case here. Rather, we might think of strategies as a net thrown over projects, a temporary curation, where there is always a project caught in the wrong net trying to get out. Conversely, we could see the projects as gathering around a strategy, able to move along with it or move away from it. Similarly, a project might gather strategies and tactics around it with varying degrees of attachment. It is a story of loose and fluid relationships between projects and their informing ideas.

The chronology >

Do the ideas and strategies embodied in projects change over time? A classic way of measuring this, and describing thematic development, is via a chronology. Ideally, that development is demonstrated by superseding older and inferior ideas; one project is spent, another begins and is improved by demonstrated learning from the last. In many practices the chronology is complicated by projects which vary wildly in duration, and in 'bandwidth' (the proportion of time or energy occupied on a particular project). So some projects can be executed intensely over a short time frame, while others trickle. Many lurch from one to the other – an intense (fat) activity being combined with a longer period of occasional (thin) work. This effect is exaggerated if we take account of the whole project, including for example, its construction in the design process. The effect on the 'progression' of

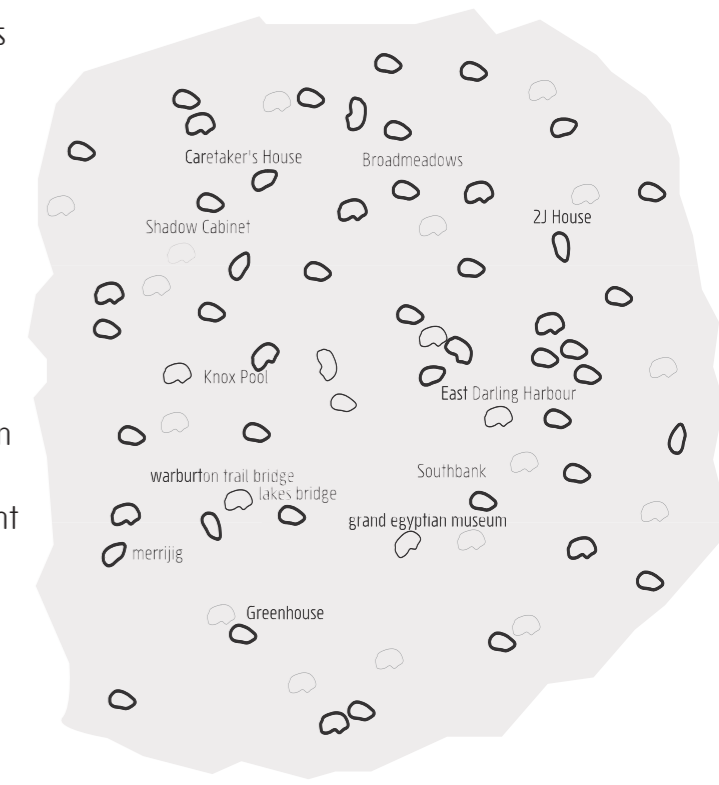


fig 23: The cloud of projects

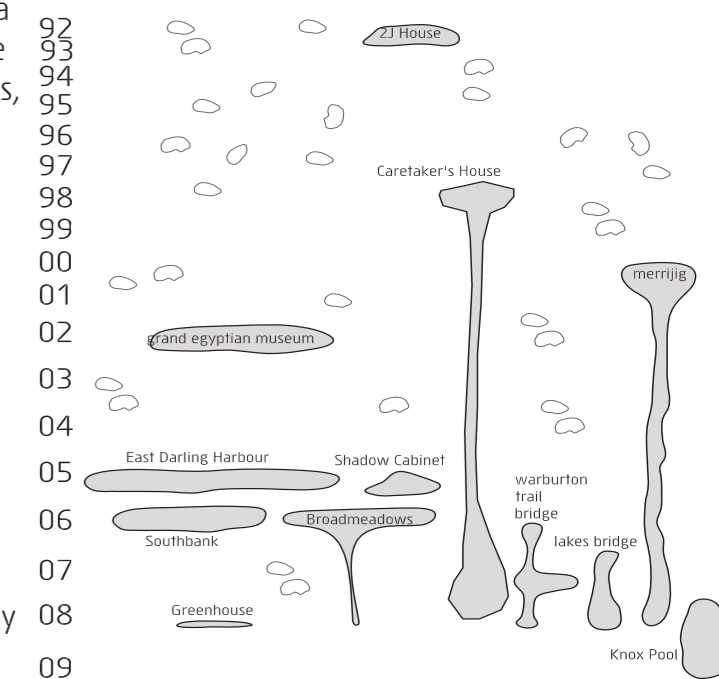


fig. 24: The chronology of projects

ideas is distorted, when in practice we might return to a project long after we have moved on in our immediate interests.

Size> There is little relationship in this set between the size of a project and its impact either in time, or perceived importance. This is despite the effect of diagramming a work relative to its square metre footprint. If we remember Koolhaas' organisation of 'SMLXL', there is a perceived correlation between the impact of an architectural work and its bigness⁹. Here, there is some – a project occupying a lot of mental space because of its size. This is distorted by projects which take energy disproportionate with their small size, and large projects which by necessity receive proportionately less attention.

The net and the llama>

If the classic categorisations tell us less than we hope, then a series of themes gathering projects together gives us a picture of the breadth of work. These diagrams have informed the organisation of this document and a broader understanding of the tactics used in practice. The net diagram uses a cloud of projects and captures them in groups. These groups are not mutually exclusive; the nets overlap and get progressively bigger. The projects do however, tend to fall into one net more than others. Conversely but similarly, projects gather around a thematic anchor like sheep being led by a llama. Some gather more strongly to one, while others tend toward one but drift along with others.

The tag cloud>

In a diagram driven by a search engine, its proportion is driven by use and popularity. In a tag cloud, the size or visual intensity of an element is determined by the number of times it is searched for. That visual element might be a word, or a thumbnail image. The user might determine the relative importance of a project and that user population might be the practice group, sharing a sense of what is relevant and useful. Or, it might serve to reinforce the already popular, and diminish the miscellaneous. This diagramming is a kind of cataloguing. We tested the idea of a visual catalogue for a series of house projects by Antarctica in *Re:Housing's Retroactive Prototypes*.¹⁰ We arranged line-drawn plans in order of size, laying them out on an A1 sheet. We were testing the potential of a one-off house design to engage in questions of general housing. That is, what could be applied from this design to other locations or situations? We shed most of the information – the individual texture and context, retaining a spatial arrangement and an index of square metres. To be thought of as prototypical, and able to be generalised, we needed a large enough number, and the blunt tool of size to temporarily turn the noise down. Only then could they be cut loose from individual composition of the individual site and home.

A secondary consequence of this process was the gathering of a set of designs created by separate practices into a series by a group (Antarctica) and by doing so, accelerating the development of a shared library. This is one of a number of instances where the group's practice parallels the broader participation in the noisy world. The process of developing the series raised the possibility that it might be extended and replicated elsewhere. Collating the discrete works into this series was the first step.

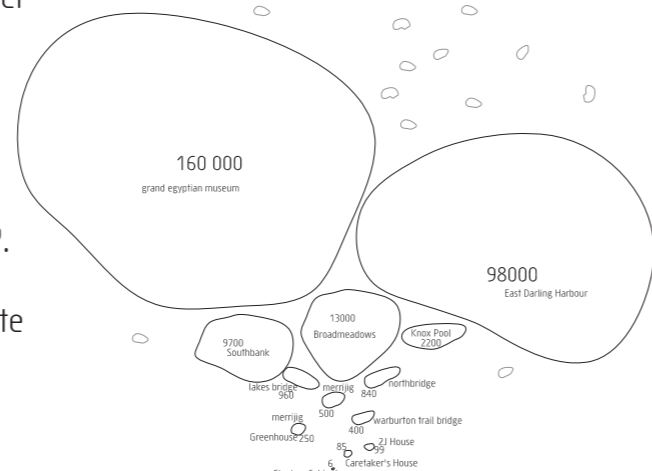


fig.25: Project size

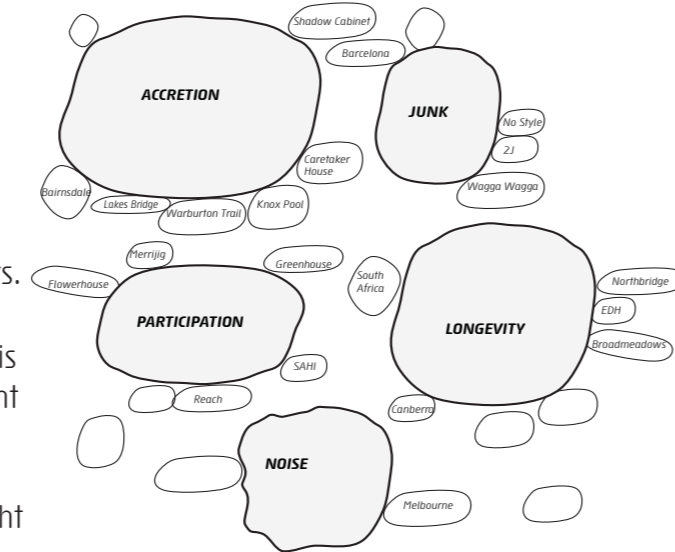


fig.26: The Llama diagram; projects gathering loosely around ideas.

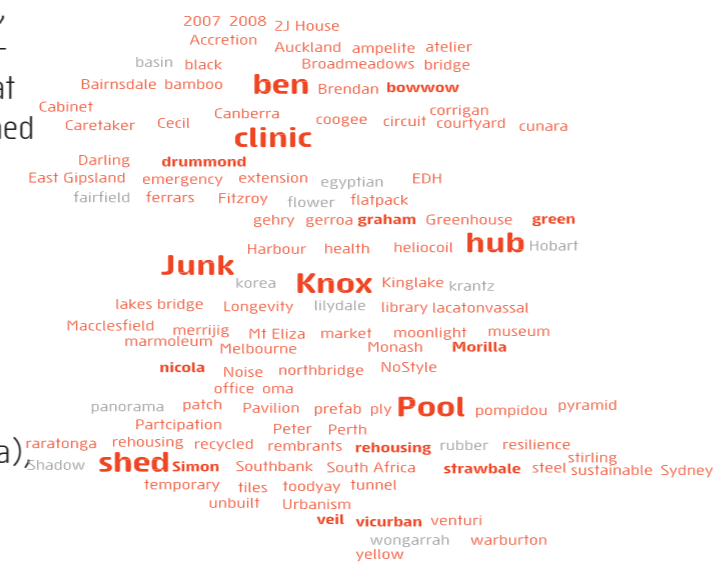


fig.27: The Tag cloud.

Noise conclusion: the virtual shed>

Treating these abstractions diagrammatically is an attempt to capture the breadth of project activity; to understand the whole body, including the miscellaneous, rather than make a few projects emblematic of the whole practice. This seems appropriate as a mode of practice where a group is carrying on activities in parallel; and where each of those parallel activities are trying to hold on to the wide band of noise around them. A noise analogy, rather than a tribal allegiance, might be a more accurate explanation of the influence of physically local design activity. The work close to us resonates most through its proximity; it is most visible in its own context, and that context is most similar and therefore most appropriate to our own. It is less purified by being remote and mediated. The tendency for a design narrative based on responses to environmental factors is for it to be abstracted toward an orthodoxy. Resisting that means that these ideas can only be loosely accommodated in architectural space. Equally and conversely, the architectural space can only loosely accommodate environmental narratives; they need to be given room to move and transform.



fig.28: The Image cloud.

Two parallel questions follow from this discussion of noise: What practice environment can best accommodate that noise and provide useful responses to noise? What design tactics might best accommodate this noise in its architectural form? Part of the answer might be akin to accepting the weather, or the contingent nature of the process and the miscellaneous pieces that aren't entirely expected or remembered. Rather than a well-catalogued library, the field of practice might be more like a shed; a space that accommodates the well ordered nuts and bolts; but equally the chaos, mess and junk.

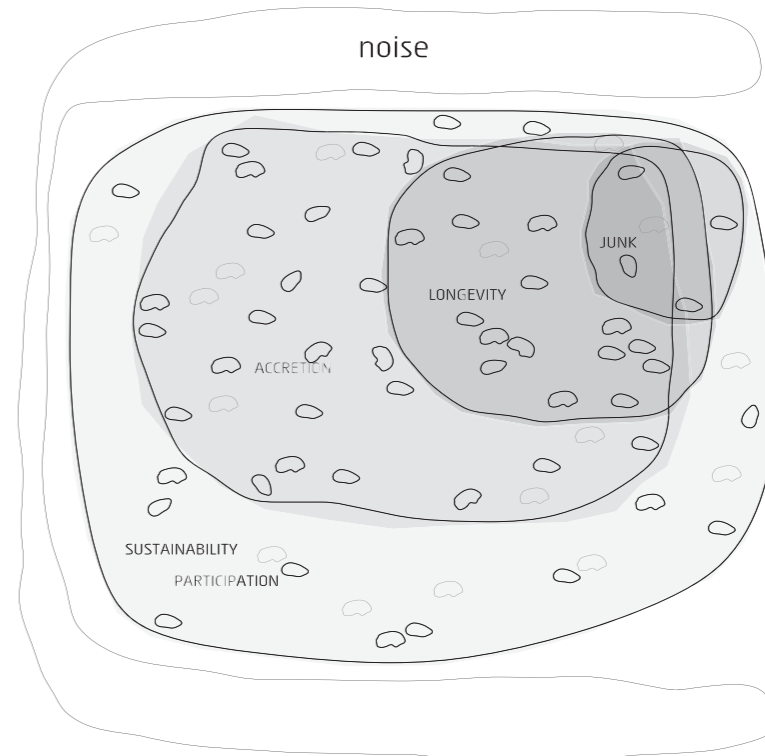


fig.29: The Net of ideas over the projects.

9. Koolhaas & Mau (1995) p.494
10. Murray, Whibley, Ramirez(ed), Re-Housing, 2008



fig 30: *Antarctica: Retroactive Prototypes*, published in Murray, Whibley, Ramirez, *Re-Housing*, RMIT Press, 2008, exhibited Melbourne, 2007



Junk

Introduction >

The first design lecture I gave opened with the line 'Our city is a bricolage of junk'.¹ Our city was a town in economic recession. It had no aspirations to be a design centre. It was a beautiful landscape full of lean and ugly buildings. At the time we saw this as an opportunity. It seemed at that time that was that everything in Perth was just a version of something else from somewhere else. Howard Raggatt's lectures at University of Western Australia (UWA) in 1991 describing the fringe condition resonated with what I observed in the metropolis. This was at the last moment before almost seamless digital copies – when facsimiles tended to be degraded, and where images could be more readily differentiated from their original. The buildings in Perth which were facsimiles of others were smaller, thinner, cheaper, less colourful. There was a lineage of raw modesty, of pragmatic modernity.

I had generally been drawn to the crude or ugly things scattered through the history of modern art. Through Duchamp to Rauchenberg and Jean Dubuffet, and even to those Cubist collages which are so roughly made when seen in the flesh. I was attracted to the idea that ugliness might simply be a more difficult form of beauty². Simpler still, that if beauty is a restrictive concept, then ugliness can muscle in to expand that idea, or rather, rejecting the division altogether as an ossified concept might allow us to expand the notion of what can be beautiful³. Frank Gehry's Californian work (c1972-1987) was one of my most important early architectural experiences.

2J House Project

The 2J house was designed in 1991 for my own family near the town of Toodyay, in the Avon Valley, an hour's drive east of Perth. It is on a site of four acres, formerly farm paddocks. The building was intended as the temporary house, to later revert to a shed. The pre-designed off the shelf machinery shed used as its envelope came partly out of frustration with an engineer over-designing the custom steel frame. A single volume of 100 square metres, five metres high could be bought for a small fraction of conventional house costs. The permanent house was never built, and it remains on that site as home to a new owner. It narrowly survived bush fires in the town in late 2009.

As young graduate I designed a house in the country using a prefabricated, off the shelf shed. I did this not out of romantic attachments to sheds or rural buildings but out of a budget which didn't allow for much else. It was intended as a temporary house – the 'real' one was to eventually supersede it. It turned out to be good enough to stay in, and became the only house built there. It is barely a house. Hi-Line sheds offered a pre-designed range which had limited sizes, were made with conventional steel elements, and which were assembled on site. I selected the smallest footprint available, with 4.8 metre height, and the largest door available. I ordered two windows (the maximum number for the price). I got a hundred square metres of double height space for just over twelve thousand dollars. I bought one added window – the largest two leaf slider available off the shelf, and cut this into the steel wall. I did the same with translucent corrugated sheet. The steel cladding arrived packed in two matching red sheets, which had been discarded as rubbish after construction. We cut these up and made them into façade panels, composed in relation to the openings. The interior space was lined in uninsulated fibreglass, and left as open as possible. Its interior was big, open, barely defined and at the ambient outdoor temperature. It was barely an interior – the car drove directly inside, and the furniture was moved about to wherever it was needed. On a small bathroom box inside was a facsimile of the mural, repeated

GRC1: The practitioner academic and low-res architecture (2005)

I began this reflection process by looking back over my practice – an uneven and distracted environment – comprised of several partnerships, cities, and models of practice. These included:

A: Bricolage – with partners Kate Hislop and Hannah Lewi: a practice created out of an economic and cultural recession in Perth. Parallel research at UWA in a masters program.

B: Paris – Practice of Cabinet Mellet – collaborating with co-employed partner Sarah Cope; parallel research making images on themes of migration and facsimile.

C: Donaldson & Warn in Perth – an office with a modernist design culture; inhabited by those who, like me, would leave for Melbourne. Parallel research in design competitions; first collaborations with Stuart Harrison.

D: Denton Corker Marshall – four years on one museum; parallel research in competitions – collaboration with Harrison, Cope, and others. Teaching at RMIT began at that time.

E: Harrison & Crist – the intense collaboration; an academic practice parallel to RMIT. It culminated and ended with Shadow Cabinet exhibition piece (Pavilions for a New Architecture, Monash University), and coincided with the start of this research.

1. Curtin University lecture 1991 with Hannah Lewi & Kate Hislop. The line references, William Gibson, Johnny Mnemonic, 1982, the city in our case being Perth, Western Australia.
2. Mark Cousins, The Ugly, AA files 28, 1994
3. Jean Dubuffet, 1951

House with No Style Project

The entry in the annual Japan Architect Shinkenshiku design competition was curated and judged in 1992 by Rem Koolhaas under the title the House with No Style. Our entry (with Kate Hislop and Hannah Lewi) was made by reworking well known villa plans through collage of photocopied catalogue elements. The ATCO sheds which made up the main elements, are a very common prefab building used during construction. The project received an honorable mention and was to be published in the forthcoming Japan Architect special issue. This was later withdrawn due to space constraints in the publication.

Wagga Wagga Civic Centre Project

The design competition for the Civic Centre in the small New South Wales town of Wagga Wagga was finished in mid-1995. The project comprised council offices and chambers, a library and refurbishment of a theatre from the 1960's. The entries were then exhibited in Melbourne after my arrival. The project, subsequently built, was awarded to Melbourne architects Garner Davis. Our entry was published in *Architect WA* later that year.

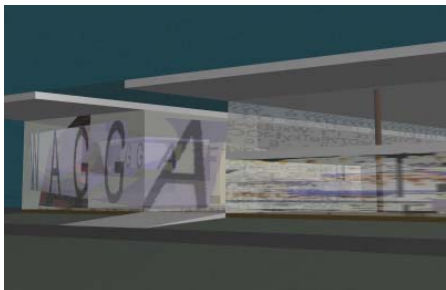


fig.31: Wagga Wagga civic centre, competition entry, 1995; library and civic offices.

twice, from Seidler's Rose Seidler House in Wahroonga (1948). The façade was a super-crude approximation of a Corbusian strip – perhaps the *Villa Stein at Garches*. Here, images from the architectural canon could be equated with the off the shelf junk of a shed. It was much later that I saw the Lacaton and Vassal houses (fig.18) which resonated with this work.

Around the same time we designed a project for the 1992 competition, The House with No Style – curated and judged by Rem Koolhaas. We designed a series of houses based on prefab generic elements – mainly site sheds. We conceived these as a remodeling, or de-modelling, of the 20th century canon – stripping these houses of their stylistic subtlety and testing the robustness of their diagram. Their surface was reduced to a wireframe of their shape. We asked, if style is invested in its surface, in its finesse, what is left when you take that away? Almost any plan diagram could be remade with boxes of various lengths from a catalogue of sheds, corrugated fencing, filing cabinets, and round concrete tanks. There were lots of examples, given ready-made type names: 'gehr-o-morph' (Gehry's Winton Guest House, 1987), 'hejd-o-morph' (Hejduk's Wall House Series), 'corrio-morph' (Edmond and Corrigan's Newman Iva House, 1982), 'dcm-o-morph' (Marshall House, Phillip Island 1988-1997). This was most vividly demonstrated by 'frank-o-morph'; a reworking of Falling Water, recast as a stacking and cantilevering of these ATCO sheds. Extracted from its beautiful site, the falling water is provided by a suburban version of Le Corbusier, standing with the garden hose.

The Wagga Wagga Civic Centre competition was finished in 1995. It was the last project I did before leaving for Melbourne – carried out with Stuart Harrison in a flurry of activity before leaving the West Coast. At that time questions about the impact of digital technology on architecture were quickly increasing. We were giving it some thought – thinking about how architecture would respond to digitisation. Our design for the Wagga Wagga competition was characterised by flat decoration – thin surfaces, tiles and screen printed glass. Our cue to use these techniques was a retained mosaic mural on the site's existing 1960s theatre – flat and scenographic. The forms were characterised also by their loose geometry. By this I mean geometry which is simple but not minimal; neither tightly and rationally orthogonal, nor sculptural or organic; a plan which inflects around its context but in approximation only. For us, the conversation on the digital revolved around resolution, and its part in fast and precise communication. At the time the web was growing fast but its speed of communication was still slow. PC processors were only beginning to get faster. We were attracted to the look of the low resolution – approximated curves, slightly pixilated surfaces – which might fall under the term 'lo-fi'. The jpeg file became an analogy – a format made for speed of communication. This file

Strange or unreliable clients, unfeasibly small budgets, speculations with few resources – these conditions shaped my view of the architectural process.

The university has been the most consistent environment for my practice – an armature for development. While the model of the practitioner academic has been well tested at RMIT, in my context the question still stands – what does the practitioner academic mean? The remote place – without a lineage or an apprenticeship, and where mentors have usually been remote – has also shaped my view. The Californian Gehry, Koolhaas, and Venturi formed the earliest environment. On the contemporary horizon, Atelier Bow-Wow and Lacaton & Vassal stand out as useful mentors.

The general opening question – not only, what kind of architecture do I do, but what are the conditions which allow me to do it? – remained unclear.

An old theme was resurrected through reflection – one which (for the Wagga Wagga project of 1995) I called 'lo-res architecture'. This is the information version of junk, and it enveloped a number of projects from my ongoing research.



fig. 32: View of the lane between buildings: the façade pattern is a text version of the image files.

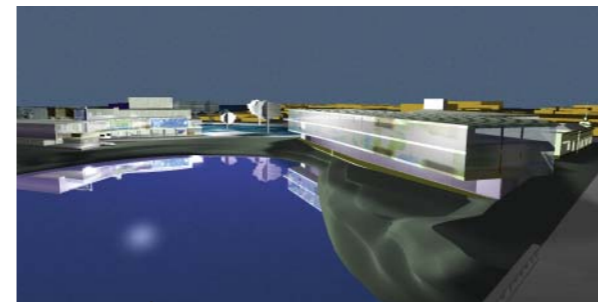


fig. 33: Wagga Wagga civic centre: view across the lake

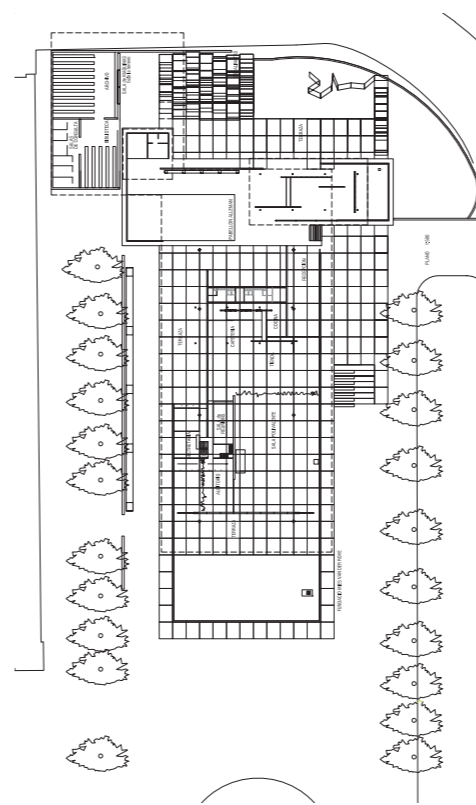


fig.34: Mies van der Rohe Foundation project, plan.

Mies van der Rohe Foundation Project, Barcelona



fig 35: Mies van der Rohe Foundation, Barcelona; Entry

format, which became common in the early 1990s, downgraded an image quality by digital approximation in order to shrink the file size. That served the task of pushing information around; particularly through the web. More precisely, the jpeg compressed information, and the associated loss of information was either difficult to perceive, or acceptable in its context. It facilitated communication. We contrasted these ideas with other digital techniques which allowed for complex fabrication – bending, carving, moulding with precision using digital files and simple robotics. It seemed to us that the more interesting focus of 'the digital' was communication; its speed and its breadth, the moving of information at a large scale. Could this architecture be more like a jpeg? Was it more akin to this, than to a piece of highly complex fabrication? This is just another version of the debate between the duck and the decorated shed⁴. Visual approximation had long been occurring on billboards, and complex carving had been occurring for much longer. It seemed though, that the jpeg re-opened the urgency of this debate because the scale of impact could be different; the level of communication could be more intense. It refocused questions of communicating, rather than form-making. Could we accept a level of flattening and approximation if it meant that more information could be disseminated? More information really meant bigger images, with more information on them, rendered at the scale of the architecture. It meant a façade could be simplified if that meant more easy application of such a façade, which would in turn disguise its flatness.

The Wagga Wagga project followed some image-making I had done while in Europe. Entitled Migrant Pictures, this work focused on information loss – loss through repetition, or through simple dropping out of information through masking. For example, by photocopying the image of Mies van der Rohe's profile hundreds of times I watched it slowly degrade. Faster, cruder and simpler tests followed with a kind of masking out of pieces of information, which rectified the image.

These thoughts on low resolution were carried into the Wagga Wagga project. Each of the buildings were, in a way, low resolution copies of the things around them – loosely, but not exactly, arranged around a lake shore. Excess information was like junk either picked up and used because it was convenient, or discarded because it was superfluous.

If there is a case of too much information in architecture – of a gem being turned into junk by over-reproduction – it is the Barcelona Pavilion. Its faithful copy on almost the same site in 1986 replaced black and white photos as the only existing visual record. That same year Koolhaas worked it over with the *Casa Palestra* for the *Milan Triennale*. Countless faintly similar versions exist, and countless textual reflections on its reflections. The Mies Foundation planned to locate its headquarters in the Pavilion, and ran a competition for a suitable addition.



fig. 36: Mies van der Rohe Foundation, Barcelona, View of the interior

Mies Foundation in Barcelona

The Spanish journal 2G sponsored an architectural ideas competition for an addition to the German Pavilion at Barcelona. The Pavilion was designed as the headquarters for the Fundacio Mies van der Rohe and with the aim of expanding the functions of the Foundation on the site, where the 1929 building had been replicated in 1986. Given the highly charged site, it was as much an exercise in confronting the question of altering an icon of the modern canon, and of the nature of authentic reproduction.

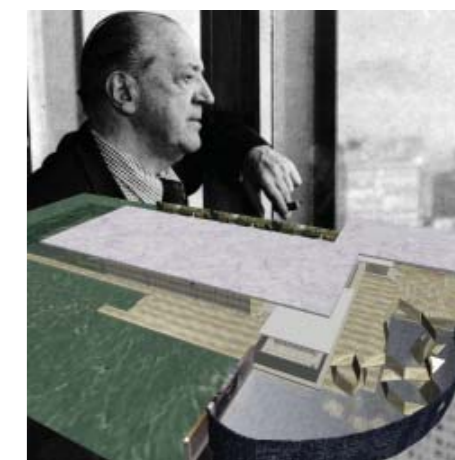


fig. 37: Mies van der Rohe Foundation, Barcelona, competition entry 1999. Aerial view of the project under the gaze of Mies.



fig. 38: Mies van der Rohe and Lily Reich, House in Glass, Deutsche Werkbund Expo 1927; the interior inside the large exhibition hall.

Our tactic for the project had two parts – first, to envelope the Pavilion in an over-scaled reproduction of itself; and second, to treat that reproduction as an intensification of the original. We enlarged the Pavilion by a consistent factor and rotated it ninety degrees in plan so that it pushed out into the Pavilion’s forecourt and placed it in a new interior. This of course is not unlike the *Deutsche Werkbund* interior of 1927, where the object with its own courtyard sat under a giant roof. The materiality of the new building was then intensified through saturation – as if you could take a building and photoshop the colour intensity of its surface, re-establishing a relationship where the new ‘original’ of 1986 seemed slightly small and slightly grey.

When I finally visited the building, some years later, I walked into a small rear room, now a Barcelona Pavilion shop full of books on itself and its author. Playing in the background was Madonna’s ‘Like a Virgin’.

Perhaps architectural rubbish is simply a way of seeing architecture through the lens of our immediate environment rather than from below the canonical plinth. This is what our cities are like – full of rawness. Not the romantic textured roughness of a rural barn, but the unfinished cheap rawness of a construction shed. The ordinary and the abject are always present in our field of vision, even if they are held out to the edge. They are evidence of what we have done, of what has really happened, and so they tell us more about our city than its exceptional moments.⁵

Pragmatism

The pragmatist fills out a tri-polar debate between rationalists and empiricists, just as they would fill a third space between poetic form (or delight) and pure technique (fitness).

So pragmatists see the Platonic tradition as having outlived its usefulness...When they suggest that we not ask questions about the nature of Truth and Goodness, they do not invoke a theory about the nature of reality or knowledge or man which says that ‘there is no such thing’ as Truth or Goodness. Nor do they have a ‘relativistic’ or ‘subjectivist’ theory of Truth or Goodness. They would simply like to change the subject.

Richard Rorty, *Consequences of Pragmatism*, University of Minnesota Press, 1982

Junk also tells us about time. It is either evidence of something discarded by others, and kept by some, or evidence of some form of recycling, even if it’s accidental. Buildings of this category are also evidence of things that might happen; they tend to be of short life or under constant threat of disappearance. Most importantly, they are open to be rectified; re-worked or re-inhabited in the most savage way. Somehow these things are more accommodating and more open to the noise around them. They are more part of that noise.

With his own house in California, Gehry provided us with an image where not everything was completed by his own hand. There is both the past of others (‘the found house’), and a future hand in what is left unfinished. Gehry once claimed to like unfinished buildings and buildings under construction; that they are exciting because they are rich with possibility, of a future, or of several possible futures. They are packaging waiting for inhabitation. Surely it is a sign of intelligence to appreciate the refuse around us and find a use for it. Surely there is some value in leaving things for someone else to do.

‘I find this idea of beauty a meagre and not very ingenious invention, and especially not very encouraging for man. It is distressing to think about people being deprived of beauty because they are too corpulent or too old. I find even this idea – that the world we live in is made up of ninety percent ugly things and ugly places, while things and places endowed with beauty are very rare and very difficult to meet – I must say, I find that idea not very exciting. It seems to me that the Occident will not suffer a great loss if it loses this idea. On the contrary, if it becomes aware that there is no ugly object nor ugly person in this world and that beauty does not exist anywhere, but that any object is able to become fascinating and illuminating, it will have made a great stride. I think such an idea will enrich life more than the common idea of beauty.’

Jean Dubuffet *Anticultural Positions Logos Journal Logos 5.2 – Spring/Summer 2006* (Lecture given by Jean Dubuffet at the Arts Club of Chicago, Thursday December 20, 1951).

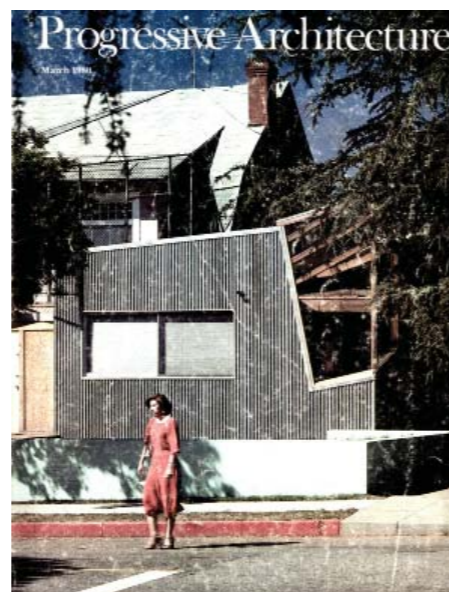


fig. 39: Frank Gehry, Gehry House 1977, Progressive Architecture, March, 1980.

5. Kaijima, Kuroda, Tsukamoto, 2001, Made in Tokyo, p.9

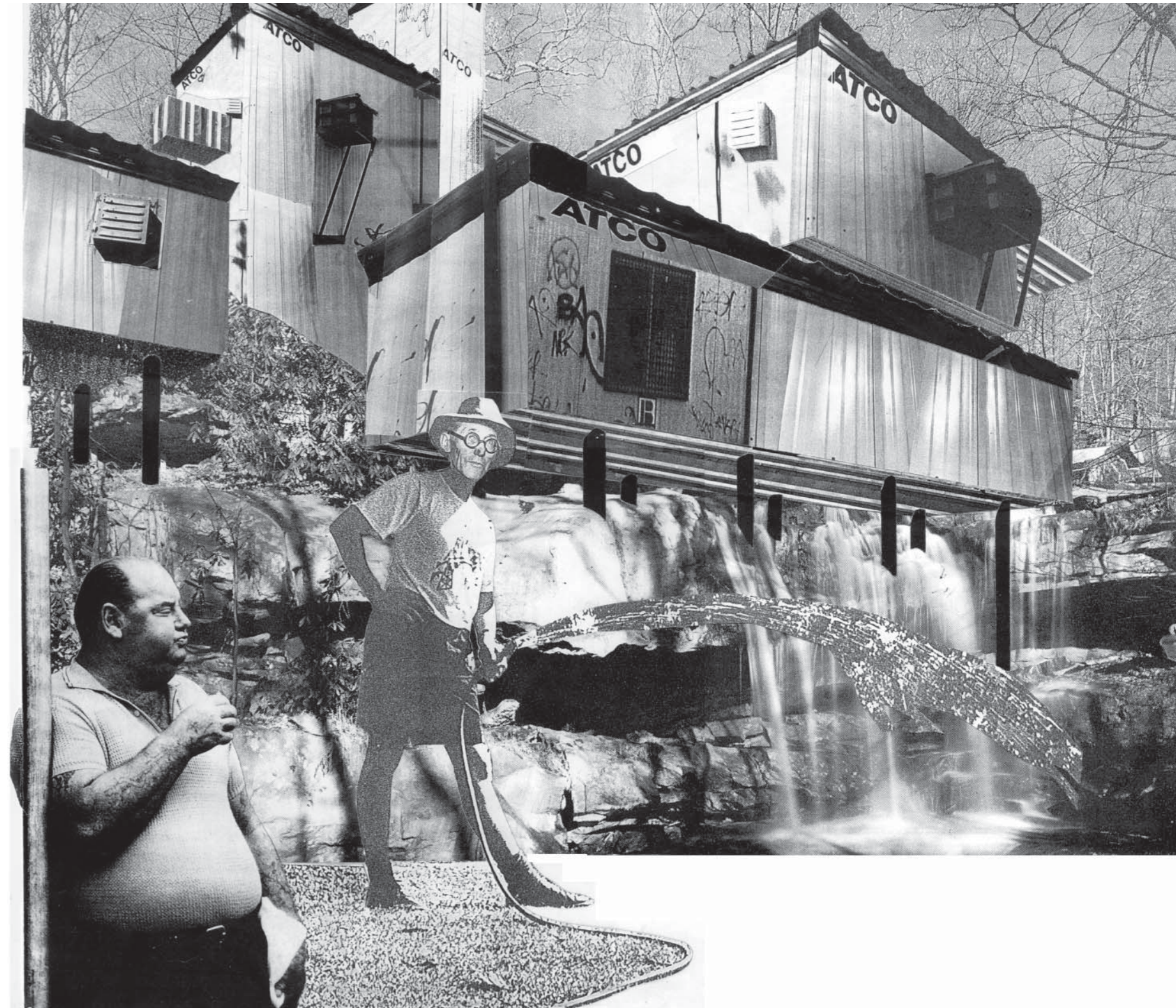


fig. 40: House with No Style: ‘Frank-o-Morph’ version: Wright’s canonic image of Falling Water recast with Le Corbusier providing the water.

fig. 41: House with No Style: plan diagrams. Versions before and after de-styling:

A: 'hejd-o-morph' (John Hejduk Wall House, one of 40 designed 1967-73, one version built in Gronigen, 2001)

B: 'gehr-o-morph' (Gehry's Winton Guest House, Minnesota, 1987; sold and relocated to St Thomas University, 2009)

C: 'corri-o-morph' (Edmond and Corrigan Nerwman-Iva house, Belgrave, 1986)

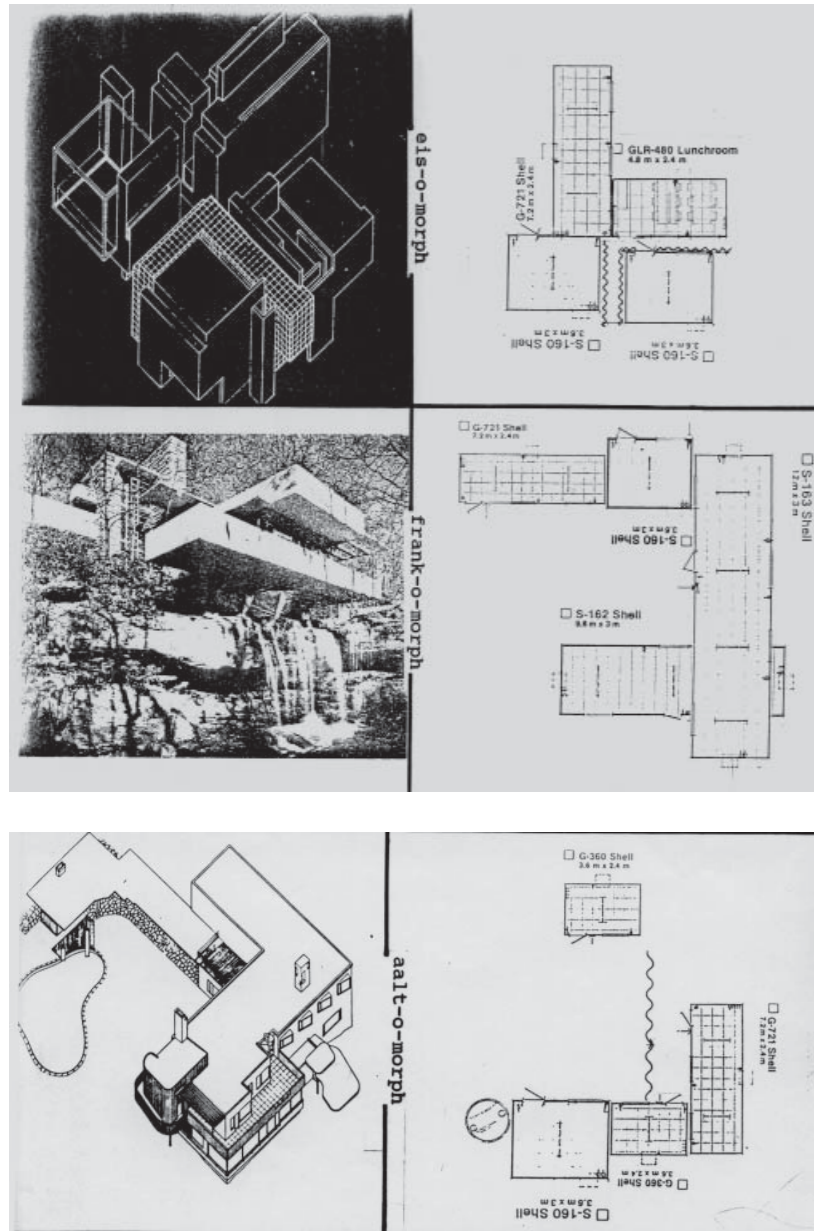
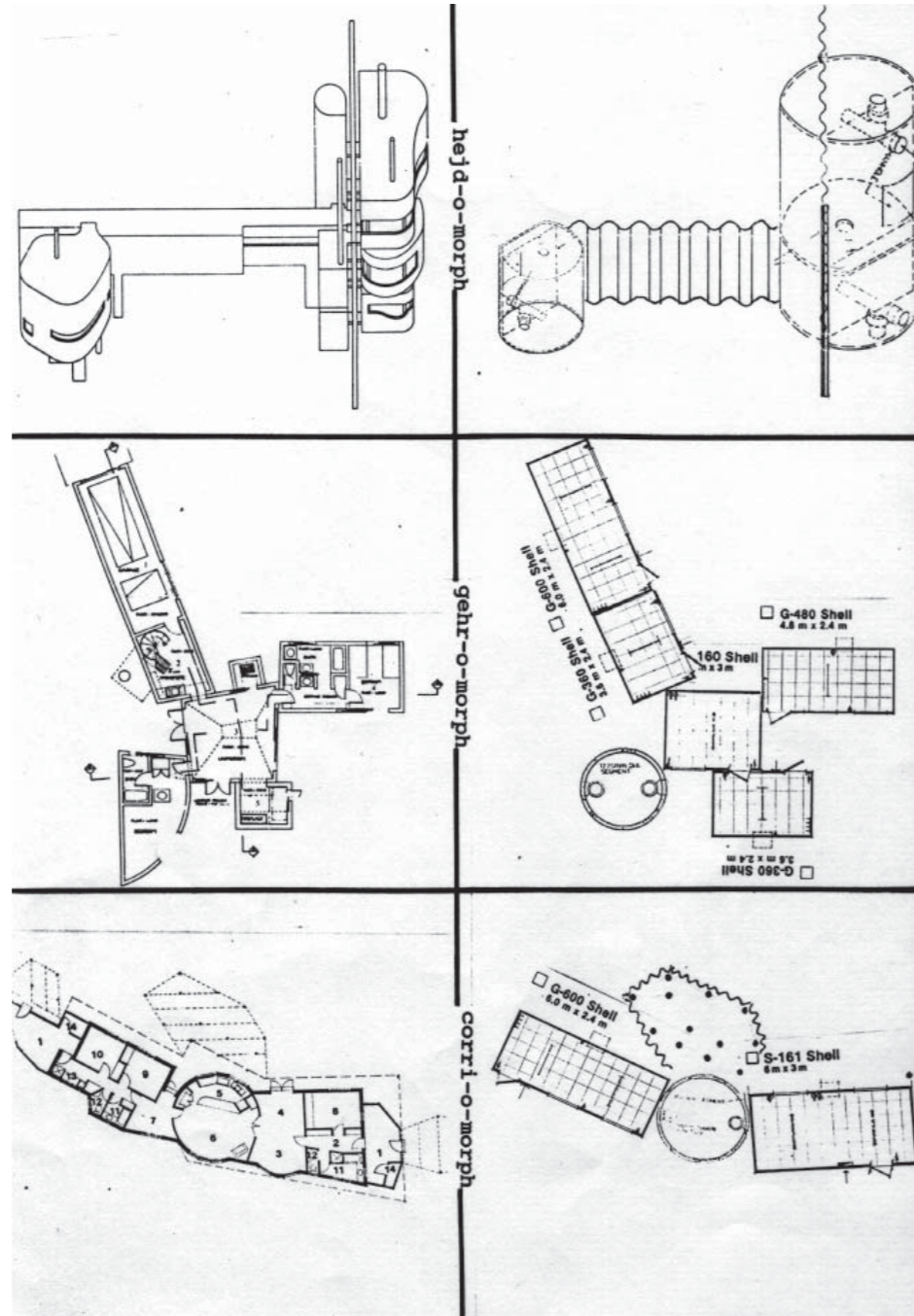


fig. 42, 43: ZJ House exterior view

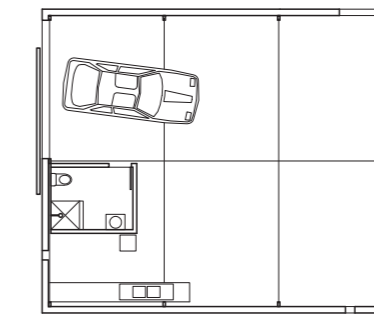


fig. 44: ZJ house floor plan.

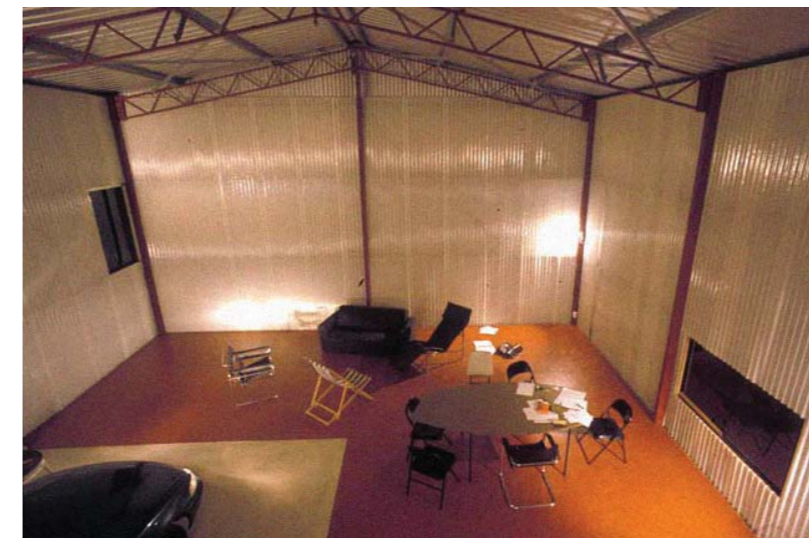


fig. 45, 46: ZJ house (1992) interior

The bedroom loft mural is a resampling of the mural on Seidler's Rose Seidler House (1948)





Longevity

The length of the process>



fig. 48: Louis Kahn, Salk Institute, La Jolla, 1959-1966, photographed 1990.
The 20th century image of the timeless ruin contrasts with an understanding of longevity as an ongoing process.

fig. 47 (opposite): Pantheon, Rome, 1st century AD, photographed 1991.

The results of architectural design (buildings) often last a long time. As they age, they can even acquire the sense of being permanent. This illusion of the permanent, timeless or eternal, is a confusion with permanent newness – an always present which moves with the designed artefact. Longevity should be viewed as the opposite of permanence or the timeless; instead it is a quality that marks the impact of time, and the transformations that time brings to it. Longevity is a quality that impacts on the use of resources; it forces us to think of what to do with the things we already have, and to consider the design process as projecting the use of resources into the distant future. Longevity is connected to old things, precious and durable objects; but it is also related to junk. Junk might come from ephemera, but its existence as junk suggests it has stayed around longer than expected, perhaps through re-use. Someone has failed to throw it away; someone else has found it; perhaps someone wants to extend its life. Longevity is a broadening of junk.

The architectural design process is not usually viewed in this way. My experience in the design practice of Denton Corker Marshall in Melbourne is an example. There I watched the design process carried out as though it was a moment to be frozen. The design moment generally appeared as an inspired sketch, and the process from then was about faithfully capturing that moment. Often the inspired sketch was captured in a model, then that model was captured in a set of construction documents, and those in turn were captured in a building. That process, however, was always approximate. The best one could hope for was to capture the sketch, but never to exceed it. The built outcome was almost certainly disappointing. The design moment is closed to noise, so the long and messy process of making architecture could never live up to the purity of the inspired moment; and the rich opportunities of that long and messy process are silenced.

My perception of design processes is that this is a common problem – architectural design is understood as a record of that moment, and the architectural object is generally referred back to that moment. Buildings are talked about in terms of their creation, rather than their current state of being, or their effects. A possible response to that, is to lengthen the conception of design – to stretch the process out, and include more of its life. Rather than see a design as a moment to be preserved or accurately translated, we might think of a longer process which continues on well after the architects have backed away from the process, and probably as beginning some time before they arrive. The job of the design might be to instigate a process which continues on and proliferates after the designer has departed. These were architectural questions I began to see as relevant to a number of architectural projects.

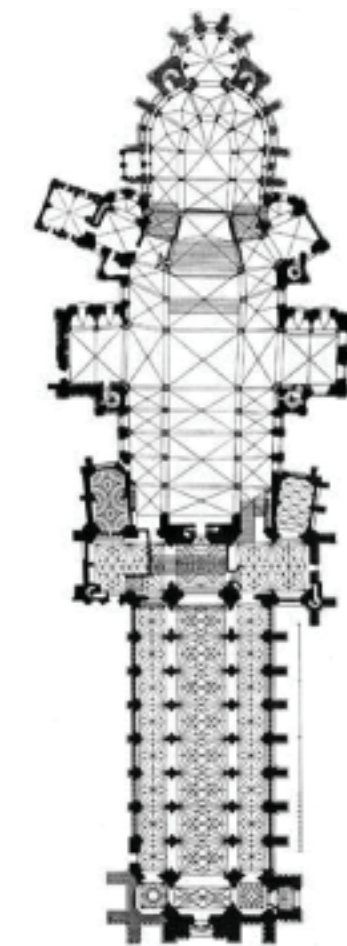


fig. 49: Canterbury Cathedral; rebuilt several times, textured by weather and extraordinary events.

1. CANTERBURY: KATHEDRALE
Canterbury Cathedral Plan, from G. Dehio and G. von Bezold, Die Kirchliche Baukunst des Abendlandes, Stuttgart, 1887-1902

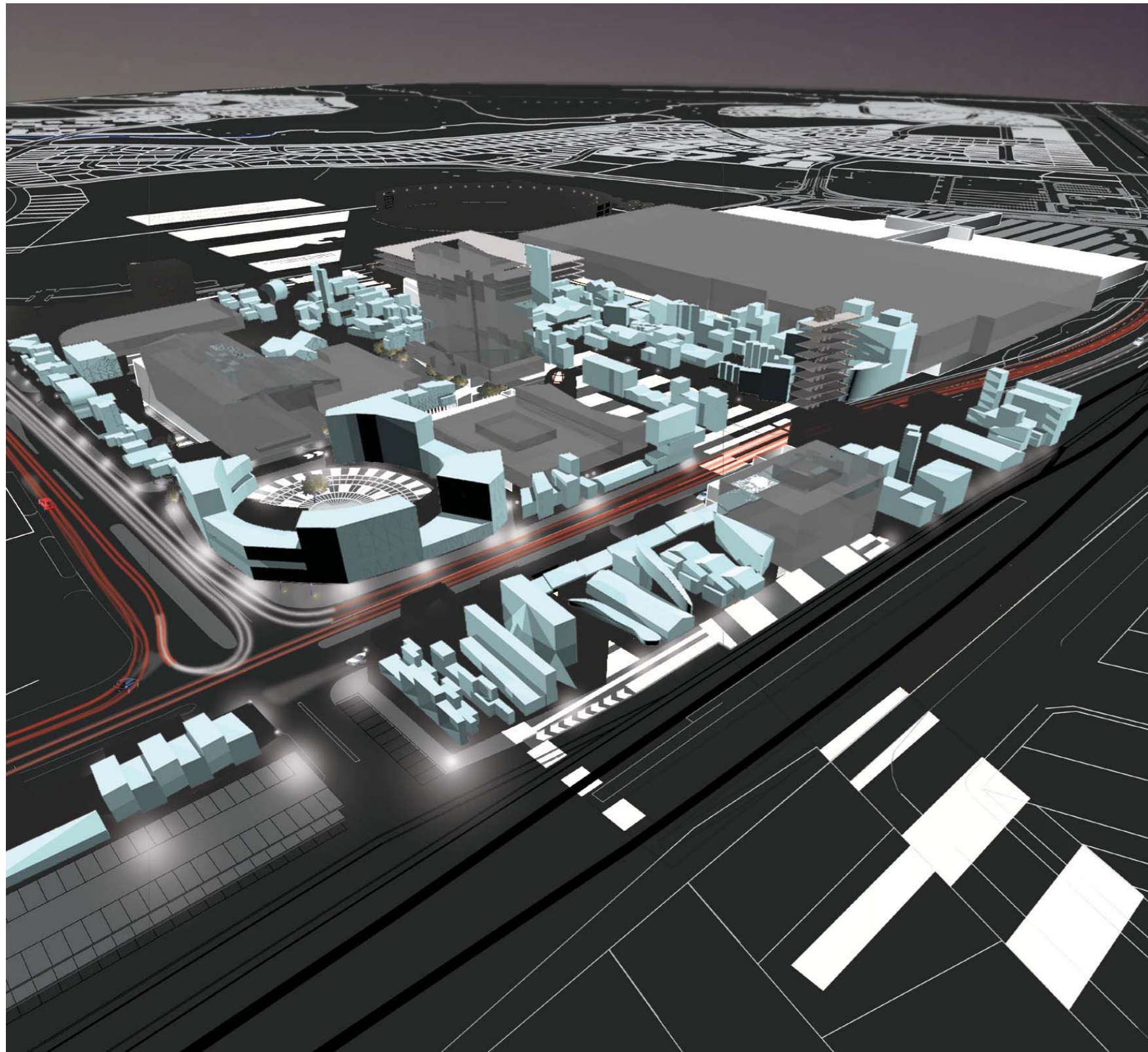


fig. 50: Broadmeadows Proposition 3067, 2006. View of the site showing mixed scale insertions.

fig. 51 Gilbert and George confront the distracting problems of the author and collaboration; two people acting as one artist, making their own signature more complicated. Good manners and neat suits make them seem impersonal, detached and unlike artists, and, less revealing. Paradoxically they are visually laid bare, able to speak off the page directly because they are there on it; putting themselves on the line, to talk about the big questions—things we are all thinking about and seeing around us. (Death politics race religion.) We want to speak to you, and we were willing to suffer ridicule, boredom, fatigue, in order to get closer to an audience. This is the message of the singing sculptures, the videos, the giant pictures. 'We are here'.

Gilbert and George, Here, 1987
 source: Gilbert and George, Tate catalogue, 2007, p118

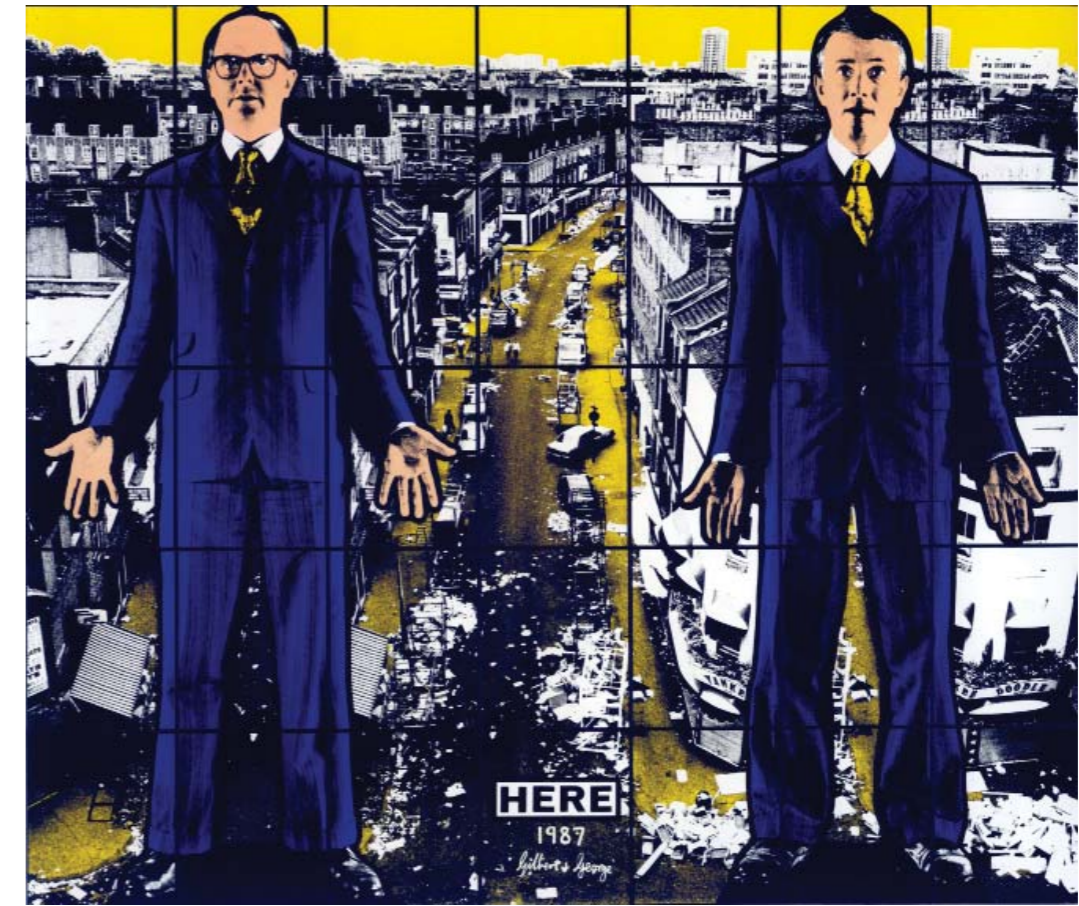
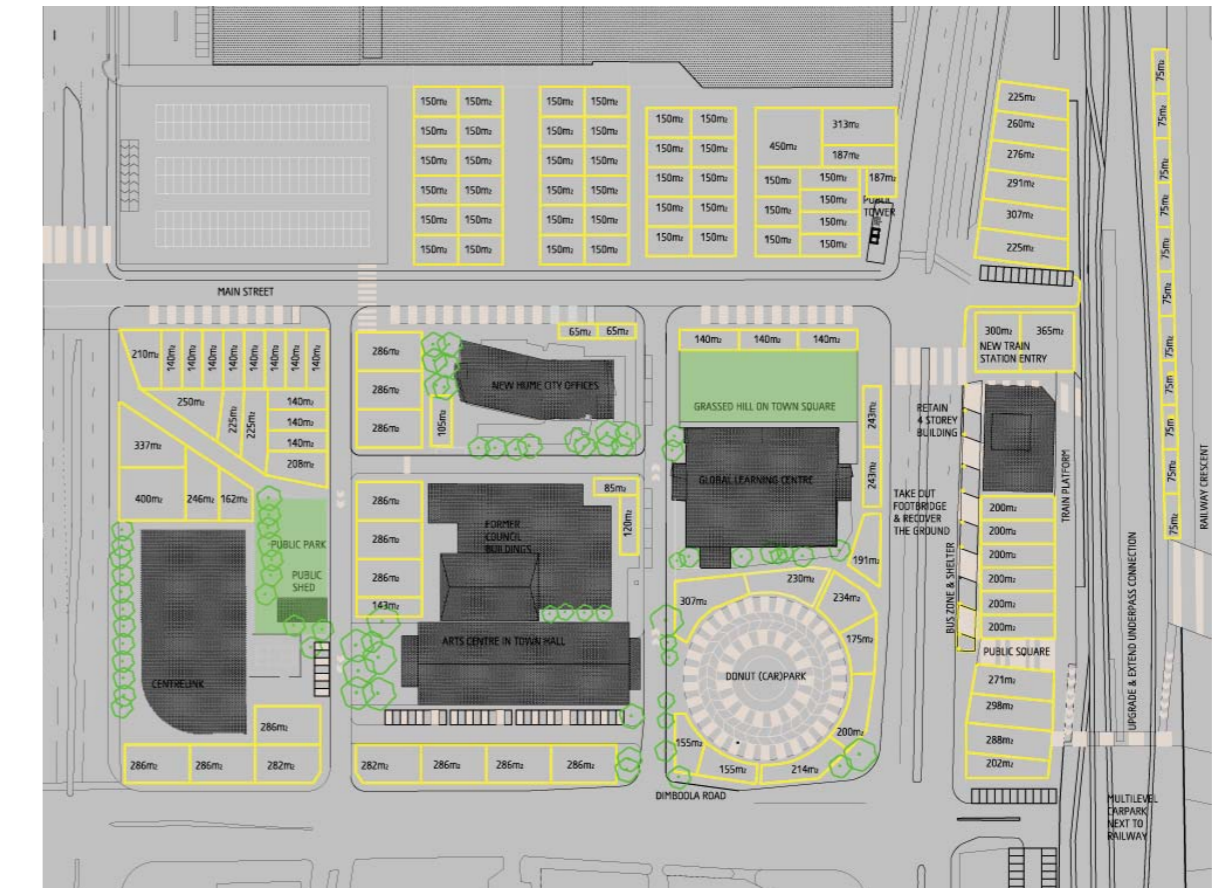


fig. 52: Broadmeadows - plan view showing the small subdivisions (yellow) among the several larger built blocks.



GRC2 Modes of Collaboration (2006)

The practice structure of the newly formed Antarctica (with four others and myself) prompted a discussion about collaboration; asking questions about collaboration both as a practice environment and a design method.

In its very early stages, the agenda of the practice and its qualities were unclear and this suited us. Although even at this early stage, I was specifically interested in the concept of co-authorship. By this, I mean an intense co-authorship which, unlike a group structure, leads to the identity of the individual author being blurred or altered.

Art practice has the best examples. Picasso and Braque jointly inventing and reinventing Cubism, or Cindy Sherman's self portraits (a virtual double); and especially, Gilbert and George. What is the relationship between a group and a co-author? What is the relationship between this, and the collaborative process of architecture?

Three projects at Antarctica started the conversation on collaboration. The East Darling Harbour design competition, Proposition 3016 at Broadmeadows, and Housing for Diversity in Perth. In each case the design process and its outcome is entangled by the fact of the group carrying out the projects. The physical environment for the projects became equivalent to a collaborating partner.

However, unless I convey my own role in a collaborative process, unless the liveliness and the bitterness of collaborative experiences is there, the result is deadness. That is what happened at the second GRC. For a time, and because of this, I set thoughts on questions of collaboration aside entirely.

East Darling Harbour project

The East Darling Harbour project was an open two stage international competition for the redesign of a site adjacent to the King Street Wharf in Sydney. It included the construction of around 500,000 square metres of built floor space, as well as large areas of public open space. The site is a reclaimed wharf created for loading docks and a passenger terminal for ships. In contrast with Sydney's highly varied harbour shores and finger wharfs, it stands out as nearly a kilometre of straight land edge. The project was launched in 2005, with its eventual winner being Sydney architect Phillip Thalys. Selected entrants (including Antarctica) were exhibited at the Sydney's Museum of Contemporary Art (MCA) in 2006. To date the project has not been realised, though recent public debate has followed the awarding of development bids to Lend Lease, which include designs by the second placed entrant, Richard Rogers Partnership.

Broadmeadows: Proposition 3047 Project

Proposition 3047 was the first of an annual architectural ideas competition run by AR journal in Australia. Its subject was the civic precinct of Broadmeadows - a low density suburb and low socio-economic environment north of Melbourne. Nevertheless it is well located in relation to rail and the airport, and has been identified in government policy as an activity centre. It is currently dominated by a large suburban shopping centre and its adjacent car parking. The local government was looking to rejuvenate the area through both public buildings and small business opportunities, in the mould of incubators for innovative businesses. We revisited the project in late 2008 for the IABR Squat City competition. Antarctica collaborated with Melanie Dodd for the project.

We viewed the East Darling Harbour project as situated being somewhere between a market-driven master plan and an open-ended mega-structure. The central question was how to produce a singular framework which could be viably filled in by others - a three dimensional land sub-division, which nevertheless read as a coherent architectural gesture. That coherence seemed to be a necessary response to the powerfully monolithic tarmac of the site - a rare piece of constructed, linear Sydney shore. The coherence of such a gesture would be tested over time - as it was inhabited and in-filled by a city. There was an analogy between this process and five of us at Antarctica, attempting to co-author a project for the first time. Finding a diagram to which each of us would put our names, and which would survive our ongoing design process, was necessary to move forward, was a test which needed to be robust. Conceiving of a diagram which would survive the 'Sydney process' - with bureaucrats, developers and its eventual inhabitants all taking ownership of the spaces - was similarly challenging. It was here that we began to think of that diagram as infra-structure for the buildings.

The design for Broadmeadows' Civic Precinct was a comparable situation within a different context. The situation was a flat suburban environment; the agenda, that it become more desirable to a wider range of new activity. It was an attempt to incubate new business inhabitants into an activity district of big box retail and large car parks. In this case, the infra-structure was to be slowly filled in over time. This would be done with an atomised land subdivision, making parcels small enough to be treated like suburban house lots. The tactic meant that these lots could be acquired by a broad base of owners and the land slowly accumulate buildings. It was a kind of start-up urbanism - the opposite of a master plan since it envisaged not an end point, but a starting point. It allowed and promoted accretion. The small parcels aimed to give a second scale to the environment of big, dispersed buildings and car parks - a second scale of ownership as well as of physical form. Like all start-ups, the desire to fill the site with new and vigorous enterprise isn't always matched by the reality that follows. We intended to spread the risk, placing it in the hands of small and private operators, and as many designers as possible. We predicted that building wouldn't happen immediately and in the meantime, the marking out of the sites on the ground would provide places for temporary and informal operations. We planned no envelope or height limits - these were dictated by the small site, and the social conditions which would make them viable.

In a radically different context to East Darling Harbour, it asked the same questions. How does the fact of realising a project over a long time affect its form? How can collaborative strategies impact on the design process and extend that process into the length of its realisation and lifespan? The infrastructure present in each of these - in one case a ground level tarmac and in the other a concrete frame - requires a large cast of agents to complete them, to distribute the design process and keep it going after the infrastructure is done. The first design gesture is just one layer of several; handed over to others for further layering.

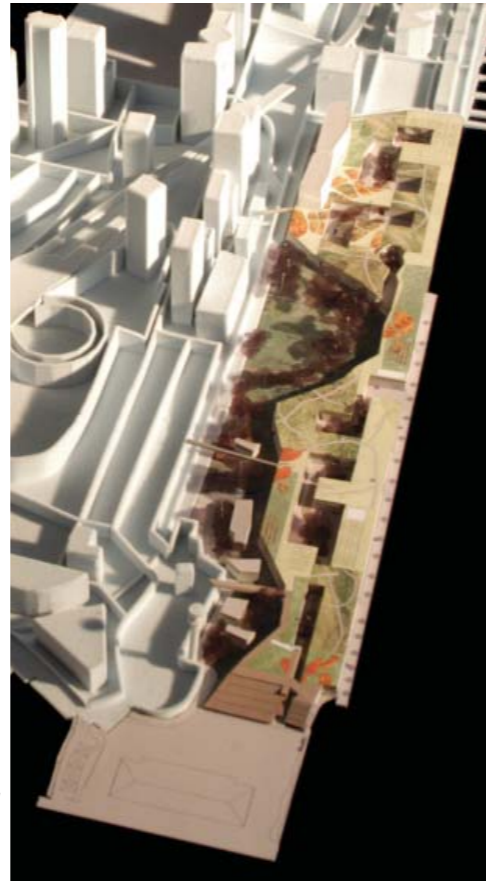


fig. 53: East Darling Harbour, Sydney; competition project 2005

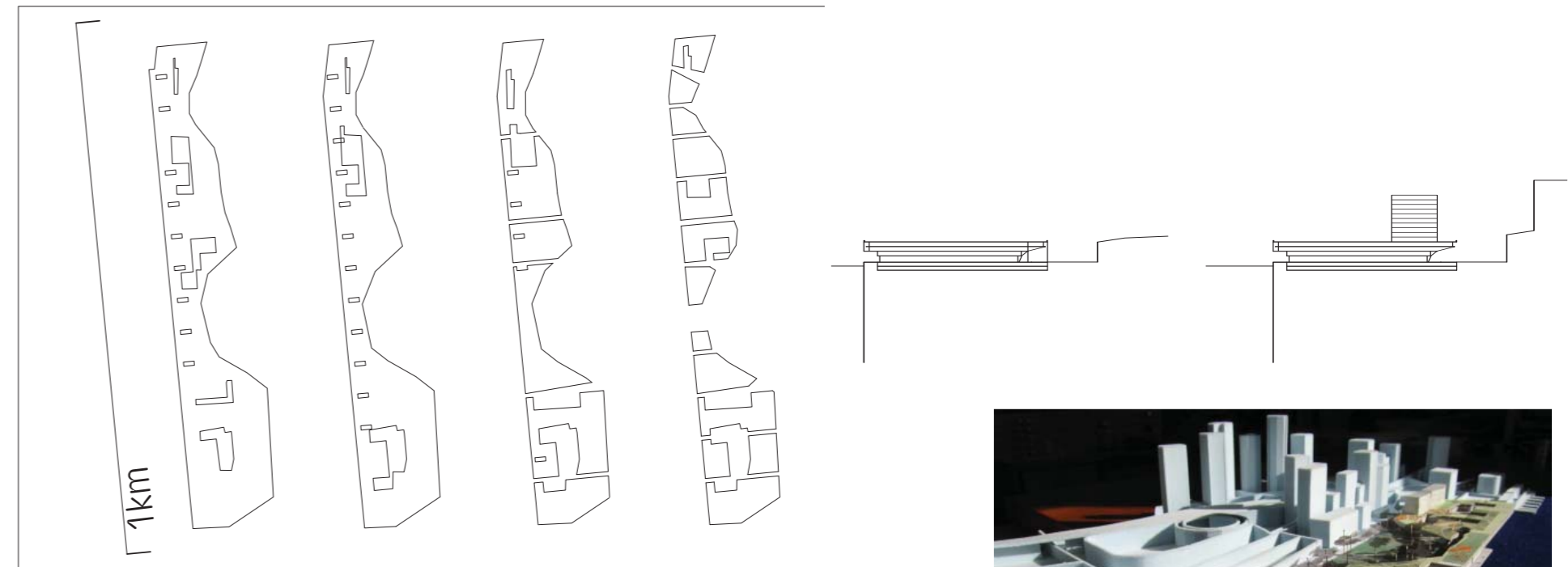


fig. 54: East Darling Harbour; plan & section diagrams



fig. 56: East Darling Harbour

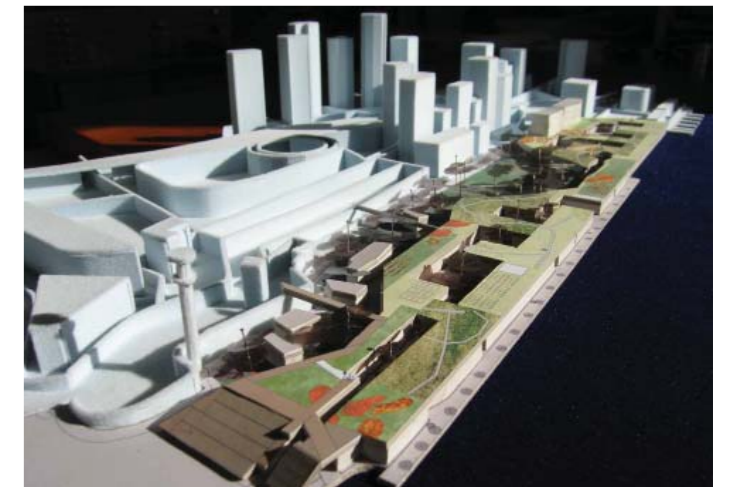


fig. 55: View of the competition model



fig. 57: East Darling Harbour-retaining the rare straight and hard edge to the waterfront. The view imagines a shell waiting for habitation.

Northbridge Project

An open competition entitled Housing for Diversity was launched in 2006 by the West Australian State Government. For the project, Antarctica collaborated with Diego Ramirez, John Doyle and Daniel Yusko. Located in inner urban Perth, the Northbridge site is vacant land where 19th century built fabric was demolished for the construction of a freeway link beneath it in 2003. The brief specifically targeted housing to replace the cheap rooming houses lost in the dispersal and gentrification of the area. The task was then to provide small dwellings of twenty square metres, and to begin the process of reconstituting the street. The competition was won by Perth firm CODA. This and our short listed entry were published in Architecture Australia in February 2006.

Mapping

Designed in 2006 for a strip of Perth land denuded by freeway tunnel construction, the Housing for Diversity project aimed to replace disappearing cheap boarding houses in the Northbridge area. The focus of Antarctica's design was the urban space outside the housing; the relief from the dwelling, that urban place on a good corner that might make living in the twenty square metre bedsit above it worthwhile. The tiny dwellings are arranged around a courtyard and also the street corner – but to make a big, open and loose space, they are pulled apart and lifted up over the corner. That place under the resulting large canopy has no fixed program, except as space for a loose market that might operate at certain times. It is an excuse for an open space of some monumentality, of some robustness. Resuscitating an urban condition here involved handing over some empty space and waiting for it to be filled – and probably not immediately. As an entry it is overblown – excessive in relation to the building that holds it. It needs to be filled to make sense, and so needs more players, and more time.

Those three architectural projects formed a chronological series; their thematic comparisons were less conscious at the time but the subject of later reflection. The form of the public spaces created in these projects tend to be loose and open. I gave this type of space further consideration as I mapped past and current design work in preparation for the GRC process. This mapping exercise revealed a tendency toward spaces which were indifferent to program and to scale. In particular these were sheds and huge flat buildings, forms which did not compose functions in an orderly fashion but accommodated them equally well or badly. In the case of the large projects, they were so over-scaled that they barely made sense as a single object. An example was the Canberra Public Space competition project of 2001, in which the plaza space was so large, so bare, and so isolated, it needed a vast crowd to complete it. It was designed for the event which might not happen for a hundred years, and meanwhile, it did not let us forget that it was waiting for that event. Unlike the urban designer's human space, it refused to make us feel comfortable in our passive recreation. For the Grand Egyptian Museum project, the planned footprint was so big that the programmed functions, vast as they were, could not hope to fill it. The majority of the form was unfilled excavation and perimeter, able to be expanded to an enormous degree, coping with an institution sized for a distant future, completed by an unknown designer. The interiors, like many vast museum spaces, were shells for an endless theatrical fitout. The loose space described in the mapping process has implications for longevity; spanning as it does the gap between two poles of architecture treated in time. The permanent, driven by type, and the ephemeral, responsive space of social processes. The tension between these two is perhaps where architectural longevity lies, since it describes the capacity for form to negotiate with temporal flux.

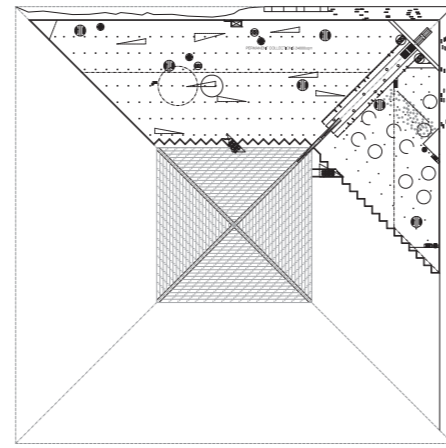


fig. 58: Grand Egyptian Museum project (Crist & Harrison 2002); floor plan. The 400 metre square is only partially filled with program.



fig. 59: Grand Egyptian Museum aerial view with the Giza pyramids



fig. 60: Grand Egyptian Museum view of approach



fig. 61 & 62: Canberra Public Place project (Crist & Harrison 2000)



fig. 63: Northbridge Housing for Diversity Project, Perth WA, 2006, view from the street corner of the loose undercroft.

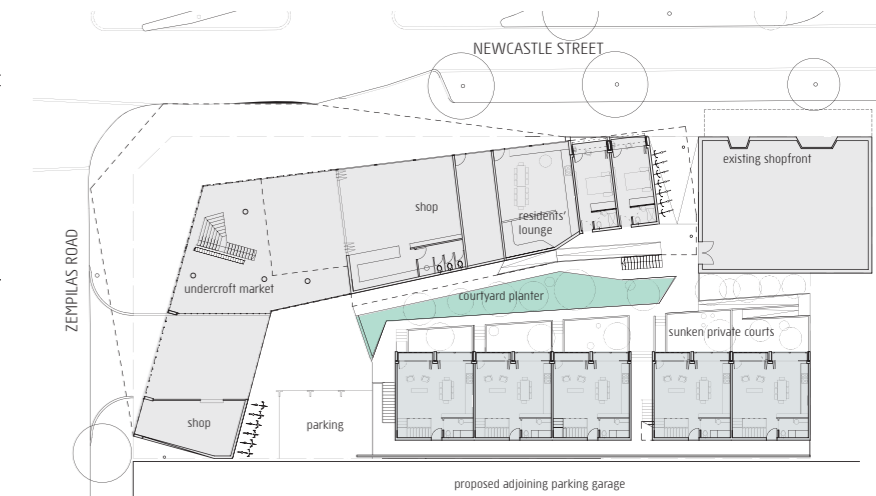
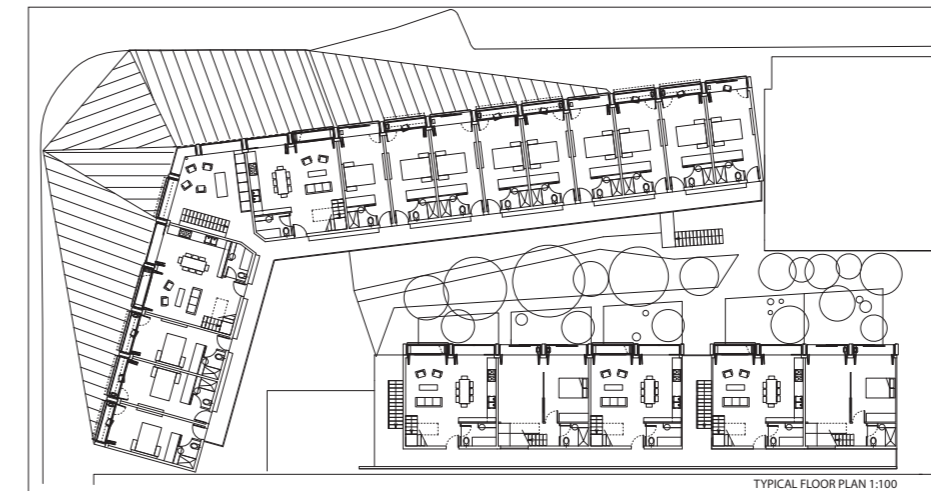


fig. 64: Northbridge Housing Ground and First Floor Plans.



fig. 65: Northbridge Housing Street Elevation.

NEWCASTLE STREET ELEVATION 1:100

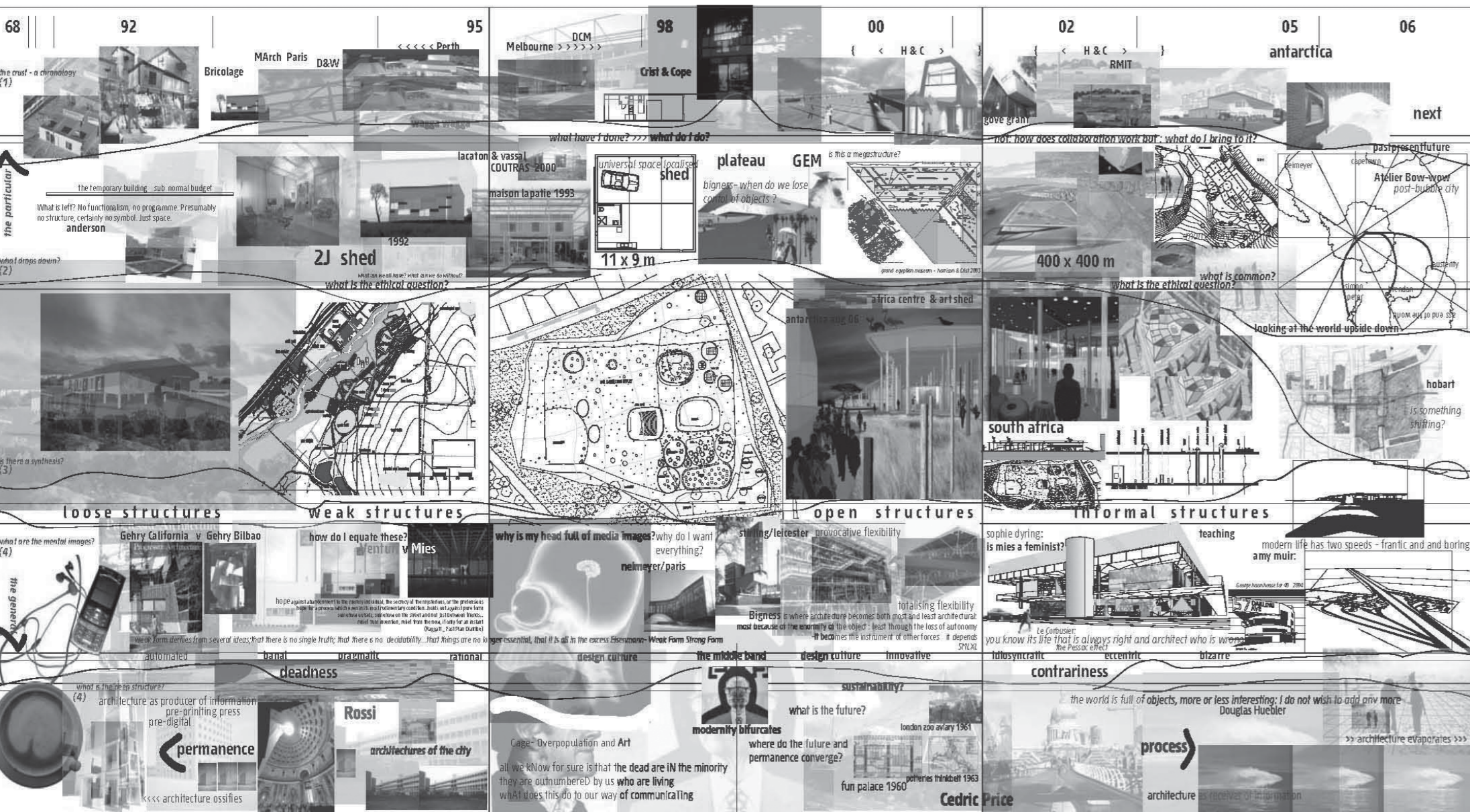


fig. 66

GRC3: The Mental Map: Loose Space & Longevity

In Spring 2006 I distilled the thinking of the projects to find deeper themes in the chronological noise. This was done by visually mapping them – first laying down an edited chronology, then by further editing and filling, looking for an overarching thematic structure in the images. The findings of that process foregrounded a split in scale between small commissions and large speculations through competition; and a second bifurcation provided by questions of time. The 2J House, for example, is small but scale-less. It is a blank shed. The Grand Egyptian Museum is

enormous and equally scale-less. It is a shed on the scale of a plateau. The Southbank South Africa project was designed while identifying that condition. In each case, scale contributed that condition. In each case, scale contributed to or amplified the looseness of its space. That is, a space needing to be over-scaled relative to its program in order to remain loose – empty space contained within a finite object. A shed, through its inert form and span, can accommodate a fluid space which is indifferent to its program, without expressing that fluidity. It is the same with the Egyptian Museum hangar; its space is scale-less and perhaps

open-ended, its form is inert and robust. It strives to be indestructible. These are questions confronted in some earlier supervised student projects: that is, the robustness that comes from loosening the relationship between program, space, and its environment. The bifurcation is further generalised to longevity, and the ephemeral. To exaggerate longevity on a trajectory through the permanent, the normative, and the timeless, arrives in the territory of Aldo Rossi or Louis Kahn, transcending function through type, whether historically or mystically formed. But what is

Southbank Project

This architectural design competition was for a large and ambitious museum (the Africa Centre) and a new town near Stellenbosch in the Western Cape of South Africa. The aim was to create a new settlement on existing rural land. It included an overt agenda of environmental sustainability. The aspirations for the museum evidenced in its brief were for flexible space – open in access, and open-ended in potential functions.¹



fig. 67: The Southbank Competition Site

Work on the design coincided with the production of the mapping piece associated with the third GRC². Work on the two were roughly parallel and informed each other. This design is the first instance where I have consciously worked through the idea of loose space described in the map. It foregrounded spaces which were empty, or thin in their program; and whether very large or modestly small, were like sheds.

The loose town >

The building program for the new town which would contain the Africa Centre called for 150,000 square metres of space in a typical range of programs for housing and public buildings. Its site stood opposite an historic settlement by the Eerste River, and near a rail line. The site is on flat land, with views to hills in the South East. With little concrete knowledge of the place, and a location bounded in part only by fields, starting became the problem. Following the clues provided in the brief, we began in a series of incremental layers, namely:

- 1> Defining a strip of land on the South river bank as a nature corridor.
- 2> Defining a more structured park adjacent to this corridor, as a buffer strip.
- 3> Locating the Art Shed in this park (along with some sporting fields and car parking) as a startup building, a temporary gallery to be constructed well before the other buildings. This would form phase one of the development. Phase two was to structure the town around existing tracks marked out from rural use.
- 4> Identifying the four tracks (extending from bridges crossing the river) which converge at a bend in a track part way up a hill. From there the tracks form two straight routes South and East. These would define the first development and the hook would define the Africa Centre location.
- 5> Defining a strip of land for intensive agricultural use. A portion of this, the land along the four tracks would contain building, interwoven with the agricultural fields.
- 6> Defining a parallel strip of dense mat building distributed along the axis parallel to the river. The building mat would be a three storey courtyard type, with a roof surface planted for intensive agricultural use. The building interwoven with the fields would be treated similarly.
- 7> A final principle was asserted; no definition of building type or program was offered, and no indication of a strategy or masterplan for future expansion. Instead, these would be open to the next layer of development, or a future series of layers, responding to the first set.

1. refer p. 43 extract cited in
(http://www.southbank-competition.org/projects_southbank-competition_home_e.htm)
2. refer p. 36

the end game of this process, what is its logical extension? A dead end perhaps, a city of the dead. Architectural form left on its own, without social transformation, is ossified. Conversely, Cedric Price, almost contemporary of Rossi, (Price 1934–2003, Rossi 1931–1997) equally offers us a lesson against modern functionalism with ephemeral mobility. Mapping form onto function only freezes it – it either stops society being mobile, or becomes redundant as society moves on. Designing for a society which has not yet arrived, for a contingent future, we can almost do without buildings. Extending that trajectory, we could let building evaporate – let it exist only in the event of an experienced moment of momentary relevance. A cloud of atomised vapour – like Diller and Scofidio's Swiss Pavilion – is the caricature of this end point. At the polar ends of a question about form in time, neither end of the spectrum is satisfactory on its own. Ossified or evaporated, architecture can not fully account for the social, giving it neither a permanent locus nor agile responsiveness. The centre position between the two might be no more useful – the familiar 'neither/nor'. The tension of the two ends is interesting; the 'both/and' position which embraces the ends rather than the middle. The mirrored face of George, looking both ways at once, marked that thought. In the centre of the overfilled map is the question: 'Why is my head full of media images?' (Ian McDougall) – a reminder for a child distracted by television and taught architecture through so many pictures. It is a reminder that this argument relies on the exceptions. There are things on this map I can not fully account for, which are not part of the argument, yet are part of my mental space. They come from Stirling, from Neimeyer. They are things I need to account for rather than discard.

The Africa Centre Museum >

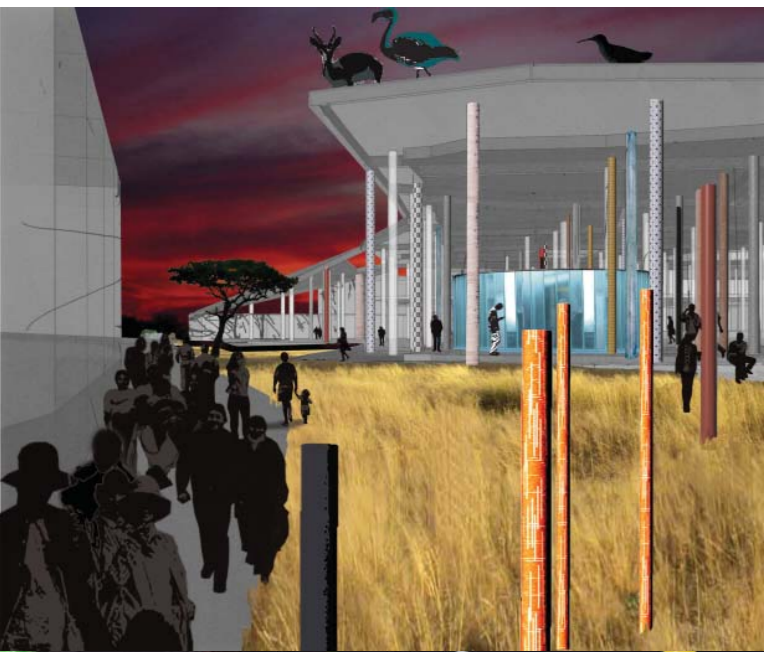


fig. 68, 69, 70: The Southbank project, South Africa; study images of the Africa Centre and Art shed.

The Ground & the screen >

For the Africa Centre, I worked on developing a space which would equally infer any number of spatial possibilities. Thinking of its image in plan, it was one that might not easily infer a function. It might not give up its secrets, it may not tell you how to use it, or what its functional intentions are. Rather, it might appear more as an abstract drawing, and less as a diagram of spatial function. I was eager to avoid the spatially inert, neutral and empty hangar which is an obvious outcome of a flexibility game. I viewed that to be as constricting as a highly programmed or figured space, since its singularity would dominate and determine the order of what follows. Rather, the flexibility was interpreted as a functionally ambiguous arena, where possible uses were asked to negotiate within a charged space. Given the intelligent and thoughtful curation of the museum detailed in the brief document, I assumed that what might follow programmatically would be richly varied. This was enough reason to imagine layers of the museum being accreted after the architectural gesture was in place; and building work continuing for the life of the institution.

A series of points punctuated the plan, making a constellation on paper which inferred a floor plate. These points formed into a catalogue of elements serving the space. They became structure (columns); columns of services (ducts for water/ventilation/power); pods of program varying in size, from rooms to cabinets, shafts of light above, floor lights below; and furniture. I tried to treat each of these as similarly as possible – droplets of varying size scattered on the floor. As a two-dimensional drawing it was relatively easy to disperse the pattern, to camouflage the functional and spatial divisions, to lose an easy sense of recognition in a forest of dots. The test was its effect as experienced space.

In this pavilion type the roof remained the consistent and dominant element over an atomised set of elements in the space. It could remain as determined as an orthogonal, universal plane despite its interior, just as the Egyptian project had deliberately done with its perimeter. The compositional test was then to inflect this roof canopy as though by an imagined context; to test how little distortion from a default orthogonal was needed to avoid it seeming inevitable – the type of inevitable or universally pure form which might result from a square. The aim was to be neither rational nor organic, neither natural nor universal. Similarly, the floor as an element needed to resist treatment as a separate plane above or separate from the ground; nor appear as seamless with ground. Neither natural nor universal; but it might be a gradation of both.

Spatially, the Africa Centre is conceived as a room without walls, or as a covered open space containing enclosed rooms. The question of screening or enclosing from the weather was not resolved at competition stage. Was a space open to the weather viable? This was unlikely. The modernist illusion that glass dissolved enclosing walls seemed obsolete here. It seemed feasible that the main museum space might essentially

be outdoors, with small rooms within it allowing for a more controlled interior environment. The roof would provide a substantial but partial weather protection. The perimeter enclosure could be thought of as a fence and a gate, providing security and wind protection, and able to be lifted clear of the 'ground' plate. The institution might then be able to leak out at its edges, and contain a deeply enclosed space while also being exposed to an outdoor environment. I expected that this relationship with the environment would be adjusted over time, negotiated with the weather, while the openness of that space would accelerate the effects of that environment over time.

RMIT design studios: 3007, 3008

To draw a trajectory from Mies van der Rohe to a feminist mode of architecture requires rigorous and inventive research... Through a study of notable interferences in architecture- Truss Schroeder, Eileen Gray, Edith Farnsworth, among others- it was established that negotiation would be a critical concept: negotiation with a situation (rather than mastery over it) and the permissive acceptance of negotiation of those using the project. Mies van der Rohe's work, in particular the Berlin New National Gallery of 1968, was identified as showing promise (and called nascent feminist architecture). There, an indifference to program, and a mute scale and hierarchy seem to paralyse legibility, and force negotiation with space. For Dyring, it forced a critical response.

The result is an argument about the survival of architecture. Survival in the new territories of Dear Park against absence of civic buildings and high architecture. Survival of re-programming and de-programming of public facilities. The Berlin project is wheeled in- copied with rigour and clarity, to demonstrate a bullet - proof formal gesture which might survive endless tampering.

The point is made potently by not only re-working the program and skin several times under the same roof, but relocating the building five times, and drawing the building some years after construction, when life has had its way with it. Broken glass, new paint, and new content - the black steel does not inflect.

Le Corbusier learnt lessons about the survival of architecture at Pessac. He concluded, 'You know its life that is always right and the architect who is wrong.'

Crist, in Baracco(ed), DIA, 2002

3. Phillip Johnson, *The Seven Crutches of Architecture*, Perspecta, 1955

I first learnt lessons about the need to regard time as an element to negotiate (albeit at this stage only semi-consciously) while supervising the thesis project of Sophie Dyring. Her 'Negotiated Civic Franchise' proposed a kind of public space which could be subjected to repeated and brutal transformation whilst retaining a civic identity. Subverting Mies, the project argued that the Miesian indifference to particular situations made it well adapted to the most harsh situations; the outer suburban community hall, for example. This resilience was demonstrated by re-franchising the design on several sites, and representing the building imagined after several years of rough treatment.

Overt questions of longevity were subsequently examined in a series of architectural design studios conducted at RMIT: '3007' and '3008', and later 'Quick and Dirty'. In the first studio, we put forward the simple yet absurd task of designing for a thousand year life. Setting aside any totalitarian connotations, we framed it as a question of ecological relevance, and one which asked us to consider what will happen to our design work when we can no longer control it.

Part of the problem was thinking about design beyond the normal completion of the design process. We were surprised as to how much of a problem this was. To say 'imagine what might happen to your building after you're dead' – undoes most of our thinking about the design process. Many architects (including ourselves, our students) tend to think of buildings as a record of the design process, and that process is thought of as a captured moment. We treat the designer's intention as paramount and alterations to that conception – either in the lengthy design process or in the long life of buildings, as aberrations to that conception. This line of inquiry largely takes away the relevance of function, bound as it is to immediate needs of that moment. It is not so surprising that taking away program as a design tool is like removing a crutch.³ Architectural design is so often dependent on functional program to define a project. Yet, to think over a span of a thousand years makes this definition obsolete many times over. Such projects expose our dependence on function as something akin to a narrowly defined client brief, rather than a broad set of possible uses. Paradoxically, this demands a certain spatial autonomy – independence

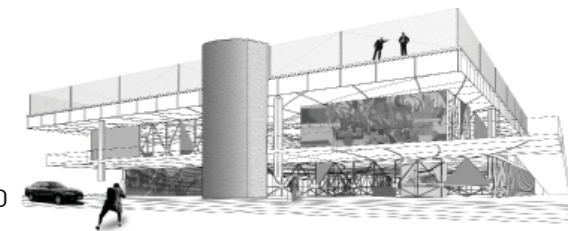


fig. 71: Sophie Dyring, Negotiated Civic Franchise, thesis project, published in Baracco (ed) DIA, 2002



fig. 72: Amy Muir, The In-Between (thesis project, published in Harrison(ed) Preter, 2003)



fig. 73: Michael Ferrarin, East City Complex (thesis project, published in Dodd(ed) Platform, 2006)



fig. 74: Augustine Savage, 3007 Project, 2007

from the immediate need, and more accommodating of any possible need. Students in these studios were eager to define the long life of designs in terms of long life program – searching for uses which demand this longevity – a seed bank for example, and a decommissioned nuclear power plant, or a radio telescope.

Even more disabling for design is the notion of an unpredictable future; of being unable to project forward, either to a perpetual present (*it will always be like it is now*) or to the future as it is already collectively imagined (*it will be like science fiction*).

The architectural results are either attempts at the timeless (the designer imagining history stopping at the moment of conception), or the futuristic (the designer imagining themselves present at a future moment).

Even the most sophisticated of these, Augustine Savage's theatrical accretion of architectural elements washed up on the Yarra shore in a mythical Melbourne, collapses thousands of years of layers into a single design moment. Perhaps it is unreasonable to ask the designer to project what is ultimately the task of someone else, at a later point. It does in any case expose our problem with thinking of the 'someone else', and of 'the later'.

Longevity Conclusions>

Thinking of the place of architecture in time, I prefer Foucault's choice of words, 'archaeology and monuments' rather than 'history and documents'.⁴ Where the latter imagines the big story and sees objects illustrating that story, the other sees the strange objects of the past and wonders what this might tell us about the present. Perhaps these are helpful in imagining the built environment from the perspective of the end of its life, rather than from its beginning. Perhaps then we might be able to imagine a user in the building, long after we are gone.

The South African project is the first design work of this series which consciously treats the use of space over extended time as an element to be negotiated. It has grown from a reflection of other projects in which such spatial concerns are present but dormant. Consideration of longevity in the design process has released that process from being an image of a captured moment. This means architectural form can participate in a process of degradation or change, rather than resist it.

Under examination in these projects is built space which is functionally inert without being spatially inert, suggestive of present use without being closed to future uses; sufficiently unfinished, robust and open to withstand and invite future change. Buildings generally have a very long life relative to their brief design process; longevity is taken for granted. Even when the life of a building is less than a thousand years, works of architecture cope with longevity without their original designer. If the design process accounts for this, or if it is considered as an architectural question, then it may re-orient the design process.

4. Gary Gutting, Michel Foucault's *Archaeology of Scientific Reason*, 1989

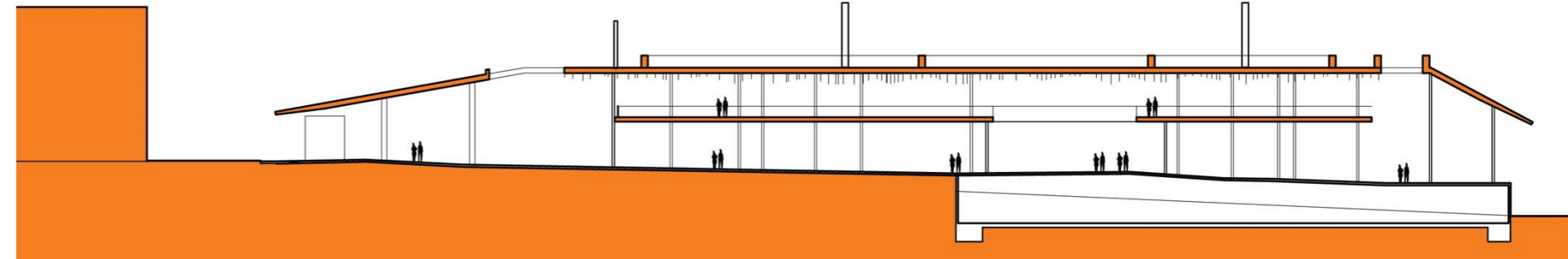
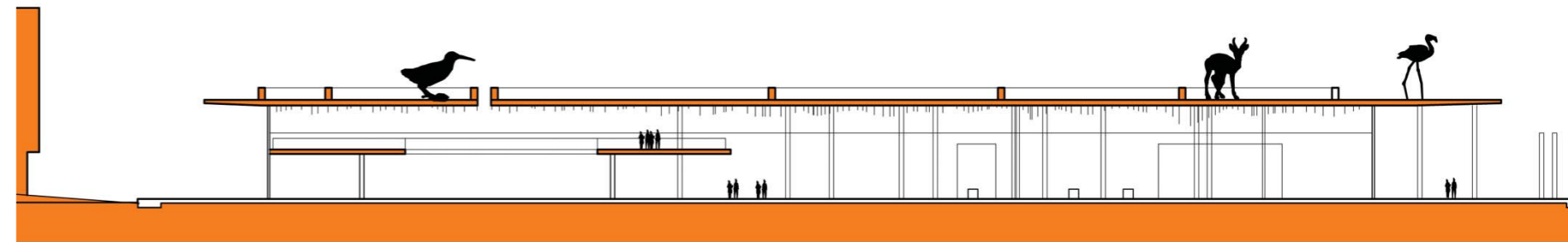


fig. 76: Sections through the Africa Centre



fig. 75: Interior view of the Africa Centre



fig. 77: Interior view of the Africa Centre.

The design for this competition was carried out in 2006 for a brief with powerful aspirations for a site and continent we had never visited. The project is for a new town of three thousand inhabitants in an agricultural context, with a significant museum of 12,000 square metres as its key institution. The museum's curatorial focus was on open communication and fluidity engendering participation.

From the brief:

'The site is on the South side of the Eerste River (Southbank), within 450 hectares of land, on the Western Cape region of South Africa. Adjacent to the site on the North bank is the leisure infrastructure of the Spier Estate (155-bed hotel, conference facilities, restaurants and retail outlets). The site, like the region as a whole, is part of a rich and sensitive ecological context. The competition called on architects and designers to define and apply new spatial approaches in order to create a community that will serve as a model for sustainable living elsewhere on the continent and beyond. At the core of the competition were universally relevant questions: in a globalising world, how can new spaces come into being that simultaneously acknowledge the creativity of its inhabitants, the abundance and fragility of its natural settings, and the dynamics of urban growth?

Some argue that Africa does not need museums. The Africa Centre does not share this view. Africa and the world – the planet's people, wherever they may live – the Centre believes, need a new kind of museum. Extraordinary though it has proven as a tool for the dissemination of culture, the museum such as it exists today fails in significant ways. Born of a particular time and place, in the capitals of 18th century Europe, it privileges approaches to culture and ways of seeing and interacting with art that presuppose a specific type of viewer. For this and other reasons, the traditional museum is often ill-adapted to certain art forms, notably ones of African origin.'



fig. 78 (above and opposite): Southbank, South Africa; views of the Africa Centre from north and east

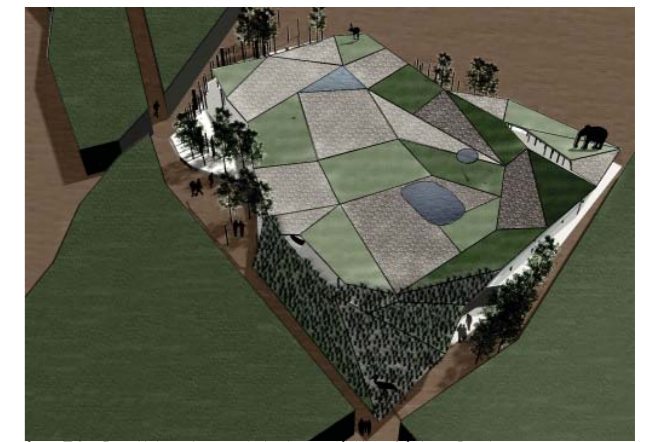


fig. 79: Southbank; aerial view of the Africa Centre



fig. 80: Southbank Town site plan; composition in strips:
 1. Eerste River; 2. South bank nature reserve 3. Buffer Strip - parking and Art Shed; 4. Agricultural field strip; 5. Low rise building plateau, 2-3 storeys roof planted. 6. The Africa Centre.



fig. 81: The Africa Centre floor plan



Accretion

Accretion is a consequence of longevity. As time acts on a building it is subjected to events which layer upon it, one after the other. The architectural design process is part of that larger process. The residue of its actions remain when it is transformed or partially dissolved. Viewed together, a body of design work is not dissimilar. As a new project is added to the pile of others, it perhaps re-illuminates the previous ones, perhaps building a consistent conclusion, perhaps not. The image of this is neither neatly linear nor a random collection, but a series of adjustments and reactions which partly blend, and partly remain separate. Similarly, the design process embodies an accretion of ideas; one laying on top of the other; the process being an assembly and rearrangement of its layers. It is a super-compressed version of the long process that buildings undergo, so compressed that it can appear singular or momentary, or natural. We take it for granted that cities are built of layers – of the ideas of many people, each superseding one another, or cohabiting in a shared space. The perfectly planned city is an illusion of a timeless moment – a pure idea which transcends the contingencies of urban life. The architectural design process and its outcomes are no different. To think of them as cleanly sequential, consistent or representative requires us to burn away many of the useful layers. This is the experience of our architectural projects. The projects described in terms of longevity infer accretion. Or rather, they expect it and invite that accretion. This is what prevents them from seeming timeless, preserved in an unchanging ether. The big, or unfinished or empty spaces of these projects depend on the layers of change – they don't entirely make sense without that use. In the case of East Darling Harbour, it is well-serviced and well-located floor space without an interior; at Northbridge, it is the daily rub of the market at the front door; at the Africa Centre, a set of events not fully catered for, with a set of spaces not fully programmed.

Caretaker's House Project Architectural questions related to the house are muddled into questions of the home. Most of the copious discussion of luxury tailored dwellings lies in fields outside architecture, while general housing (that is, most housing) is often regarded as sub-architectural by the architectural profession. Architectural experiments of form through the house often suppress the influence of inhabitation, and the realities of their influence over time. This is even more complicated when it is one's own house, and when the building is neither spectacular nor highly wrought, and when its design process is slow and interrupted. This building is a slow accretion; sometimes a haphazard one, and one which spans most of my time in Melbourne. It was begun ten years ago and has been slowly added to since. Apart from housing a series of discarded and unfinished ideas about architecture, it houses my family (which has doubled in size) and myself. It became the office for a business partner and myself for three years. Its presentation and publication during that period has prompted reflection on it. While thinking of it as an architectural project, I experienced it daily. Other people have taken it over as they would any home. Different people again came to work there every day. I designed a number of other projects there; it was both the physical environment for

All of old. Nothing else ever. Ever tried. Ever failed. No matter. Try again. Fail again. Fail better.

Samuel Beckett *Worstward Ho*, 1984

Caretaker's House

The Caretaker's House in South Melbourne is a building for my partner and myself. Design and construction commenced in 1997 and 1998 respectively. Town planning zoning determined that the new building become an office with a caretaker's residence. This replaced a small wooden cottage in what was now an industrial zone. The building shell of two levels and 85 square metre footprint was built for around \$600 per square metre. While under construction, the design was presented at the Half Time Clubin Melbourne. It was published in an issue of *Architect Victoria* in 2001 dedicated to low cost design, and again in *The Age* newspaper in 2004. We moved into the building the day before the birth of our first child. Between 1999 and 2002 it housed the offices of Harrison and Crist. In late 2007, after the immediate built context had changed significantly, work began on a third level addition, adding more space named as 'office storage' for town planning zoning purposes. It then was published as part of series of projects for the *Re:Housing* exhibition and book, and again was featured in *The Age/Sydney Morning Herald Sunday Life* magazine in 2008.

fig. 82: (opp) Caretaker's House

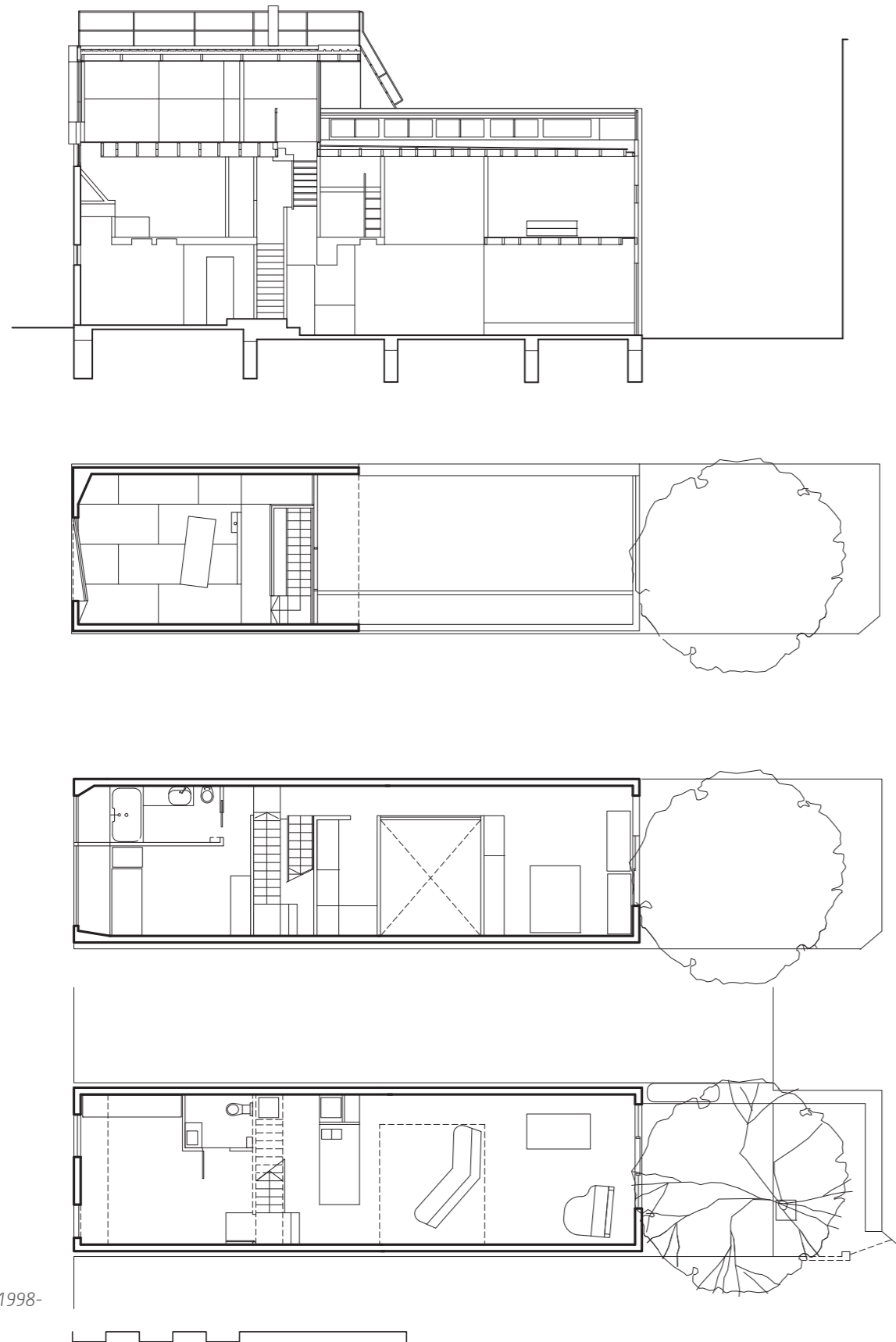


fig. 83 Caretaker House Melbourne 1998-2008. Section & Floor Plans



fig. 84: The Southbank context for the Caretaker's House

Project Noise: the determining environment

my practice and part of my practice. As a piece of research it is like carrying out an experiment on myself; seeing the results immediately and re-testing. As a slow accretion, it is a common thread behind other projects which stretch back well before my arrival in Melbourne. It contains my own half disclosed preferences, while I spend time designing houses for others. This work was the first whole building I designed in Victoria – a small house in South Melbourne, begun while I was concurrently working on the Melbourne Museum. At the time, I noted that its site would fit over five hundred times into the Museum's floor area. We bought the timber cottage in 1996. It was near collapse – one of four in a row, and one of few of a type left after the area's transition to an industrial zoning. A brick mechanics' workshop flanked the other side of the row; behind it were more warehouses. An important agenda was to do what the buildings around us did. That is, be part of the real context, not the preferred context – looking at the immediate environment as it is, and agreeing to its validity. One of the first decisions was to set the front wall of the building flush with the warehouse adjacent, and at a matching height. This was a continuation of the warehouse wall, which in itself had no particular merit.

Since the design had aspirations to be general housing – it needed to be considered as repeatable rather than unique; applicable to a field which is now referred to as sustainable and affordable. This building had precedents in my first house attempts – in a lineage of pragmatic brick buildings which are lean and undecorated. A house I had designed in the Northern suburbs of Perth (the Wat House) – blunt and raw, was in reaction to all the eclectic flourishes around it (fig.96 p.57). The Caretaker's House grows out of that, the 2J House and The Where House by Simon Anderson. This in turn can be traced to both Brian Klopper (a Fremantle architect who worked in raw red brick vernaculars) and Krantz and Sheldon, designers of countless plain brick flats (fig.96 p.57). Whilst still in Perth, I re-fitted a small flat designed by Len Buckeridge (former staff of Krantz and Sheldon, who went on to specialise in apartment developments). The renovation to that interior was constrained to have no impact externally, and to make no alteration to the tightly planned structural envelope. It had me thinking about flat surface decoration as the best means available. Remnants of those places inhabit my first thoughts about the Caretaker's House.

Density & money

From the beginning of the design process, the project was closely tied to money and to density. The general housing condition is that it forms both a home and a large and long term investment for many; and one which becomes crippling for some. To speculate on those questions and to make the work viable ourselves, we confronted the same questions as those lean precedents. Questions of density were not an abstract exercise in relation to the city. The tiny land parcel was what made it affordable, and was a pattern typical of Melbourne workers' cottages. Learning how to use this type of plot properly was an exercise in sustainability. The tactics were

GRC 4 (Autumn 2007)

The Impersonal, the Commodity & Longevity
 A series of projects with a particular landscape focus, including the bridges and the Design Studio 3007 form a discussion on ecologies and resources. Longevity as the overt theme of that studio has an ecological subtext, similarly present as a theme in the design projects. Describing these as a commodity is not meant cynically, but in the sense of being useful, of using resources and having ethical dimensions. This was the basis of the discussion. 'This work is very impersonal but you like weird things'
 I liked the surprise response to the presentation. It fascinated me. My instinct was to say – yes, that's it – regardless of the intent. If the impersonal is neutral or detached is it incompatible with the passionately idiosyncratic? Or is weirdness simply a personal quirk? Is there something else to it?
 The impersonal is an escape from the limitations of the self – to be able to be given over, able to take part in bigger games, and to accommodate all the idiosyncrasies of others. It infers silence into which environmental noise is allowed. It defers to that noise but also arches over it.
 And the commodity and longevity? It is hard for us to think of a design as something impersonal, or as simply a commodity, something we (the designer) no longer own. A design is a record of our work. I have the stronger sense of the impersonal in old buildings – ones where I don't know the architect. Perhaps the strongest sense I've had of this is at Canterbury Cathedral – thinking that I was inside a city – inside a place so large and so loose that it was like an exterior; its worn stone floors like a street. I am not reminded of the mind of its designer, but to a sense that so many had been at work in here – tinkering,



fig. 85, 86: Caretaker's House Melbourne 1998-2008 Street views



fig. 87: Caretaker's House Melbourne 1998-2008 Interior of third level space

fixing, adding, or simply using and wearing down. The ideas I experience there are so layered that they were impersonal, they are only partially a record of a design. Yet they were not neutral, or diluted – they were intensified and polished through erosion. They gathered strength as the control loosened. It is more common to see the opposite in the design process. I had seen the weakness of a process where construction becomes the end point, in fact the end point comes well before then. I had seen it on the Melbourne Museum. A sketch becomes a model – a model becomes a building – imperfectly so. As an attempt to record a design moment, the building can only be as good as the day it is photographed, and that will never be as good as the drawn idea; a shadow on the wall. It's the problem I was trying to reverse in thinking about longevity.

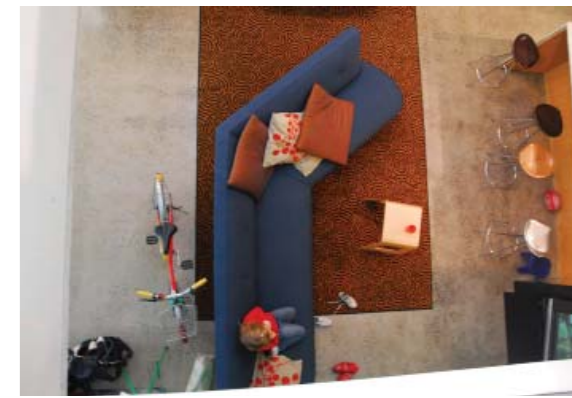
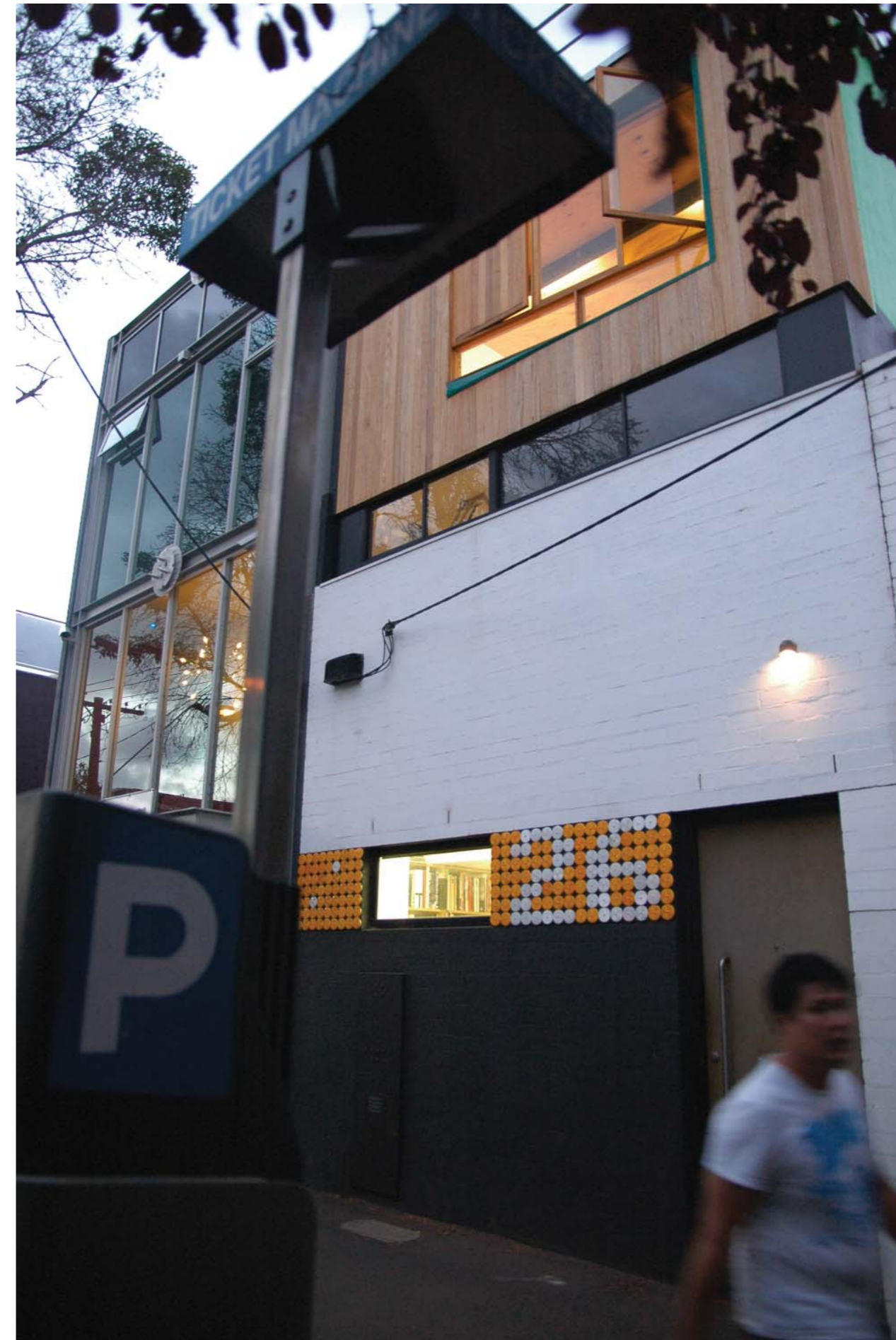


fig. 88, 89, 90, 91: Caretaker's House Melbourne 1998-2008 Street views & interior of the third level space



brutally simple; a box envelope and limited openings; few finishes and internal divisions: conventional load bearing construction with no steel. We eventually built the shell for around \$600 per square metre. When we moved in, most rooms were not enclosed, and there was little sense of how we might inhabit it. That is spaces were not designed with a particular function in mind. It was simply a process of slicing up the space and understanding how best to live in it.

The home not a house >

Three external and prosaic influences nearly derailed the design. First, the town planning application was refused on the basis that it was a house and the land was now zoned industrial. Second, the geotechnical engineer claimed the site was virtually impossible to build on due to the very poor soil and the proximity of unstable buildings. Third, some difficulties of the small project and a revived housing market meant procuring a builder had a number of false starts. The latter two influences were invisible in impact (apart from very deep footings below ground and some very poor building work). The first influencing fact (that of town planning) meant the design was turned into an office building holding a caretaker's residence. Almost no spatial change was needed following the nominal change in use (a bathroom became disabled accessible). This interested and amused us – and confirmed our view about the absence of specific planned use.

One of the first moves was to think about figuring a footprint onto the site – squeezing space into the small piece of land and possibly trying to sculpt a form in the box of land. We began some basic tests by pressing shapes and carving out voids; resisting the orthogonality of the site. We used a tree at the front of the site as an excuse for a void. We split the form to make a courtyard. We sliced the footprint more narrowly to get open space down one side. We tested a full coverage mat, and a small footprint tower. This hopeless task led us to reject a figured footprint. Instead, that most basic gesture was mute, like everything around it, including a concrete tilt up block being thrown up directly behind. A rectangle pushed up to the street and side boundary was obvious to everything else around it.

This approach was reinforced in the division of space internally; the impulse to refuse a 'sculpted' interior, and similarly to avoid the long narrow spatial divisions and corridors so prevalent in five metre sites in Melbourne. Space was simply sliced laterally – dividing the interior across its width, and then squeezing the stair across this width. This conformed with the obvious structural division by beams, and was reinforced in the longitudinal section generally through ceilings and wall finishes.

Context panoramas >

The particular context of the building is a fast changing fragment of the city. When I first viewed it, the gigantic Crown Casino complex had just been completed, while the more immediate surrounding was low rise, low key, and industrial. The area has altered scale since then and now includes one the world's tallest apartment towers. It is a precinct of freeway bridges, of billboards, of 19th century fragments and of brothels. I had described it as the back door of the city.¹ The narrow context of the immediate

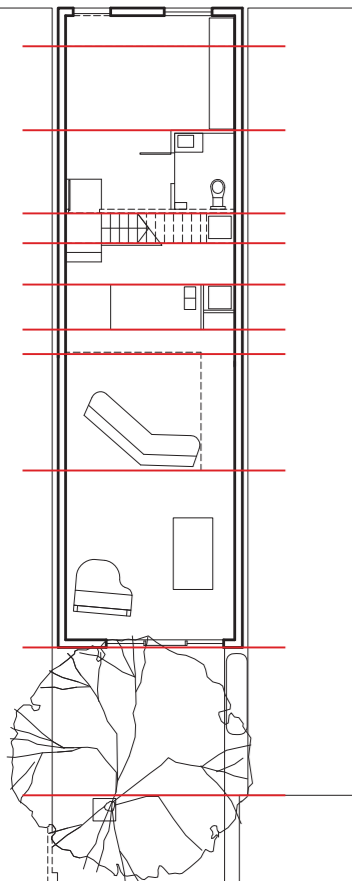


fig. 92: Lateral slicing of the plan in the Caretaker's House

Sliced space >

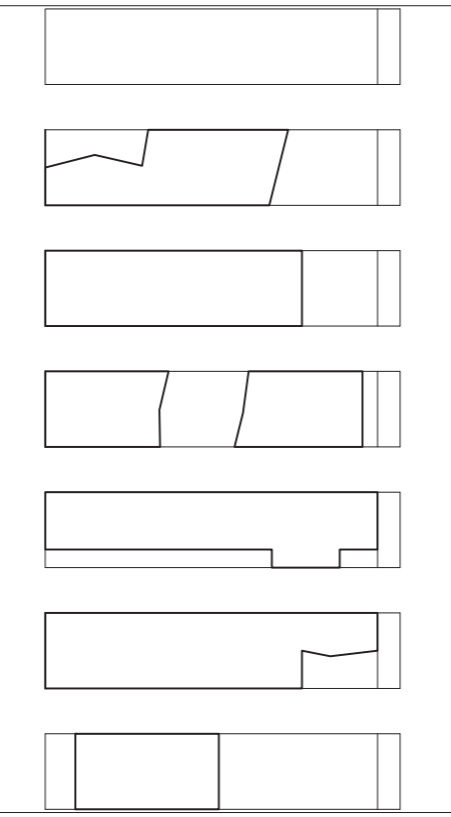


fig. 93: Caretaker House Melbourne 1998-2008. Site footprint diagrams

Time lapse accretion >

When I described this house for the publication *Tight*² I commented that it would be suitable for later alteration or demolition. The project was an accretion of design moves, and so was its immediate environment. Buildings were changing over, being added and removed, altering panorama strips. Parallel to the spatial panoramas mapped through photograph strips was a mapping of the change of this panorama – a time lapse of the context as it accreted new content. As the immediate context changed, the building followed; a third floor added later responded to the change in height next door, and the area slowly recomposed itself. The accretion followed at the minute level. Every time we added something, we did it differently from the time before; every time we made a mistake, we over-corrected. A growing collection of materials and a rough set of handmade details evolved, built by an ever-changing group of disappearing trades and displaying a hundred quirks. We would cringe at the amateurish lack of consistency, but at the same time laugh at the critic drooling over another careful detail in a perfect home. Eventually, we saw this as a semi-conscious study of accretion – a rare chance to build time into the process, to inhabit that half finished process. It is as if to say: 'There is always another way to do something, and there is always another person to do it'.

The series >

For the purposes of general or broader application, the Caretaker's House is part of a series. In terms of my study of small houses, the Caretaker's House is the mid-point of that series. Drawing directly from its Perth precursors: 2J, the Wat House, the Flat House, and the Where House; the Caretaker's House influenced others after it: the 2002 House, the Kwon House, the Adaptable House, Dandenong Living Places housing, and The Patch House. (fig. 96) The territory of the *Retroactive Prototypes* (fig.30) series made for the *Re:housing* exhibition was the repeatable nature of the individual house; the tension between the tailored one-off house, and generic volume housing. With its small footprint, the Caretaker's House was at one end of this series. Being mute in its plan figure, it was at one end of a spectrum ranging from generic to idiosyncratic. By placing the house in a series several times, I sought to address the situation where the individual house is viewed as a personal expression

1. Presentation to the 'Half Time Club', Melbourne, 1998
 2. Harrison(ed), *Tight*, Architect Victoria, jan 2002, p20

environment was the field of enquiry for this work. Responding to both the documented requirements of the planning permit application and the impulse to catalogue like Ed Ruscha, we made images of every bit of streetscape on the block. Not so much objective as non-judgemental, these were an unfolded and flattened view of the immediate built context, presented without exceptions. The new building simply formed part of this strip – its relationship intensifying with nearness so that, in part, the immediate neighbours regulated its composition. The parapet is set to the neighbouring white brick wall; the West wall mirrored the colour of the cottage it faced. The context is neither special nor ideal, but it is here to be taken seriously.

GRC 5 (2007)

Panoramas, *Dirty Realism & Ed Ruscha*

It is possible to identify techniques for making designs that may be described as impersonal – techniques which remove the hand/brain from the generation of the design, or at least camouflage it. They include imitation or replication (sampling, distortion, symmetrical mirroring), usually of a program or a precedent, or of the immediate context of the work. To test one of these I produced a range of panoramas – an image catalogue of a series of sites, in the manner of Ed Ruscha and his famous books on gas stations, parking lots, and the like. In my case they were composed of photos I had taken previously as part of a general study of site contexts. Composed into single images, it was evident that the projects responded not so much to a particular context or a preferred part of that context, but to the general mass and noise within a closely defined limit.

You don't necessarily learn anything from my books...I want absolutely neutral material. My pictures are not that interesting, nor the subject matter. They are simply a collection of 'facts'.

Ed Ruscha, in *John Coplans, Concerning Various Small Fires: Edward Ruscha discusses his perplexing publications, Artforum, Feb 1965 p.24-25*



perimeter of block bound by market moray chessel clarke south melbourne 2006



fig. 94: Site catalogue for the Caretaker's House Melbourne, 2006.



fig. 95: Ed Ruscha, Every Building on the Sunset Strip, 1966 (extract. Source: Marshall (ed) 2003)

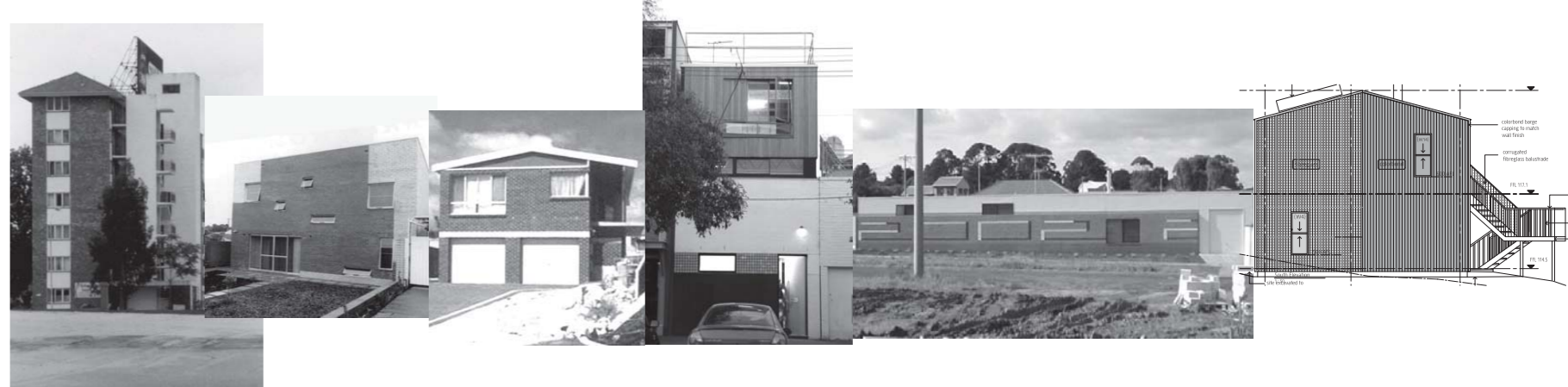


fig. 96: Caretaker's House series: Krantz & Sheldon, Flats, Adelaide Terrace c. 1955; Simon Anderson, Wherehouse, Perth, 1990; Wat House 1992; Caretaker House 1998-2008; 2002 House, St Leonards; Patch House, Melbourne (construction 2010)



some beach houses st leonards 2004

fig. 97: Site catalogues for 2002 House St Leonards Victoria, 2002



2002 house st leonards west face 2006

rather than as architecture with a public dimension. That dimension is perhaps acquired gradually, by repetition, by serialising, and by collective accretion. Likewise, with its D-I-Y builder, the project slowly accrues layer after layer of material. Placed in a line, it adds a layer to the knowledge of the house, and offers an antidote to the instant house, whether unique or identical.

The Shadow Cabinet Project

The Shadow Cabinet is the antithesis of a decade long process of accretion, with layers being slowly added over that time. It accretes ideas rapidly, layering one onto another in quick succession. The piece was partly the summation of a practice (Harrison and Crist), and partly the first project executed at the commencement of this reflective process. It is small and contained, having a short design process and a short built life in a gallery. It is evidence, however, of the tendency in my research to layer a set of ideas through the design process, and to let them cohabit in a space. In the Shadow Cabinet, all the noise of the design process is compressed into one simple little box. With a notional brief for an object nominally represented at one third scale, in an exhibition nominally at full scale, we were drawn to the experienced scale of small spaces instigated by that ambiguity. In plan, the pavilion replicates the Australian Standard disabled access bathroom template at full size. It is half the height of generic 2700mm high office space, and the ceiling is mirrored to double the section. At one third scale it would be a comfortable, albeit small chamber. As a cramped room it is like a cupboard, evoking the *Narnia* fantasies, or the shrunken world of *Alice's Wonderland*. The mundane world of building codes began to rub up against literature.

As a pod, it conjured up for us old fashioned science fiction; the mysterious black monolith of *2001*³, or the interior of its machine/brain HAL; the tardis for *Doctor Who*, or the sensuous interior for *Barbarella*.⁴ Its name referred to the decision-making core of political parties in opposition; a meeting room for a group where policy is formed and then sits, waiting for the day when that opposition governs. All these thoughts folded into the design process along the way and all were allowed to stay; nothing was discarded. Some said that there were too many ideas. Sometimes such a cacophony of ideas spells difficulty. It threatens to simultaneously overwhelm and undermine the design intent. But this work is not building, it will not accrete through inhabitation; its lifespan mentally and in the public realm was short. To compensate for its abbreviated existence, it was compressed into an artificially small time and space, mimicking the broad scope of a lifetime spent gathering ideas and allusion, like dust and scratches.



fig. 98: Shadow Cabinet Project, 2005, Monash University Museum of Art.



3. Stanley Kubrick (dir) 2001: A Space Odyssey, 1968

4. Roger Vadim (dir) Barbarella, 1968

Shadow Cabinet

The Shadow Cabinet project was designed and built in August and September 2005. It was part of a group exhibition entitled Pavilions for a New Architecture held at the Monash University Museum of Modern Art. The project was carried out in collaboration with Stuart Harrison, immediately after the practice of Harrison and Crist had formally disbanded, and also with RMIT students Nicola Garrod, Meg White and Prue Lawrence. It was built in a garage in suburban Brighton before being assembled in the gallery. It was then sold to a private buyer who intended to reconstruct it some years later. To our knowledge he is yet to do so.



fig. 99: Warburton Trail site plan; the bridge joining the line on the highway.

fig. 100: Warburton Trail Bridge - plan.





Warburton Trail Bridge Project

The Warburton Trail is an historic path and railway in the Eastern foothills near Melbourne. It was cut by the Maroondah Highway when that road was constructed to connect Melbourne's Eastern suburbs to the city and the Dandenong Ranges.

The footbridge was designed to re-join the Warburton Trail for walking and horse riding, at the site of a former rail bridge. We designed the project for an invited competition run by the state highway authority Vicroads in early 2007. It remains unbuilt after the commission was awarded to Sean Godsell. In 2008 our design received an honorable mention in Architecture Australia's Aa prize for unbuilt work, and was then published in Architecture Australia. A radically reworked version was exhibited in the Australian pavilion of the Venice Biennale later that year.

A bend and a rise in the road >

We reckoned that if the bridge was to be a seamless join in the track, then its ground surface should be a continuation of that track – a tray of ground continuing it rather than a machine stretching over it. Further, we decided that the seamless join required a bend. We set the line so that the bend occurred on the bridge's centre – meaning that it could be read as a continuation from each side (rather than an object of its own) and would create a stopping point over the road. The bend could occur in section too – absorbing some necessary height changes and elevating the stopping point in the middle. Prior to resolving the form of the bridge, we set and fixed its line a rise and a bend – defined by the site and limited by the requirements of horses crossing it. In contrast to the continuous line, the impulse that the object should be two things meeting was driven by the same response as the bend in the line, and of them springing from the unlike edges we

fig. 101: (opposite). Warburton Trail Bridge; view looking north across the highway

The Warburton Trail Bridge project was designed over an intensive period in the Summer of early 2007. The process of designing it demonstrates more clearly than most ideas unfolding in an accretive manner. This process allowed for a series of separate moves to occur, and for participation by a number of people. On reflection, the clarity of this process may be due to the contained period of its execution, and to the contained (though diverse) group of people involved. The project to design a bridge over a Highway on the Eastern route out of Melbourne was at a threshold between the sprawling metropolis and rural valleys beyond. Apart from creating a pedestrian and equestrian link over the road, it would re-join a severed part of the Warburton Trail. This section of the Trail had once been a railway line. Two earlier bridges had previously occupied the site, where the Trail was cut by the Maroondah Highway, interrupting this popular riding and walking trail. [fig.103]

As part of an invited (but slightly mismanaged) competition shortlisting process, we had a very short time in which to produce initial concepts. We produced two images over the course of one night and established that we had very little idea of what the design should be about, beyond two things. One, that as a night-time gateway into metropolitan Melbourne (it marks a vague transition from the Dandenong hills into the suburbs) that the bridge should shimmer under its own lighting. Second, that as a re-joiner it could amplify the landscape condition at each end, defined by the copse of trees from which it sprung. Our brief and superficial view of the site showed that its density was quite different at each side – that is, a dense copse of trees on one side of the Highway and on the other a more open trail with sparse trees. The density or opacity of the bridge might amplify this.

The project then lay dormant at Vicroads for several months before we were notified that it had been shortlisted. At this stage, we revisited old conceptual territory and reconfirmed our view that the bridge should be a response to its immediate location and that it might contain interior space. That is, that it could be like a building with an interior rather than merely a sculpture, and its form, a response to the site. We quickly discarded sketches of sculptural snaked bridges and spectacular arches. We had no answer to the question of containing space and temporarily set it aside.



Plate 1
First train crossing the Lilydale to Warburton Railway trestle bridge over Maroondah Highway in 1901. (Courtesy Museum of Lilydale)



Plate 2
Steel bridge that replaced the trestle bridge (constructed c. 1925). (Courtesy Museum of Lilydale)

fig. 103: Warburton Trail former rail bridges on the site.



fig. 104: First concept sketches for the site.

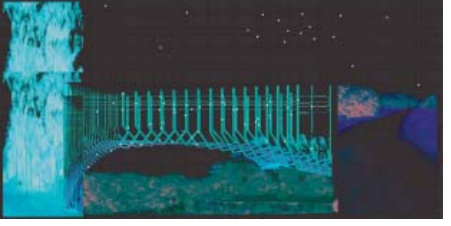


fig. 102: Cedric Price & Frank Newby, Snowdon Aviary, London Zoo, 1963

Joining Two Parts > observed. The formal idea of two objects emerging from the side and barely touching was a transfer of the first response, to vary the density across its length. We thought the structure should be formally simple. This was largely a response to the lineage of utilitarian rail bridges that had previously occupied the site. A timber rail bridge had been demolished, and replaced by a steel deep beam structure, which in turn was removed for the widened highway. This was then the third attempt, and the first two weren't bad – in a direct and straightforward way. The new bridge would be considerably longer due to the widened road, roughly twice the length of the previous two. The simple structure which met the need for two objects was two pairs of trusses, cantilevering from each side and only touching in order to maintain a continuous ground surface. The triangulation compressed slightly at its edges, but otherwise was straightforward engineering. The truss was perhaps an evolution – from wood to beam to frame – an incremental step, or an accretion. It was fixed in the process that there would be two elements, and that conceptually, they would not meet. The depth of the trusses outlined a space which joined overhead and therefore inferred some enclosure. However, we still hadn't confronted a way of making the interior.



fig. 105: Warburton Trail Bridge; the site view from the south bank

Enclosed space and the tent >

A large bridge often has an interior, even if it is left uncovered. Being in the interior of the Sydney Harbour Bridge is like being inside an extraordinary nave. We were conscious in the Warburton project though, that the scale of a large structure like the Harbour Bridge is a large part of this effect, and that was not available to us in this instance. We looked at more modest rail bridges which enclosed a tunnel of space in mid-air. The *Ponte Vecchio* was an obvious 'room' since it had program. Here, a level of enclosure was required – a balustrade to two metres for horse riders. But this was not a 'room' and would not provide the substance of a visible 'gateway'. We were attempting to design a 'room' without program, without monumental scale, and because of safety concerns, without a complete or dark enclosure. We wrestled with solid buildings with windows. We wrestled with fabric, and the room became more like a tent. If we were to achieve a 'room' then the space would need to enclose a broader space, that is, be less of a tube. We thought more about the desire to merge with the landscape at each end, and to form a loose enclosing structure. We thought about Cedric Price's bird enclosure at the London Zoo – literally a loose structure moving and enveloping a landscape beneath it. It seemed a far less complex sculptural piece than cable structures such as Frei Otto's. So the skin on our bridge ballooned out, beyond the structure, making the space on the bridge like a room at moments, and enclosing a tent-like space under and beside the bridge, capturing some landscape. That skin was woven steel mesh in varying densities. It needed to be loose, rather than taut. It would flutter in the weather, catch rain and leaves, glint in car headlights and mark shadows of people crossing. The two sides were differentiated simply by colour and the size of their dilation. We imagined these spaces as provoking a program, as becoming a building. By accretion.

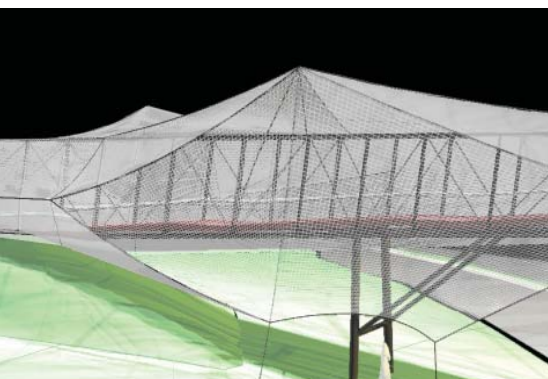


fig. 106: First studies of the tent.



fig. 107 & 108: Warburton Trail Bridge; reworked version for *Abundant* exhibition, Australian Pavilion, Venice Biennial



Team Three > Strategically, we were aware of being one of only three designs competing and the outsider of those. In another strangely mismanaged event, the three teams met together with the client to cautiously discuss the project. This triangle helped position us. We expected of Sean Godsell a taut and minimal approach; he had cited a log thrown across the creek as an inspiration. We predicted the second team's (Cassandra Fahey's) response would be more ornamental and sculptural. Our space could be in the middle – a 'both/and', or 'neither/nor' position – neither minimal nor highly ornamental, both decorative and plainly robust, site specific and without an individual's signature. In reality, we were indifferent to the dichotomy – equally interested in the poles but wishing to sidestep the idea that the two be viewed as opposite answers to the same question. We simply wished to ask different questions.

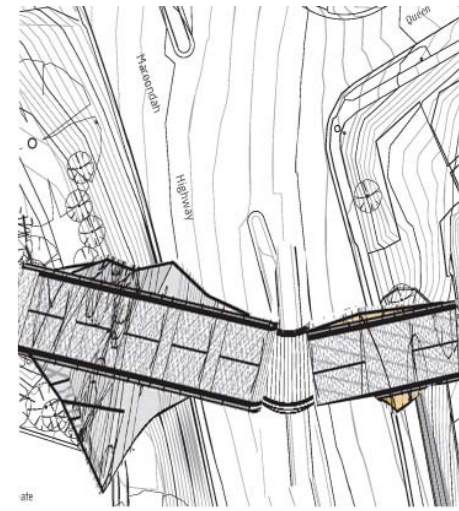
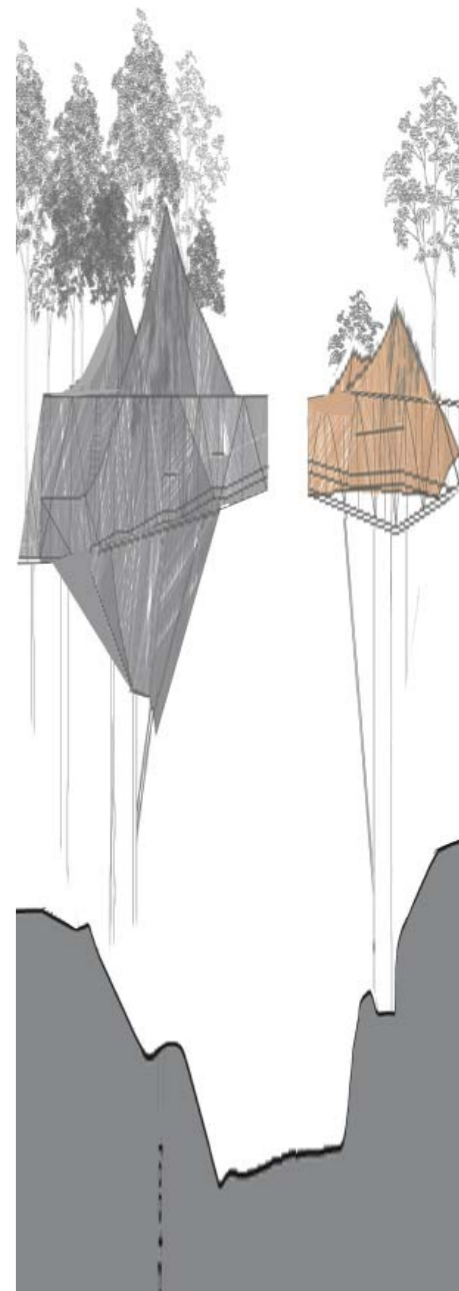


fig. 109 & 110: Warburton Trail Bridge; compressed plan & section for *Abundant* exhibition format.

Long-life & the ephemeral > Internal debates on longevity and accretion were increasingly in evidence in this process. The layers of parts in its composition also reflected various stages in its imagined decomposition. Its skin was highly ephemeral, which was a problem in itself. The design life of one hundred years outlined in the brief was raised. Despite the assertion that its material would last that time, it was considered acceptable to replace the skin before the main structure. The ground of the bridge would last several hundred years. Thus, the joining of the ephemeral with the permanent became part of the accretion process – a process set in motion by the design – but intended to continue long into the future. We imagined program growing up around the form, just as landscape would, just as its decomposition was inevitable and may mean its partial replacement and transformation.



The accretion process > Many designs have a catalogue of ideas, and a kit of built elements. In this case, that catalogue accreted in a way which is evidenced in the designed object, and which facilitated the process of pushing the design forward through collaboration and relative blindness to the end point. This meant that our position at any stage needed to be clearly stated, locked in at certain points, interrupted by another person at other times, and propelled forward by someone else again when things stalled. Someone would leave a drawing in the office; the next day (or overnight) someone else would pick it up and add a layer. There might be a phone conversation, and a new drawing as a result. The accretion of elements is what allowed this process to occur. Not only did we need to conceptually build up layers (*this is what we know, this is what we don't know*), we needed to model elements before the whole was complete. So, some parts were modelled and examined in the office as other parts were slowly being added. This is analogous to our reading of the object and how it might perform. The adding of layers might be evident in the object, and this might provoke or allow subsequent accretion. If we saw the design as an addition (both to the site and path, or to a series of bridges), then the compressed space of our design process was in itself, like a series of additions.

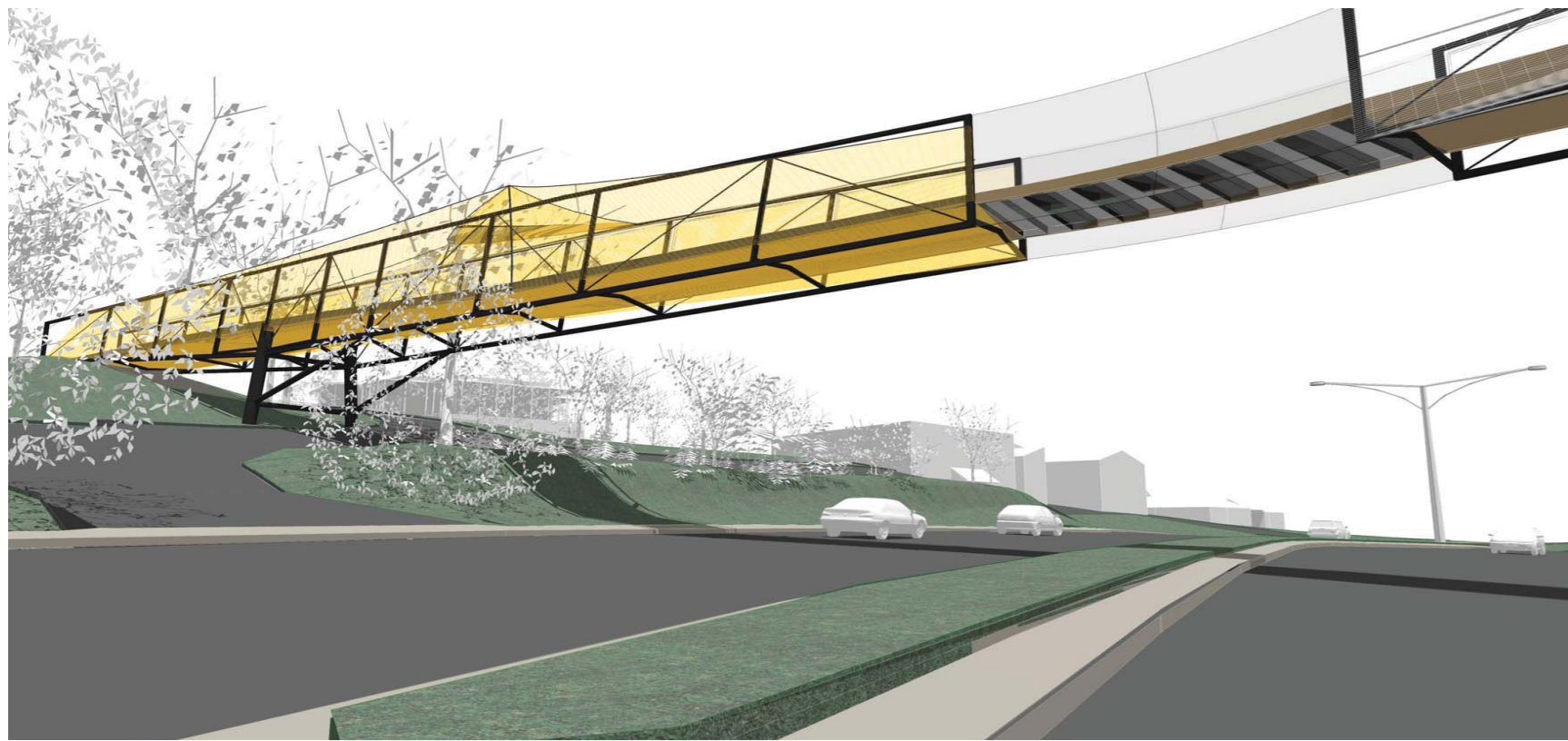


fig. 111: Warburton Trail Bridge; form study model



fig. 113: Warburton Trail Bridge; view from the highway.

fig. 112: Warburton Trail Bridge; lateral section series

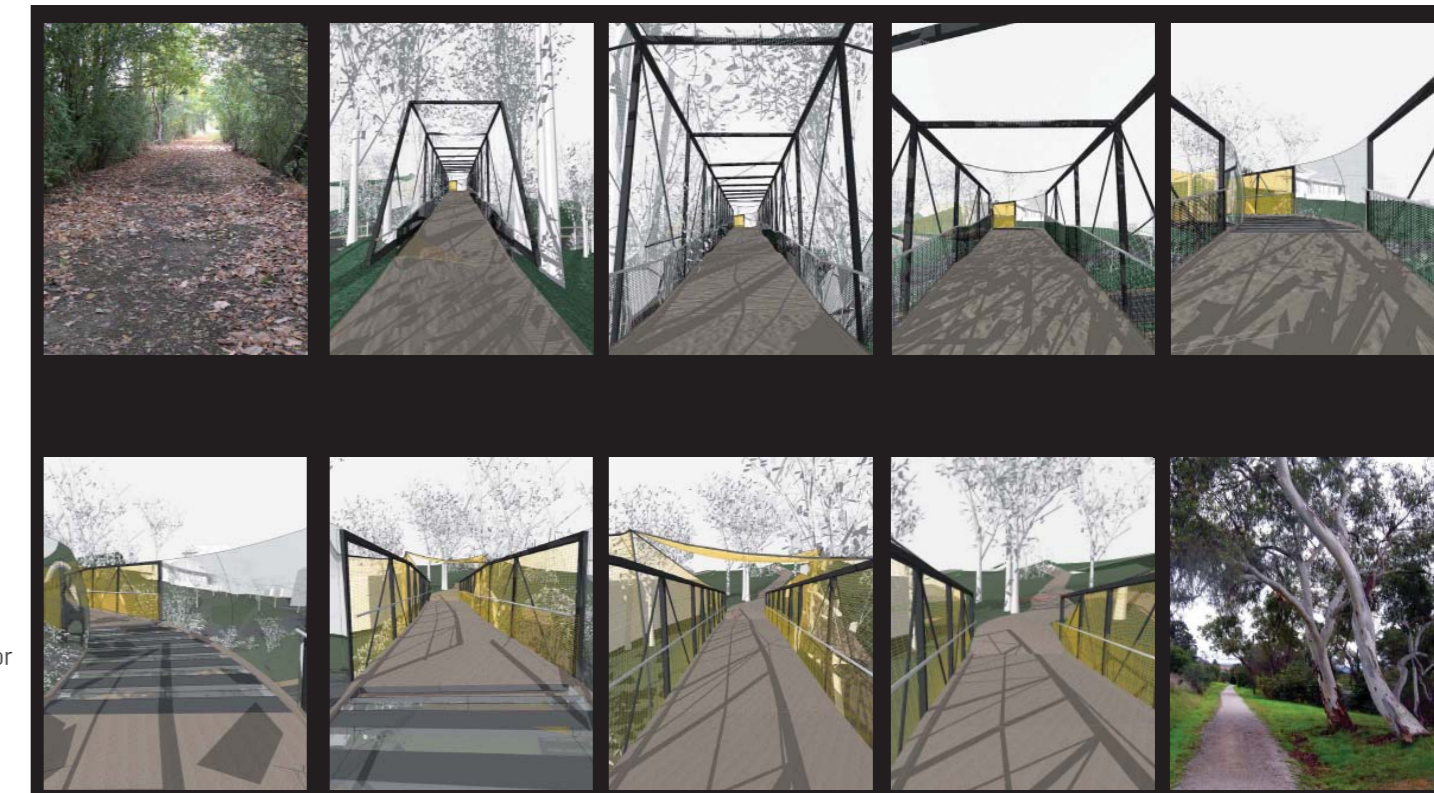
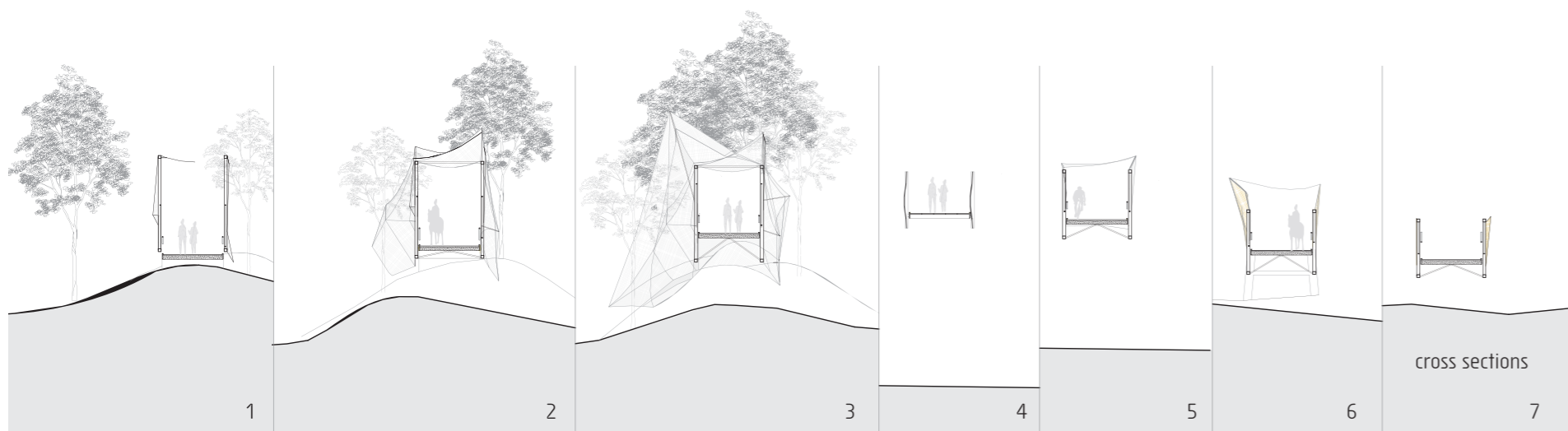


fig. 114: Warburton Trail Bridge; sequence moving through the bridge interior

Lakes Entrance Bridge Project



The open design competition commissioned by the East Gippsland Shire was for a pedestrian bridge replacing a wooden structure over the Cunninghame Arm at Lakes Entrance, a town on the South coast of central Victoria. That bridge joins the town to a spit of land forming part of Ninety Mile Beach. Initially, it was not clear whether the Shire was calling for a new design, or simply a rebuilding of the old bridge. The process became further complicated soon after we were awarded the commission; there would be no timber allowed in the project and the tidal flooding of the bowl space would be reviewed. It then became clear that the Shire's planners had not yet established that the project could be built on the State Government administered land. In response, the bowl mutated several times. A floating pontoon eventually satisfied requirements to avoid a 'permanent' structure there, though it moved tidally 2.5 metres in relation to its fixed bridge, requiring the design of a mobile disabled ramp to be resolved. Once the contract for construction was let the bowl space was cut from the budget. By the completion and opening of the project, the town's community campaign to 'Finish Our Bridge' was underway. That campaign continues and is evident in shop windows and the odd piece of merchandise.



fig. 116: Lakes Entrance Footbridge, at opening ceremony, 2009.

Similar aims were pursued in the design of the Lakes Entrance bridge, carried out immediately after the Warburton Trail project. How can the bridge best be experienced as a public space – as an arrival location rather than simply a means of transport from one side to the other? This bridge was the replacement of a well-like timber structure. We responded to its simple directness and its close proximity to the water. From the middle of that bridge the casual viewer could look at the town, at the mouth of a body of water facing the open sea, and down at the water's surface. As an urban condition, it could be thought of as a room, or at least an urban space at the bridge's centre.

The design was for a straightforward linear bridge, with a timber jetty element forming a shallow amphitheatre mid-way across the water. That jetty would be partially flooded each day. That flooding piazza, responding to the daily tides, drenched by rising water, and then beached, became known as the bowl. It mutated several times during the complicated design process. It sat on a rock base, then a hollow ring of piers. Then the bowl became a floating jetty; a pontoon rising and falling with the tide, and adding all the complexity of its relationship to a fixed access bridge.

The narrative of that bowl is a new layer brought to a bridge, which has simply been renewed and enlarged from the previous version. The forms are independent but interact in a complicated way. The design questions posed were less about what form the bowl or bridge should take, and more-about questions concerning the form of their interaction – with each other and with the weather. How can it change, and how will its environment change it? Making a space dependent on its environment – dependent on the sea, the town and the old bridge – in this case meant exposing the fragility of this design process to the toughness of the bureaucratic process. As the bridge was built without the bowl (which was shelved for a later, second stage), it became a victim of its own process of accretion.



fig. 117: Lakes Entrance Footbridge, design development view with pontoon, 2008.

GRC 6 (2008)

Open Source & Accretion: Knox Pool

Returning to collaborative models I considered open source software and wondered about its equivalent in architecture. Open source software is a reaction to the tight hold on products by proprietary software companies, which prevents both access to the products and innovation in their development. Open source shares code and encourages development incrementally by users and amateurs. Several others have used the term open source architecture to describe two different approaches. One was to use the digital connotations of the term to foreground an interest in digital coding and process. The second was to think of architectural services as a shared resource for those in need - a kind of *pro bono* cooperative. Instead, I wondered if open source architecture could allude to a broad focus on information sharing, above and beyond the margins of the profession. It could make overt the adoption of the work of others, and privilege the benefits of broad dissemination over uniqueness. It positions ideas more clearly as a form of accretion.

At the same time, I was discussing a growing pile of projects, gathering them into this PhD. I found it difficult to stop adding to the pile. It was a problem for focus and a problem for completion, of conclusion. But it also signalled an interest in layering up information, and in moving onto the next thing before returning to the first. It was suggested to me that the sheer number of projects was the most difficult part of the research, but also that they did in fact need to be accounted for, and recounted in this document. It was Ranulph Glanville, commenting at this GRC, who identified that this form of accretion as central to the way of making the projects.

Starting from Nothing & Starting with Everything >

fig. 115(opposite page): Lakes Entrance Foot-bridge, competition entry image, 2007.

fig. 118: Concept sketch briefing for Knox Leisureworks, Peddle Thorp Architects, 2008.



Tile patterns >

fig. 119: RMIT Building 8, Edmond and Corrigan, level 7 lobby, (photographed 2009.)

The Knox Leisureworks Pool Complex is at the Eastern periphery of Melbourne. It was built in a series of stages, beginning with outdoor pools (which were later enclosed), and in 2001 added to with an indoor leisure pool, spa and gymnasium. The subsequent addition of a warm water pool and associated treatment and party rooms formed the basis of our commission. We began the design process with low expectations. At face value, the commission was the development of a concept plan by Peddle Thorp Architects (fig.118). This plan offered neither anything spatially nor worked functionally. This concept was coupled with an architect client who was overtly uninterested in form or 'the aesthetic', while very interested in ESD initiatives and delivering a functional facility. At our appointment interview, we were directed to prioritise 'practicality' over aesthetics. Moreover, for some, the construction of the pool seemed to be little more than an opportunity to fund some ESD features. We began to suspect that design qualities would be delivered by stealth.

In another sense, the project was almost complete before it began. An accretion of building works had seen an outdoor fifty metre pool built, then enclosed, then a leisure pool and gymnasium added in 2001, as well as a steady series of small modifications since then. The location for the new pool was intended as an addition within that building's envelope, located over another shallow pool which had since been closed and filled in with concrete. (We later discovered that the shallow pool was in turn built over another large footing and remnants of a wooden house). The recent building work, which included a new entry sequence, was low grade and we had limited opportunity to fix this. It lacked the qualities of the first enclosure over the large pool, completed in the early 1970s, which had some of the clarity and robustness of a shed. This we took to be the anchor point for design moves, and thought of our subsequent work to be a new, grafted layer on this body.

An indoor pool inferred one obvious thing to us – ceramic tiles. Tiles are taken for granted in pools and in bathrooms – they are a default. In the buildings of Edmond and Corrigan (in particular Ringwood Library, Windsor Fire Station, and RMIT Building 8) they are key decorative finishes, like oversized mosaics, or an intensified brick. In Building 8 they are everywhere; structuring the decorative schemes and pattern-making in public spaces. It is as though the bathrooms have leaked into the foyer. These foyers had always reminded me of the tough infrastructural spaces of metropolitan subways. We thought about the unbuilt schemes for Newman College Library (Edmond and Corrigan 2004) being tiled externally, and we remembered by contrast, the existing bare broom finished concrete of the concourse in our building, and the concrete built version at Newman. It was perhaps an opportunity for an homage.

Knox Pool Project

Knox Leisureworks is a large public pool in the Eastern suburbs of Melbourne, owned by the local government Knox City Council and operated by the YMCA. It is an accretion of stages, where an outdoor pool built in the 1970s was later enclosed, then expanded with other programs such as a gymnasium. Most recently a children's leisure pool was added in 2001. It is typical of this type of public building – lean and spartan in its interior, and fragmented in circulation by the additions. The program was to expand these facilities further – adding a warm water pool within the main volume, as well as function and treatment rooms. Our commission came as a result of public competitive tender, where the client broke with an entrenched set of consultants in this area. Peddle Thorp Architects had previously carried out a concept design for the new pool, and our commission was to review this and carry it forward. Design work commenced in mid 2008 and construction began in mid 2009.

Evolution

And if mindless evolution could account for the breathtakingly clever artefacts of the biosphere, how could the products of our own 'real' minds be exempt from an evolutionary explanation? Darwin's idea thus also threatened to spread all the way up, dissolving the illusion of our own authorship, our own divine spark of creativity and understanding.

Daniel Dennett, Darwin's Dangerous Idea: Evolution and the Meanings of Life, 1995



fig. 120: Knox Leisureworks Pool addition, during construction, 2010



fig. 122: Knox Leisureworks Pool addition, 50m pool during construction, 2010

fig. 123: Knox Leisureworks Pool addition, East annexes during construction, 2010



fig. 121: Knox Leisureworks Pool addition, during construction, 2010

fig. 124: Knox Leisureworks Pool addition, during construction, 2010

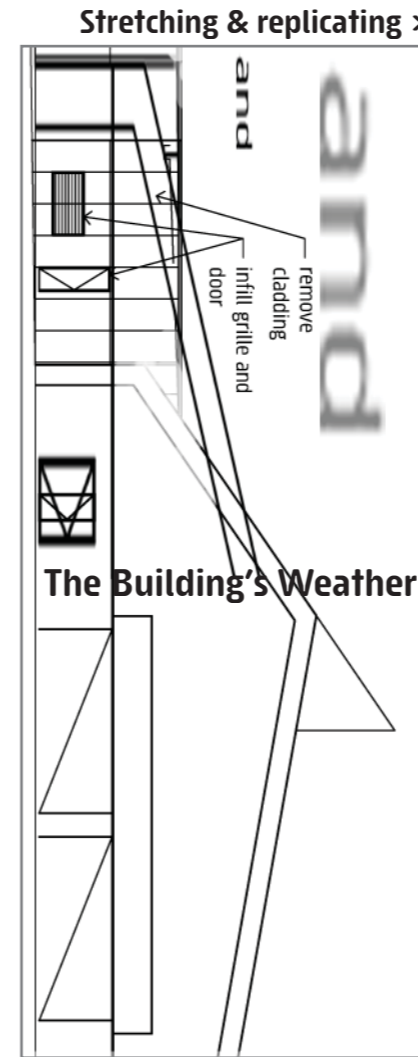


fig. 125: Knox Leisureworks Pool addition, sketch for addition by replicating the section drawing.

Stretching & replicating > As the addition's area burst out of its ready-made enclosure, we entered the territory of the annexe – the lean-to supplementary to the main hall. The asymmetrically gabled shed deserved some recognition, and we were grafting onto it separately on three sides. A series of layers were added to that shed with a range of straightforward strategies to maintain the dominance of the large hall and to appropriate it. To the East the gable end was stripped and made transparent; and re-clad in fibreglass. The annexe that joined it was a shed, which replicated the gable at a smaller scale. It enveloped a couple of rooms and a back service stair, and created a side entrance. The additions on the North might be described as a not-so-gentle pull or stretch of the gable – extending a steel portal over the new pool and bending the geometry in the process.

The Building's Weather > Inside this building the weather is stifling – the air is close and humid and heavy with chlorine. It is noisy. The buildings which enclose that air are imperfect – rough and variable in their composition, all compromised by previous architectural shortcuts. The chief tactic was to treat the visual language like the weather – to use that as a gauge to set the levels of the next stage; to graft onto this building rather than stand next to it, and to do so without degrading that older imperfect work. The graft was not a seamless, invisible replication but like a new piece of skin, slightly more smooth and pink than the rest, nonetheless joined and forming part of the same surface. When adding to a fine work of architecture, the hazards are similar but reversed; navigating the tension between uncritical respect and insensitive destruction. In haphazard or ordinary built works (such as this one), it is instead a tension between replicating uncritically and dismissing blindly. The precise task at hand seemed to be navigating a graft in a shady space between these two poles.

Bairnsdale Project

We were in a similar situation in Bairnsdale, grafting onto a civic building of dubious quality; grossly dilating it and retaining almost all of it. Completely burying its fabric seemed to be no more an option than replacing it. Nor did extending it in a manner compatible with the original. Much of the additional building volume came from a disproportionately large car park, and the encircling of the old building was partially a response to its siting near the centre of the site and away from the street. The game of 'exquisite corpse' we played with the building – collecting architectural gestures as we went – was mirrored in a design process truncated and compromised by the pressure of deadlines. Rapidly handing on work from one to another in the office to meet each deadline mirrored the longer process of handing on built layers years later. The poor planning and siting of the 1980s building, and the obsession with car parking on the part of the client, along with an absurdly short deadline, prompted the issues from which the project emerged. Grafting onto a side and forwards onto the street corner



fig. 126: Bairnsdale, sketch for library addition to the civic offices, 2008

Bairnsdale

This project began with a brief about relocating and co-locating public programs in the town of Bairnsdale in Eastern Victoria. A library housed in a 19th century hall needed to be expanded; a visitors' centre needed a new home; council civic offices needed to expand, with function rooms to be added. Together these would form a public hub and combined information centre, a 'one stop shop' of information aligned to a contemporary understanding of the library. The civic office building becomes the emergency communication centre for the region, and had recently been the coordination site for bushfire and flood relief efforts. The East Gippsland Shire commissioned Antarctica to study various sites as possibilities; next to the library, next to the offices, and commercial sites in the town. They settled on an expansion of the current civic offices, a vaguely post-modern looking brick building, dating from the early 1990s. After that, nothing happened. Eighteen months later, the prospect of funding via an economic stimulus package triggered more work. We re-designed to a reduced brief (with no function centre) but on the same site, and delivered at excessive speed. The documentation of that design was put to public tender; this stalled again as that money failed to materialise. At the time of writing there has been a proposal to expand the existing library building.



fig. 127: Knox Leisureworks Pool addition, interior during construction, 2010

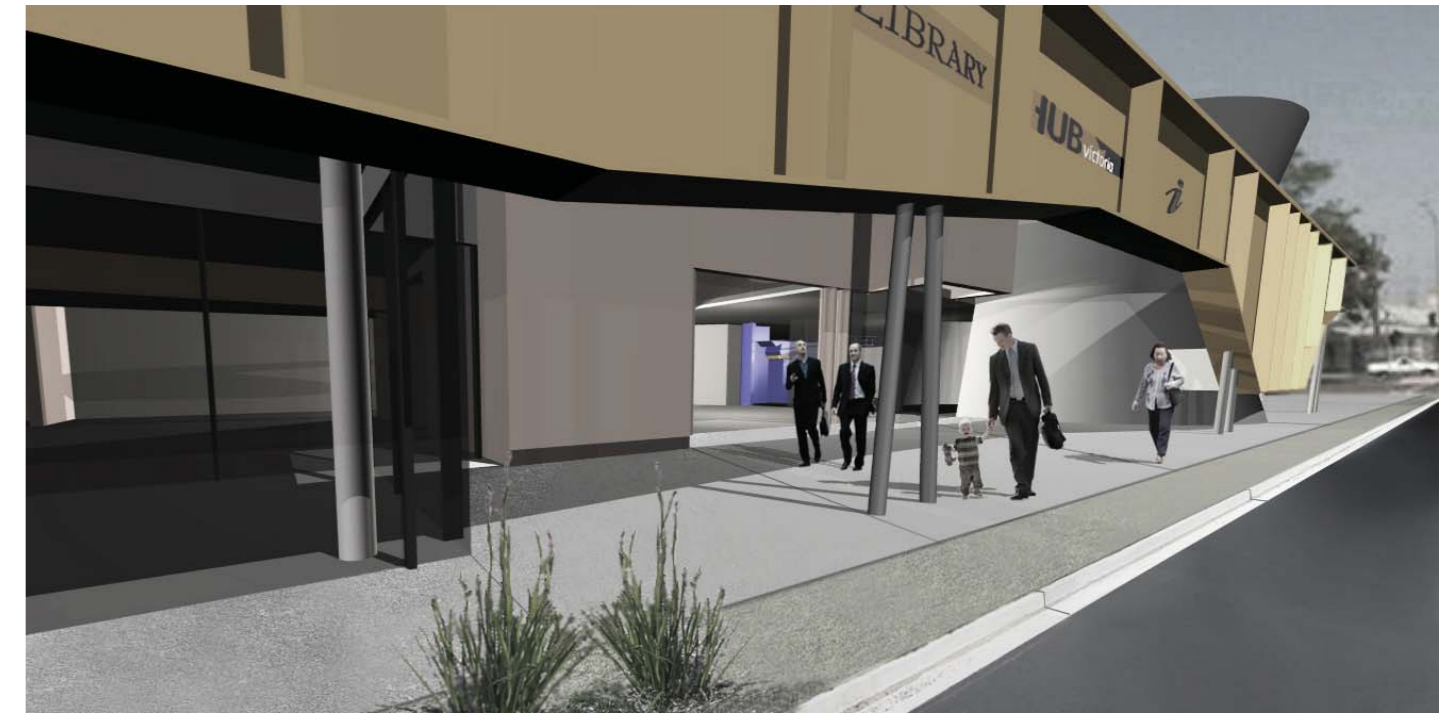


fig. 128: Bairnsdale, view of the entry to the library, offices and visitors' centre.

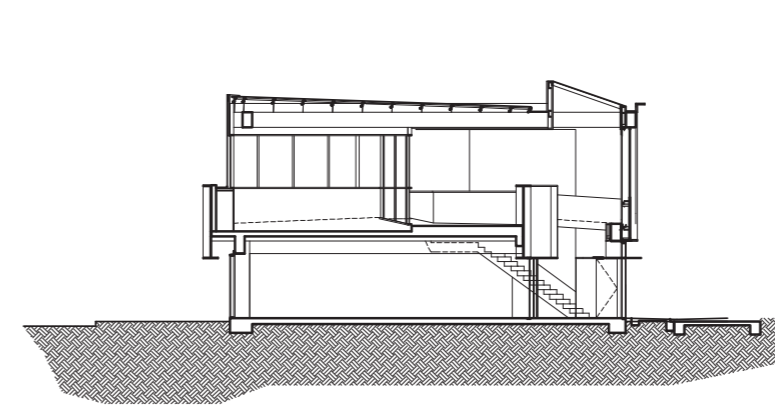


fig. 129: Bairnsdale, Lateral Section.

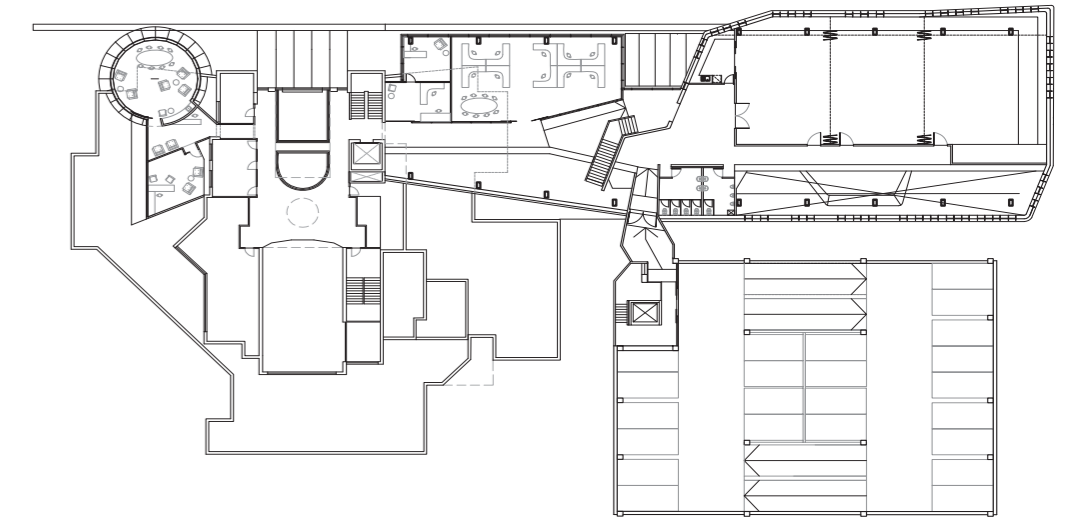


fig. 130: Bairnsdale, Floor Plan, upper level.

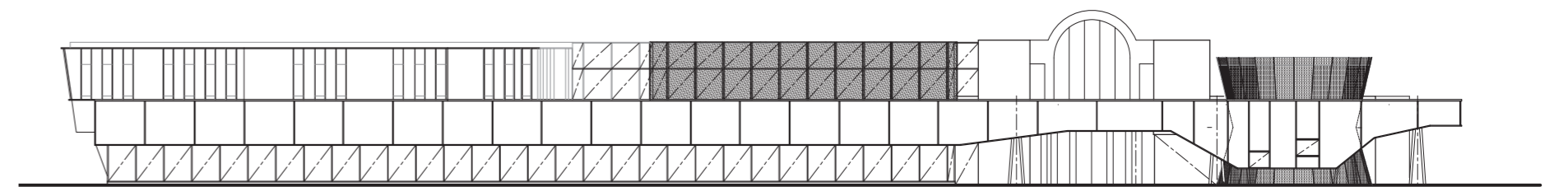


fig. 131: Bairnsdale, Street Elevation.

delivered a more prominent public presence, which was consistent with the broader range of programs. The hollowing out of the central interior helped join those programs spatially, but also helped realise the atrium implied by the existing, strange barrel vault. The gently distorted edges are a new version of the cranked and chamfered geometries rife in the original building.

Accretion Conclusion

Architectural works do not acquire longevity without accretion, except in the preserved environment of pure architecture or pure research. That environment assumes no change, yet the evidence is that this is uncommon. Accretion happens of its own accord in the built environment. I have treated it, however, as a valid question of architectural design, not simply as a compositional layering, or as a desire for weathering. I have tested it through the slow building process; through collaboration, and through serialisation and contextual compression. And from a certain point in this research, a conscious consideration of future amendment or unlike additions to the design entered at the time of its creation. These projects are evidence of accretion which results not simply in a picturesque melange, or as an expression of instant complexity. Temporal accretion is possibly a useful antidote those impulses to over-represent complexity where, the focus is on complexity built slowly through social and environmental change.

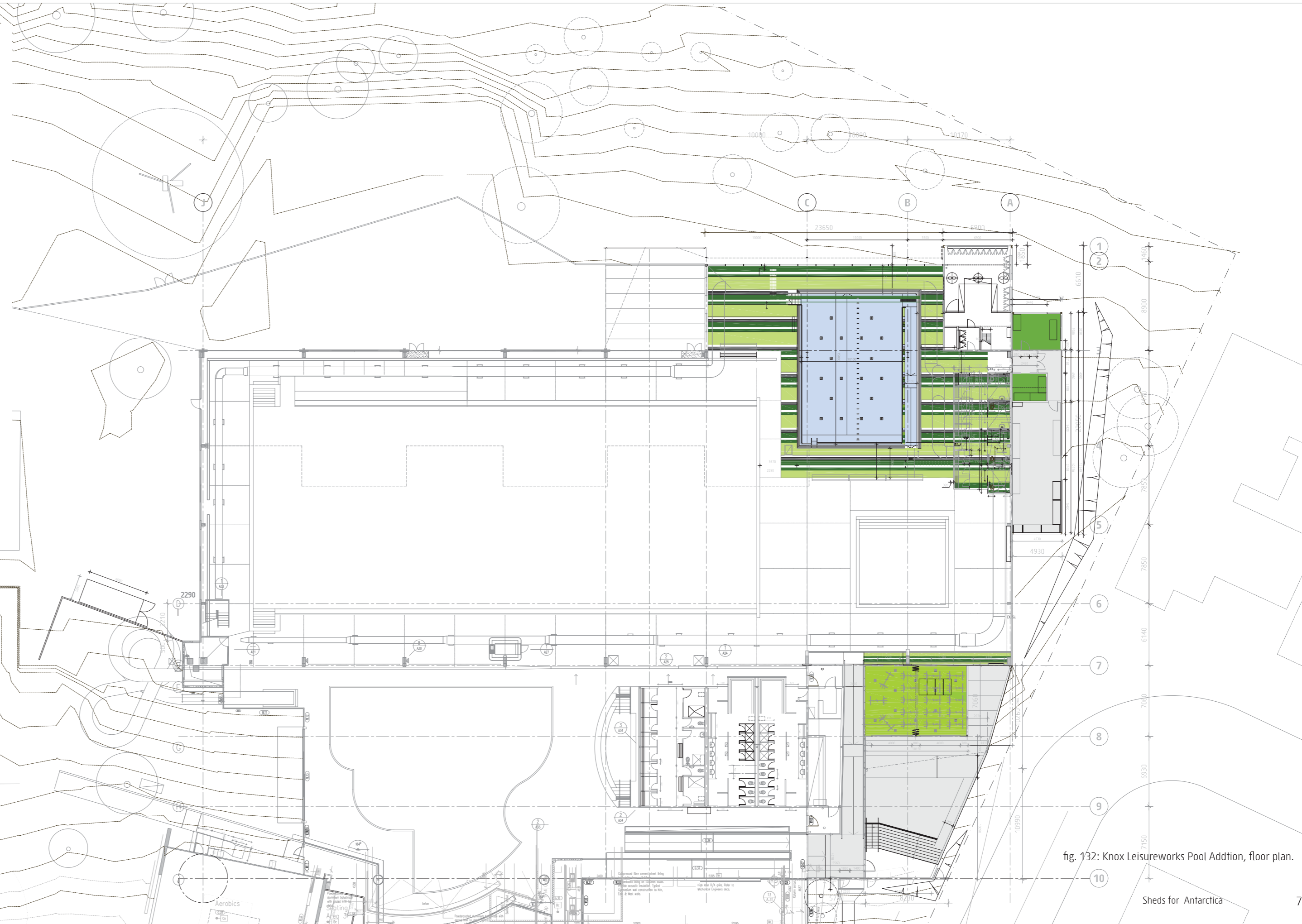
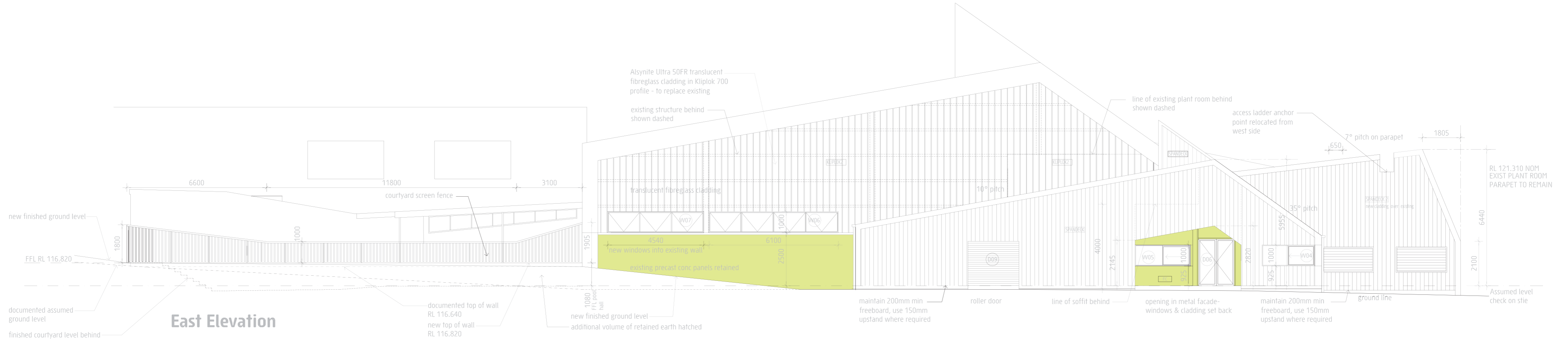
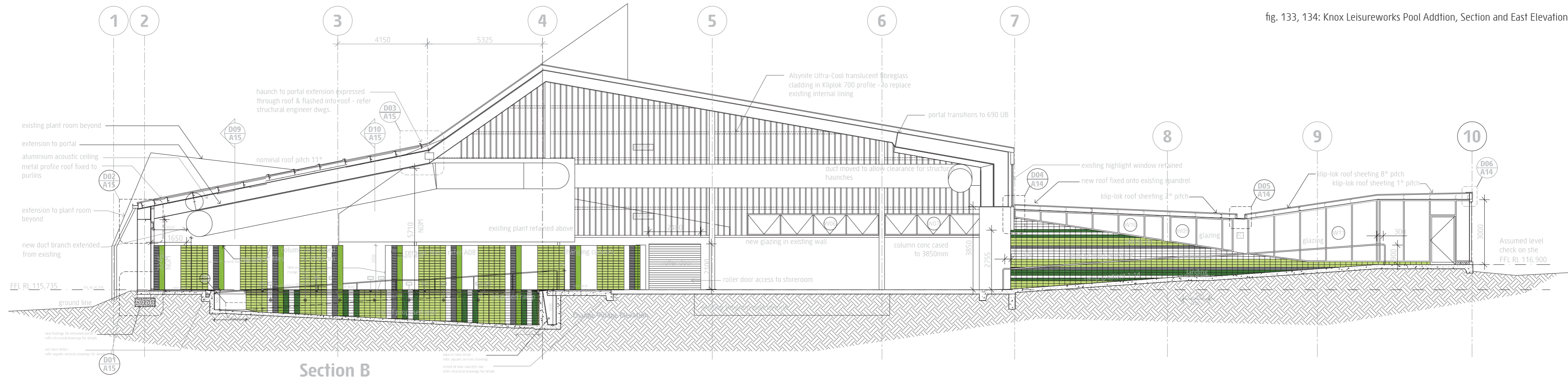


fig. 132: Knox Leisureworks Pool Addition, floor plan.



East Elevation

fig. 133, 134: Knox Leisureworks Pool Addition, Section and East Elevation



Section B



fig.135: Greenhouse at Federation Square, Melbourne. View from Flinders Street, 2009

Participation

Why examine the length and age of the design process? Why think in terms of its many layers and include its junk? Might it be primarily in order for architectural design to become more participatory? Participation is an abused word in design; as misused and problematic as collaboration, or sustainability. Yet, they are difficult terms to ignore. Participation is often seen as a sub-culture of design; but I would prefer to view it as a part of the general design culture of architecture, and to ask what it could mean in different contexts. The previous thematic discussions, of the role of time or that of noise together add up to this; a desire to participate in the context surrounding the design process, and to view the design process as an opportunity to participate in it. Participatory design processes usually seek to engage those who are disenfranchised from their built environment, yet are most directly affected by that environment. The history of modern housing is the most acute example. Architecture has been shown to become irrelevant when its design values ignore the lived realities of its inhabitants.¹ Those marginalised from the architectural process are in this position for the simple reason that they are unable to fund the building. Participatory design seeks to highlight the user rather than the patron. Where does the architect and design process fit into this? How does it best contribute? For many, participation means community consultation, and that often means token efforts to inform user groups and to hear feedback. It is a process well known to local governments in this country.

Advocating a participatory process, however, is often coupled with a suspicion of formalism, and of narrowly defined professionalism. It has grown from a mistrust of paternalistic or uninterested professionals. Because this mistrust is often combined with an observation of a profession focused on sculpting exclusive delights, this position can descend into a suspicion of architectural form generally, and of professional expertise more broadly.² Conversely, the complaint sometimes heard is that participation in the design process amounts to asking citizens to do the design themselves. Bluntly put, the disenfranchised are asked to contribute their own design services, while others have the luxury of professional architectural services provided to them. The problems of participation outlined by critiques of architectural modernism often stem from an architect in a powerful position applying a set of values which are out of touch with their context. The visionary is confused with the autocrat. In a participatory process conflating these models, the architect is no less in charge; but the role is recast as a well meaning facilitator, one of managing and overseeing a community's design aspirations, and applying a filter of good taste over the activities of said community.

I am reminded of OMA's 'mixture of omnipotence and impotence'³. For an architect so dominant these words seem hollow, yet they remain relevant. The mix of omnipotence and impotence can vary radically for less revered architects. In many instances, the designer is not the

1. for example Charles Jencks (1984) citing the 1972 demolition of the Pruitt-Igoe housing towers.

2. for example Jeremy Till (2009), *Codes of Misconduct*, p179

3. OMA, Koolhaas & Mau, 1995, p.xix



fig.136: The Reach Foundation, interior of stage 1 offices.

Learning about participation from partial projects>

manager. The user is not disenfranchised through lack of access to building, but through lack of access to design contribution. That is, at the moment a community needs the opportunity design can give, they are instead offered a bureaucratic process. What helps most is the contribution of a discipline that can integrate design within a broad set of needs. For the architect as contributor rather than manager, participation might be better understood as architects contributing in the world of others, rather than asking others to contribute to the discipline of the architect. Design process becomes a participation in a bigger process, more than managing the participation of others. In these essays I have attempted to shift the emphasis of the design process toward a longer time frame. Therefore, it is also important to consider the informal role of the user after completion of the formal design process. Charles Jencks famously noted the long term evolution of the housing designed by Le Corbusier at Pessac. Importantly, he described the capacity of this project, and the *Unite d'habitation* at Marseille, to allow this infection and alteration. It was a particular quality of the design that provoked participation.⁴

Some projects are complete and cohesive; the relationship between an early idea and the final outcome is close and tight; the design process supports the realisation of an idea comprehensively. Most projects are not like this; the mix of omnipotence and impotence is rich, emanating from the noise of all those around them. Some projects seem to be the very opposite of complete – where the design process is so dependent on aspects beyond control that the architect seems only partially effective. In a spectrum from autonomy to participation, perhaps the theoretical house projects of Eisenmann (for example) are at one end, and the *pro bono* work of emergency architects for an active user group at the other. In one, the architectural design process is pure and central, in the other the architect is a partial contributor, in danger of avoiding design questions altogether. Our architectural projects with a high level of control and a dense architectural narrative often remained unbuilt, contrasting with the more compromised and incomplete work of marginal practice. There is less to say about such projects when they are described in a traditional autonomous architectural narrative. Reflecting on them in non-architectural, or rather in noisy architectural terms is more useful. To talk about buildings other than 'signature works' tests claims about participation in the design process, and about generosity in disseminating architecture. In the case of Antarctica, they test our ability to be tactical, our ability to bring architectural culture to a situation where it is not necessarily demanded. When Raggatt described the situation of 'just another building',⁵ I read this literally. The impact of the early works of ARM or Corrigan stems largely from the leanness of their situation; from the insistence of bringing a fully loaded architectural discussion to a building situation where it is not expected.

4. Jencks, Le Corbusier & the Tragic view of Architecture, 1973.

5. Howard Raggatt, Notness: Operations on the Fringe, in van Schaik (ed), Fin de Siecle, 1993



fig.137: The Reach Foundation, interior of the theatre space during construction.



fig.138: The Reach Foundation, the theatre launch event.

Reach Foundation Project

REACH

The Reach Foundation is a youth support organisation which delivers a range of programs, many theatre based, aimed at building self esteem in teenagers. In 2001 a two storey rag trade warehouse building in Collingwood (tough inner urban Melbourne) was donated to the organisation. They began a process of developing a headquarters there, which included their offices, a series of workshop and flat floor theatres spaces, meeting rooms and a gallery.

The conversion of the building was carried out in stages. The final set of spaces were opened in late 2007.

At the Reach Foundation, the architect was unlikely to be treated normally. There was never enough time to be properly briefed, and never enough money to build properly – both were always a drip feed. During this slow building process, the organisation grew fast and expectations did too, yet priorities lay in places other than building; money was used to sustain Reach's core social activities. People came and went, either burnt out or moving up. Design decisions were made on the fly, documents were minimal, work was staged and sporadic. It took the architect and other participants some time to get used to this, and it took Reach time to get used to an architect. Once everyone learned a way of working, things went a lot better.

We began by refitting offices into the lower floor of a warehouse shell, and in doing so discovered that the building had an inadequate structure for its current or any planned use. We added structure as we pulled out the interior, and put back as little as possible. We exploited a relationship between a 'raw' image for the youth programs (expressed mostly as raw emotion) and a 'raw' image for its built headquarters. That was elaborated as a mixture of convenient as found elements, and by exposing the workings of the building wherever possible. In the second stage, more structure was added, and more building taken out. Columns were taken out and an open workshop, theatre space, DJ booth and bio box were added at the rear of the building. Crude steel beams were smashed into the structure already there (which had been built without the intention of being exposed).

The process lurched forward; breaking after each stage. The next stage though, was the main one – three times the size of the previous two. The upper level was planned as a flexible, flat floored theatre with an adjoining gallery and backstage spaces. Late in the construction of the gallery, a roof volume was exposed, and an extra function room was added. Belatedly, an organisational plan was established. A group of four people became a 'design and construct' team – an architect, a builder, a project manager liaising with Reach, and a manager liaising with industry to procure donated trades and materials. Decisions, including design decisions, were taken jointly, and in the context of resources as they became available. The design tactics had to be brutally simple to survive this environment. They had to be simple and recognisable and based on limited formal means. The phrase 'Reach Raw' had gained currency, and became a term which stood for limiting applied decoration and accepting the crude state of most spaces. Colour was limited to black and white, plus one deep red – the brand colour which appears in Reach's star logo. A room was either a black box or a white box. Generally theatre spaces were black and galleries, white. If a wall faced east it was red. Structure and services, usually exposed, were painted black. A colour schedule for the contractors became unnecessary. Structure was maximised as open span, with maximum flexibility. Attempts to 'program' the spaces and define their functions were resisted. The response to a long and growing list of potential uses was

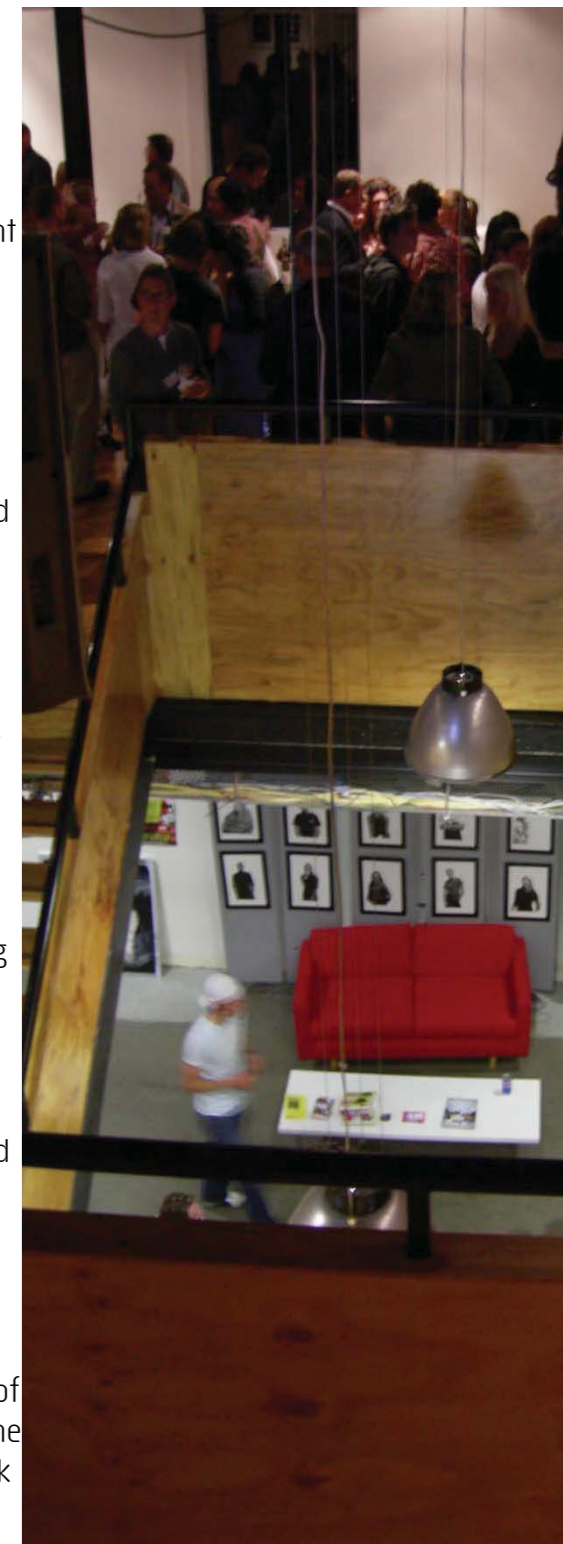


fig.139: The Reach Foundation, foyer and gallery space at the opening launch.

flexible and undivided space. The raw template meant that occasional suggestions for theming an interior could be deferred and that any number of fit-out overlays could be expected after the fact of building the robust shell. Now, the building is almost invisible to the Foundation; as though it is the naturally occurring backdrop to their activity, an environment for a group whose focus is elsewhere.

Strawbale Farm Project Merrijig

Merrijig

The Strawbale House and Farm is near Merrijig, a town at the foot of Mount Buller, three hours' drive from Melbourne. Its site includes alpine forest and former farm paddocks. It is a commission by two families - to build a farm producing olive oil, as well as a bakery, and in doing so to engage in a series of ecological strategies for both. A house of around 480 square metres accommodates the two families. Each has a separate wing, sharing large central spaces.

Design work began on this project in late 2000, within the practice of Harrison and Crist. The owners moved to the site and lived there, in sheds and tents, from 2002. Construction work on the house began in 2004, and has been interrupted or diverted by weather, fire, lack of funds, and the building of the bakery and ovens. It continues still, slowly.

The Strawbale project at Merrijig commenced in 2001, with construction starting much later. The project involved the development of a house and farm buildings for a pair of families opting into a rural lifestyle. It is a slow and loose project. Its aim was a small ecological footprint, with autonomous services and no grid connection. Here, the primary design concern was to recognise the limitations and potential of strawbale construction. Recognising its tendency to veer toward adobe vernaculars in image, we sought to bring this self-build field into direct contact with questions of composition in the architectural canon. Strawbale is an extremely loose and imprecise form of construction (it is 'levelled' with a hedge trimmer), and so it resists the precision of the architectural designer. As a very thick wall (here 500mm), it resists the taught planar skin we might associate with modernity. It also resists the orthogonal. The resulting plan maps these observations, into compositional interests in sampling, as well as strict axial symmetry or mirrored composition.⁶ Le Corbusier's Chapel at Ronchamp was the starting point for operations, since it shares obvious superficial affinities with a strawbale and stucco wall. The house-sharing by two families became the justification for a mirrored plan form. The design satisfies all its autonomous green demands, and the demands of a loose, robust building process. It also refuses to abandon formal composition as spatial organisation and image, as an overt question in the design. With the Merrijig House, it became clear that what the client/builder needed was a spatial mapping – a spatialising of their minds' understanding of their environment. Construction, details and services were the domain of the builder (themselves), but the mapping was crucial and they intuitively understood this. Indeed, they recognised and accepted the surprises of someone else's mind (the designer's), and instantly recognised when the map resonated with their own space. The plan was primarily seen as a map in the geographical sense – a loose territory to navigate and manipulate – a guide document to be used while building.

Greenhouse Project Federation Square



The Greenhouse project in Federation Square became a follow up project to a previous private strawbale house (fig.141); and a test case for lightweight steel construction systems, this time in a radically different and public context. A temporary building with a life of a few months over the Summer of 2008, it was intended to demonstrate the prefabricated system of super lightweight framing and strawbale in-fill for buildings that are subsequently re-used and recycled. In addition, the temporary events and business housed within served as a demonstration of sustainable food principles in an urban café environment.

Unlike conventional strawbale construction, the folded steel skeleton was exposed, as was its strawbale flesh, with each bale in a clear polythene wrapping, and the steel frame supporting a lightweight roll out glazing. The primary materials of plywood and steel are re-usable and recyclable. The strawbales, if not re-used, return to ground as compost. A wall and roof system of hung planting is contained in commercial florists' trays and Chep crates. Planned essentially as a single hall with an open, planted roof deck, the project was initially proposed for a flat open site in the City of Melbourne. It made its way instead (and fortunately) into a wedge of space between two pavilions at Federation Square – a complex space sandwiched between facades designed by Lab Architecture Studio. At first, this building was intended to be a prototypical pavilion, universally applicable to a range of sites. This idea evaporated as it became an intensely site specific installation. While the generic wall system and the vertical gardening techniques had been thoroughly worked through, the task of framing this project on stairs and of constructing a plaza platform suspended over railway lines was left largely to agile contractors and engineers – working on an exceptionally short time schedule.

The task of spatialising the project in this particular location made it an essay in expressing architectural values differentiated from Federation Square. The set of contrasts reads somewhat like the famous description of the 'Ugly and Ordinary' versus the 'Heroic and Original'⁷. Where Federation Square is complex, precious and permanent, the Greenhouse's gestures are formally dumb and materially rugged, reading more like a remainder of the modest sheds used while constructing the larger project. Where the Federation Square's plaza is composed symbolically as a desert, the Greenhouse is an oasis of un-composed planting. Where Federation Square suppresses readings of windows under double skins, the glazing at Greenhouse is rolled out, soft and ephemeral. The project's name is a marketing pun, since it is neither a greenhouse, nor truly green, nor a house. It is however, a kind of slow event that offers an opportunity to consider – in a very particular urban context – what codes might be attached to the term 'green'.

As many have argued, sustainable practice involves reorienting traditional modes of working toward more collaborative models. In



fig.140: Greenhouse at Federation Square, seen between the zinc clad buildings

Greenhouse Federation Square

The Greenhouse was a temporary building on the plaza of Federation Square, operating as a bar in late 2008. It was built as a demonstration of techniques for lightweight recyclable construction, and urban agriculture. Aggressively promoted by its owner Joost Bakker, the design was a super-fast collaboration between the owner, the architect, and agile builders (Lexon Constructions) and engineers (Tim Gibney & Associates). In January 2009 the building was carefully deconstructed (as planned) and packaged for another life elsewhere, initially in Perth. Publication of the work has ranged from *Architectural Design Research* and *Architecture Review Australia*, to *Vogue Living*.

6. Greg Lynn, The Renewed Novelty of Symmetry, *Assemblage* 26, 1995, p14

7. Venturi and Scott Brown, *Learning from Las Vegas*, 1972
8. CH2: City of Melbourne Headquarters & Offices, built as a prototype green building.



fig.141 (top left): Flower House, Melbourne, 2007. A straw bale experiment and test for the subsequent Greenhouse.

fig.142, 143: Greenhouse at Federation Square, Melbourne; interstitial spaces between the two buildings.

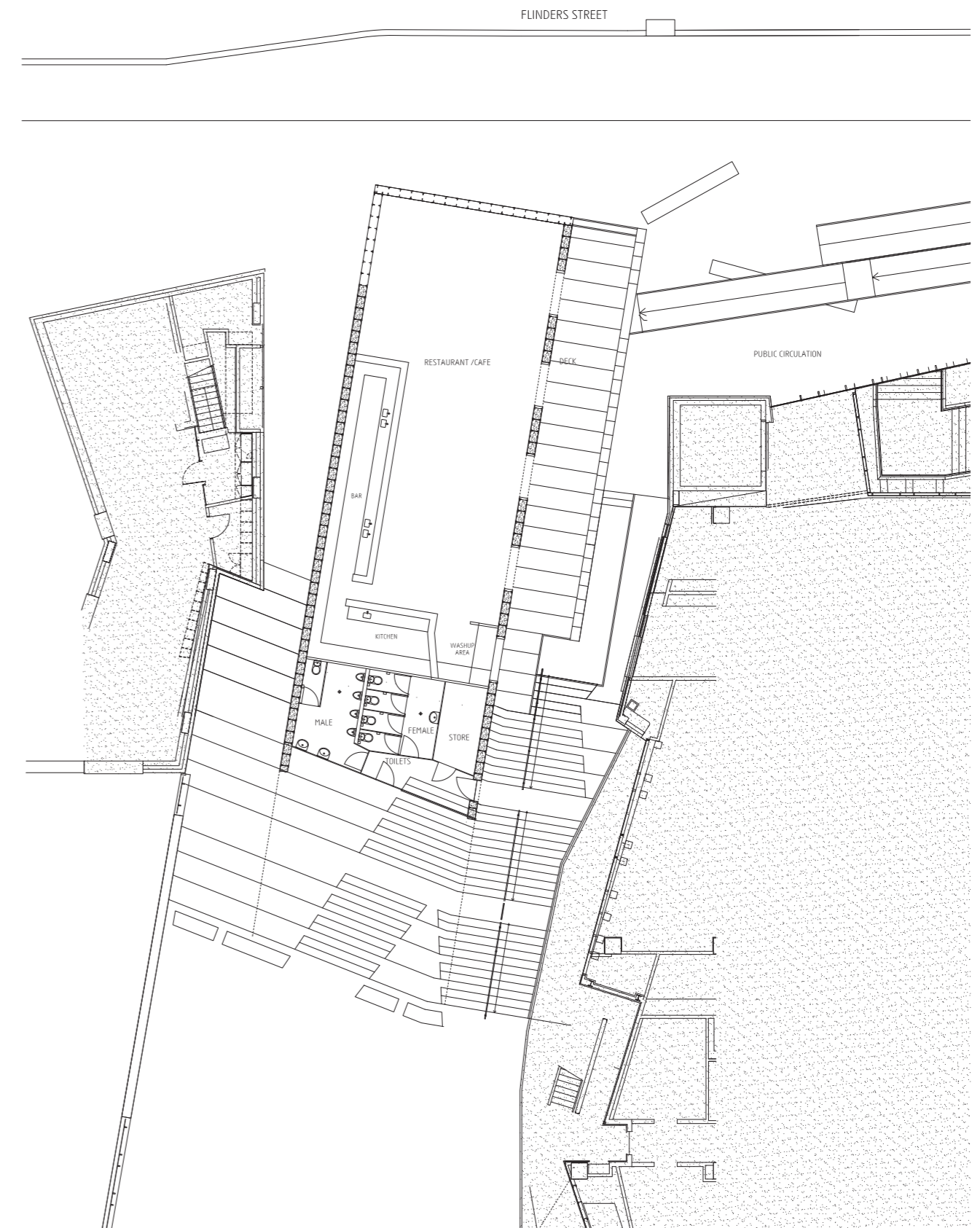


fig.144: Greenhouse at Federation Square, Melbourne. Floor plan showing instertion into the plaza stair space between two buildings.



fig.145: Strawbale House, Merrijig Victoria. 2000 conceptual image of operation on Le Corbusier's Ronchamp chapel.



fig.148,149 : Strawbale House, informal inhabitation during construction.

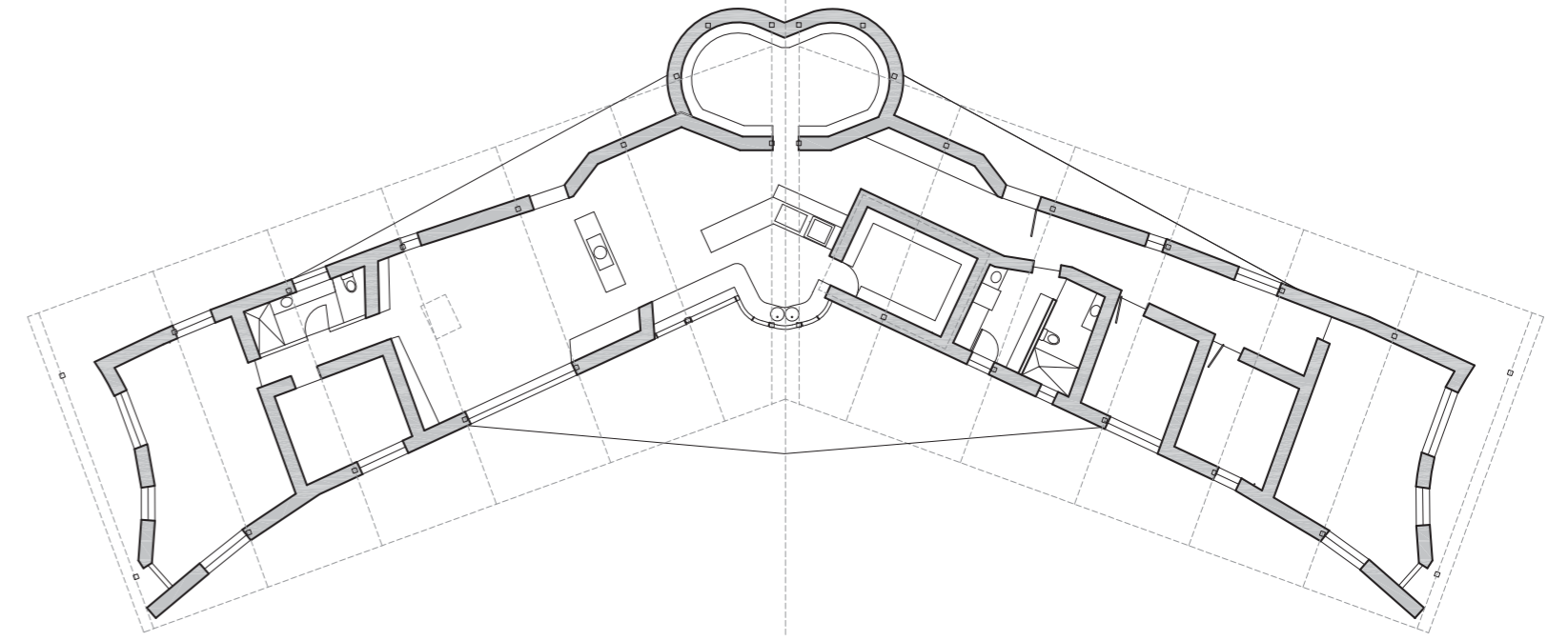


fig.152: Strawbale House, Merrijig Victoria. Floor Plan bifurcated for two couples sharing the space.



fig.146 : Strawbale House, framing construction.



fig.147 : Strawbale House, interior during construction.

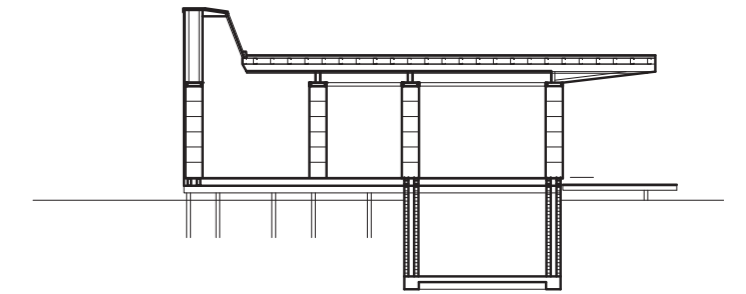
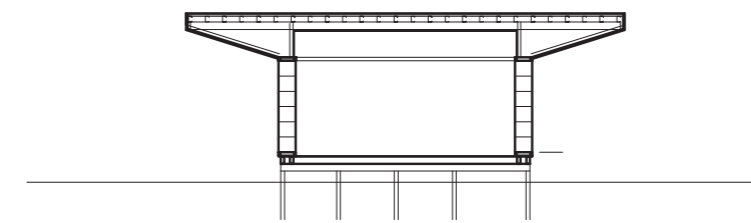


fig.153: Strawbale House, Merrijig Victoria. Section

fig.150 & 151: Views from the North and West partially complete

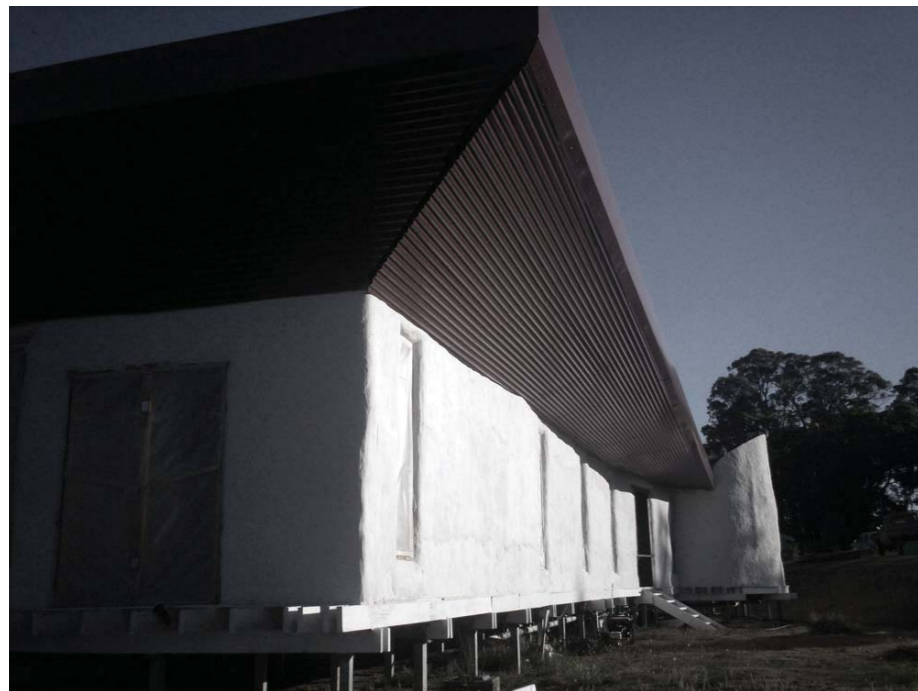


fig.154 & 155: The building's weather: Strawbale House in snow, and during 2006 bushfires.



fig.156: Greenhouse planted wall (wild strawberries)

the case, for example, of Council House Two in Melbourne,⁸ the consultant *charette* process forced broader participation at concept stage; a process which seems analogous to how a sustainable community would best operate. This view holds that conventionally separated roles for disciplines or consultants inhibit the innovation needed for green design; that the process is necessarily complicated and requires robust collaboration. In the case of the Greenhouse project, roles and processes were complicated and altered by the building program and the needs of stakeholders. The fast track process forced each party to be a collaborator. The design process was less than six weeks; and so the construction process, design development, costing, and permits, all happened concurrently. The construction period was less than eight weeks; key structural considerations took place on the construction site. A co-design role between architect, builder, engineer and owner became essential. There were several financial investors in the project, including the building contractors and an events promotion company. The lines between promoting a facility that was only to be open for a few months, promoting a construction system as a prototype, and developing a piece of site specific architectural design, became extremely blurred.

The contribution of architectural design was masked by these processes. The speed of the work made it seem to ‘just appear’. The spatial mapping, central to our concern as designers and critical in the particular nature of the site, was masked by the apparently self evident and ‘off the shelf’ character of the designed object. A role for the architect as sole leader or manager was impossible here. Participation in all the noise and the speed of the process was absolutely necessary. The complexity and mess of the process created enough difficulties to distract everyone, yet the situation threw into sharp focus the particular contribution of the design discipline to the building process.

The reality of authorship in architecture is usually more complicated than is conventionally described and in a participatory process this can become even more complicated. However, this does not mean that in entering the muddle, the architect does not bring the particular expertise of the discipline. In a project where owner, builder and designer are enmeshed, clarity around the design contribution is even more critical. It is not uncommon, for example, to watch architects in an uncontested role of manager of the process conceding the role their spatial intelligence might bring. Participating in a broader, socially complicated process alters the design role but does not diminish it.

Participation & Resilience: Hubs, Clinics >

Some of Antarctica’s design projects bleed particularly into advocacy for design in the built environment, bringing design values to a context in which they have not been explicitly sought. In these cases, design becomes a matter of exceeding expectations, of demonstrating the relevance of the design process as a matter of policy, even (or especially) when it is not expected or intended. There, the presence of a design process cannot be taken for granted. Three such instances are the Workplace of the Future project, the Rebirth of the Clinic project and the Sustainable and Affordable Housing Initiative.

The Workplace of the Future project for Victorian State Government focused on the efficiency of office facility footprints and on administrative strategies for integrating new technologies into work environments. It was driven, by and large, by a facilities management perspective. An outcome of that agenda, however, was the proposition of flexible short term office hubs for government – an idea impossible to assess without a design process. Similarly the Rebirth of the Clinic project examined primary care medicine, initially from the perspective of professional safety (motivated by the professional college after a series of attacks on general practitioners in their clinics). An examination of this as a spatial design problem was pursued through design case studies, and broadened to examine the role spatial design could play in making the medical process both safer and more comfortable. It was further expanded to consider the role of architectural design in general medicine, and to consider the civic role of the clinic building in delivering both health and shared information. This is not an obvious approach to a professional culture largely divorced from architectural design. It took some innovative questioning from the College of General Practitioners to confront the scepticism of many doctors (as well as that of the Institute of Architects)⁹. An argument for the place of design needed to be made beyond its conception as ornament or luxury indulgence. A third project, the Sustainable and Affordable Housing Initiative, (SAHI) was focused on design from its inception. Yet its explicit aims – to deliver low cost single houses with high environmental standards – meant entering a field largely abandoned by architects many years ago. Spatial design might have been peripheral to the design questions of these projects (which largely focused on design as defined by efficient building servicing techniques, or by façade composition), had they not been actively pursued by the design team. One of the key contributions to the SAHI projects was to integrate forms of spatial adaptability into the plan, thereby addressing questions of social longevity in housing. For these projects, like the others, the form of participation was to join another field, and bring a design process to it, rather than to manage the design contributions of others. It meant bringing architectural design to the table as one of several participants.

The results of these design processes have something in common with each of the earlier projects cited, and with the discussions of longevity and accretion. They share an impulse to divorce buildings from their immediate functions, with the purpose of making them resilient. In office hubs, tightly programmed work spaces (work stations) are substituted with looser spaces for working and meeting with varied users. When the medical clinic is uncoupled from its rigid type, it can edge toward other public types such as libraries, cafés or community centres, rather than being imprisoned by its own medical program or defined as a small hospital. Even for the nuclear family house, we imagined it split into other uses or other future arrangements.

Participation Conclusion >

9. Anecdotally, both the Australian Institute of Architects and members of the medical community showed little support for the publication of *Rebirth of a Clinic: A Design Workbook for Architecture in General Medicine*.



fig.157: EBD urban design with Victorian Eco Innovation Lab, West Melbourne brownfield site, testing high density, urban agriculture and re-use of industrial urban fabric.



fig.158: Sustainable and Affordable House Initiative Project, Melbourne. A prototypical, adaptable house for the volume market.

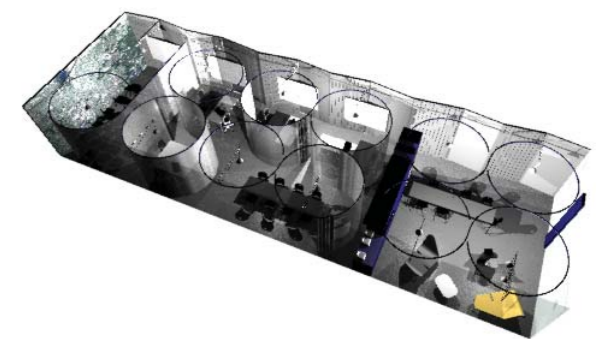


fig.159: Hub Victoria series: large prototype.

Resilience is a stated principle of the workplace guidelines project. It is a quality that gives space longevity, allows change, and accommodates the unknown. Resilience is what allows a built form to exist beyond an immediate functional situation without being dependent on formal archetypes.

Resilience is a stated objective of another project, the VEIL design for the EBD site in West Melbourne. (fig.160) Resilience in this case meant adapting cities to life beyond fossil fuels; beyond enormous dependence on large scale mobility and transport. Spatial design was one part of this – a mere participant. But for us it meant loosening the influence of zoning on the site, as well as any other pre-figured separation of program. The spatial resilience of an urban design might be measured by its ability to loosely contain new programs, and to co-locate existing ones. In that situation, the effect of an increase in density would be accelerated by a decrease in commuting, relocation, and rebuilding. Resilient architectural design means neither neutral, fluid space for flexibility (assuming constant change), nor an immutable type into which varied programs are pressed. It wrestles (or negotiates) between the two, just as longevity wrestles between resisting time, and responding to it. All architectural space does this, more or less, and fully acknowledging as much in the design process, means accepting form which is imperfect or provisional. It also precipitates a consideration of ongoing and future participation in the architectural process.

Uncoupling functional program from architectural space is a way of catering for future participation in the design process; of acknowledging that designed spaces will be acted on, that others will continue the design process over time; and that accretion infers participation. The experience of our practice is that notions of participation and resilience are demonstrated most strongly where the role of design, and its process, is least obvious. This might be most marked in projects where the noise is greatest, or when at face value it is not a design project at all. The analogy for participation is one of sitting at the table of others, instead of bringing others to our own table.



fig.160: EBD urban design with Victorian Eco Innovation Lab, View from the west.

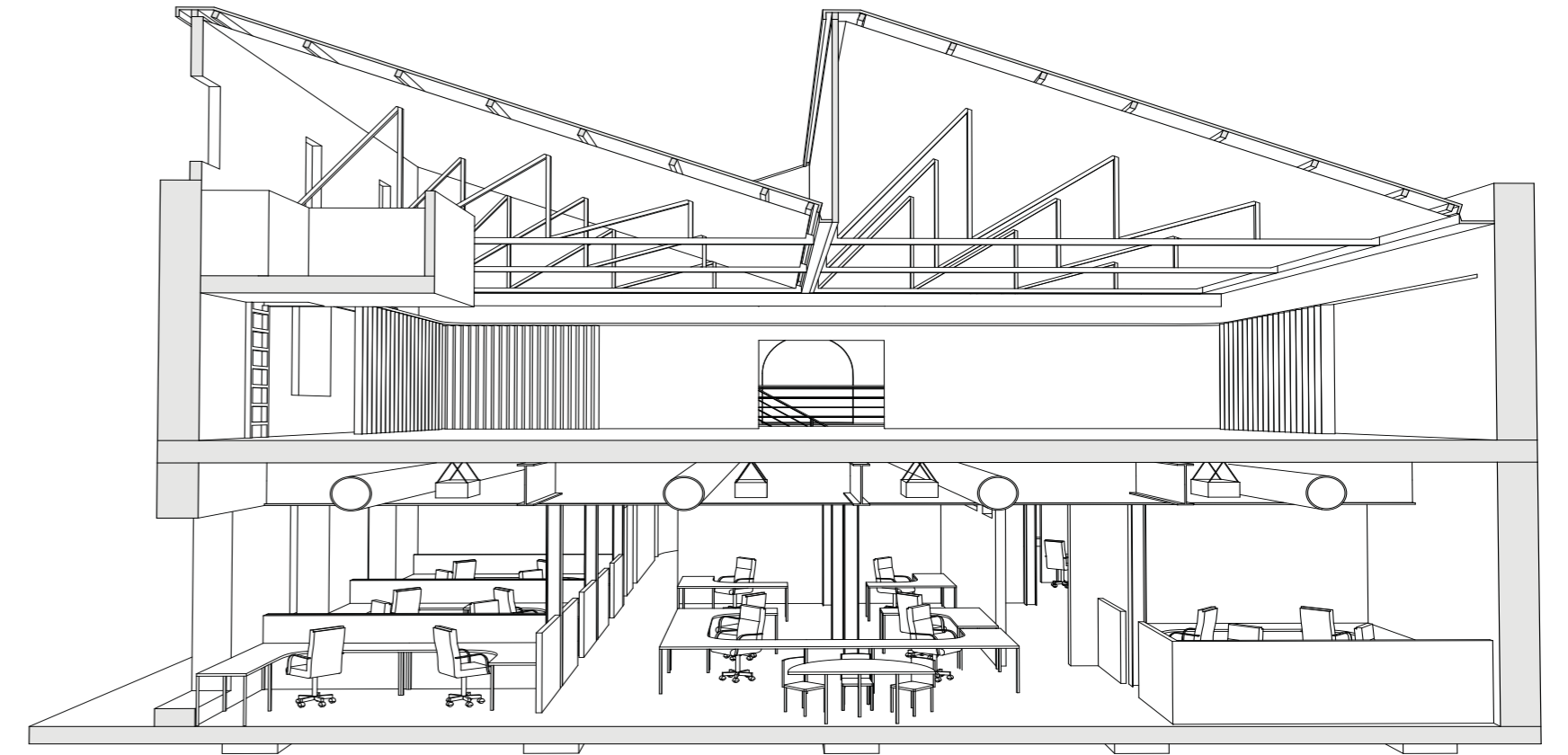
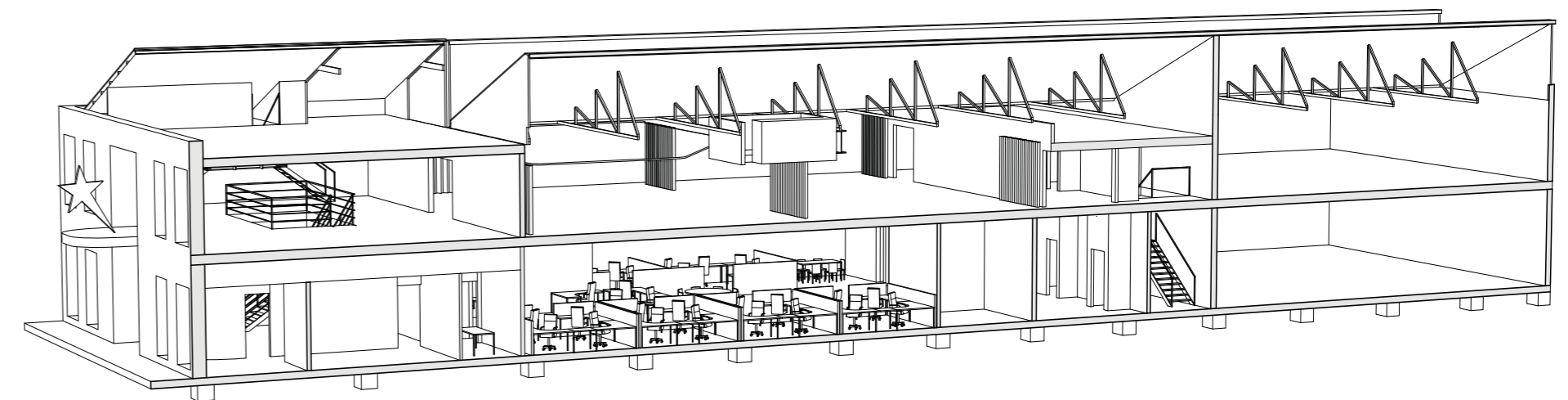


fig.161 & 162: The Reach Foundation Sectional view and oblique view.



Conclusion

Design practice is an ongoing activity, in my case through Antarctica and the RMIT Architecture Program. The process of uncovering design propositions was structured around an analysis of my design practice leading to six GRC project presentations. This PhD charts a path through that research and uncovers five basic propositions that are the deep questions underpinning this ongoing research. They have been labelled Noise, Junk, Longevity, Accretion, and Participation.

Through these propositions I have attempted to connect three things which I argue inform and interact with each other throughout the architectural design process, and that are often analogous to each other.

They are:

1> A type of architectural space

(A SHED)

A shed here is defined with the following characteristics:

- a:** a loose relationship between program and form- between its interior and exterior envelope
- b:** an envelope which is simple without being minimal
- c:** raw enough to accept accretion

2> A mode of practice

(ANTARCTICA)

Which has the following characteristics:

- a:** a group practice (a place not a single personality)
- b:** a conventionalised exterior (engage with 'normal' practice)
- c:** participation is key, both within the group and within the wider environment of the projects

3> An ethical position towards architecture

(SUSTAINABILITY)

Which has the following characteristics:

- a:** to broaden and expand the field of engagement for architectural design
- b:** to accept the condition of the built environment as we find it
- c:** to be resource conscious, seeing architecture and building as a finite commodity

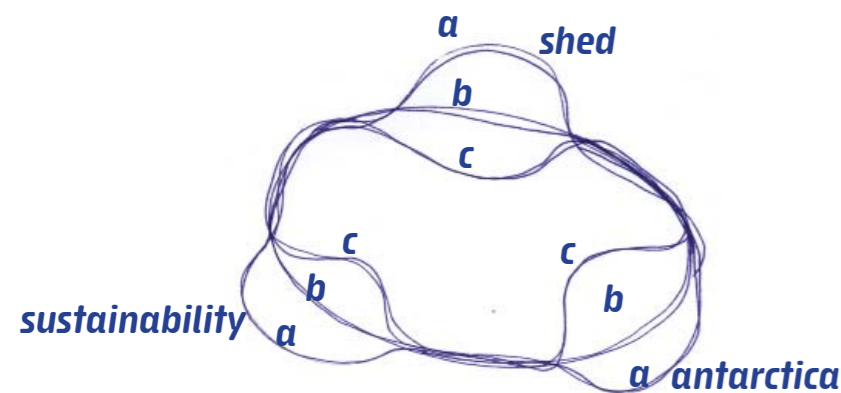


fig.163

- 1> **a:** Program and form are often very loosely related. A shed is a spatialisation of this phenomenon. It accommodates indeterminate activity; and changes over time. This should be differentiated from a shed defined through a nostalgia for honest expression. It is closer to Venturi and Scott-Brown's notion of the decorated shed (which accommodates program and ornament) without their singular focus on the sign replacing space. The focus on questions of time amplifies the capacity of architectural space to accommodate loosely defined requirements.
 - b:** Questions of formal complexity, precision or craft are largely sidestepped here. Thinking of design as a process unfolding over time releases the work from being a formal expression of a moment or a particular time, whether expressed through complexity or through minimal precision. Instead of being preoccupied with the purity of form (either complex or minimal), a shed aims to be permissive. That is, architectural design can accommodate complexity better than it can create it; it can allow it better than it can prevent it.
 - c:** Simple and flexible spaces are not necessarily sheds. It is shorthand for a characteristic that accepts and demands accretion. Rawness means sufficiently un-finished or un-precious, so that it may accept the unpredictable inputs of others and therefore extend the design process into the life of a building. The projects in this document have in different ways demonstrated this characteristic. Reflection on the earliest projects under the theme of Junk were particularly concerned with this idea. The overarching formal quality of the shed could be described via the ability to survive and adapt to social or cultural change; to modernity. Its form is robust enough to be altered, re-coloured, neglected or degraded, without foregoing its architectural ideas.
- 2> **a:** Architectural design is intertwined with the environment in which it is made, including the environment inside the architectural office. When we established a loose group practice at Antarctica we observed two common models and aimed to cut across both. First, the personality driven practice, with a dominant head reigning for a generation; second, an anonymous corporate structure with a perpetual life. The group operates in the tension between complete collaboration and parallel activity. There is no single model for working, and the range of projects in this document exhibit that range of processes.
 - b:** With the exception of Antarctica's earliest days, when a loose cooperative structure was trialled, a conventional company structure has been pursued. That structure has incrementally become more straightforward, and tighter, while being mindful of its autonomous origins. We have been conscious that normalising a structure via external protocols has enabled us to participate more broadly in the public architectural environment.
 - c:** Participation is the crucial ingredient of this practice environment, preventing it from ossifying, and allowing it to supersede this reflection. The developing practice environment of Antarctica relies on our ability to draw on a shared library, rather than subscription to a single shared agenda. It relies on a culture of review and critique, rather than of pre-approval or an explicit singular direction. This takes time, both in the day to day and through the accretion of



fig.164: Greenhouse interior (2008)

the shared library. Questions of co-authorship, collaboration and specialisation in the design process are filtered through participation. The messiness of practice contingencies and competing agenda remain central to the design process. Acknowledging the existence of a complicated set of roles and allowing them to participate is necessary to properly understand that process.

I have also observed that the collaborative design tactics used in projects frequently parallel the external pressures of the environment. Accommodating architectural program with form is like accommodating varied voices within a group; the collaboration necessary with clients, consultants and builders mirrors the internal negotiations of a design group, as well as the constraints of a physical site. A multi-headed design structure has made us more able to accommodate the particular difficulties of a given project.

- 3>**
- a:** The ongoing design research aims to broaden the field of influence and engagement for architectural design. Reflections on the theme of Noise in particular have considered the design process within an expansive terrain. Similarly, reflection on time through Longevity and Accretion aims to expand further still the territory in which architectural design enquiry can comfortably exist. Engaging in design in which resources are a real concern, or where the direct influence of the designer is more limited, are examples of that process. The projects have demonstrated this position through the diversity of participation in the imperfect conditions for design.
 - b:** Accepting all of the built environment and its artefacts is a response to the agenda of participation. It is an ethical position to refuse to dismiss most of what surrounds us. The theme of Junk describes engagement with degraded forms of building and information; the themes of Longevity and Accretion expand this to join the ephemeral to the durable.
 - c:** Positioning architecture as a finite resource is latent in themes extracted from the projects described in this document. It unites the impulse to re-use junk, to stretch the life of buildings, and to encourage their re-adaption through accretion. This position infers the intelligent use of space, just as it infers the intelligent use of money, and of the human resources used in making the designs. Each project discussed here shows evidence of engaging with questions of resources.

The term sustainability is inadequate to describe this position toward architectural design. However, I use it to shift the sustainability debate away from questions of landscape or wilderness, or of building science. Instead, it is framed by the long term viability of architectural design in an overpopulated and under-resourced environment. I began this document with a proposition about the camel; asserting my preference for it over the more commonly admired horse, and asking what does that architectural camel look like? The projects demonstrate that it can take many forms, but that in contrast to predominant images of modernity, it might look old, or small, or cheap or unfinished, or very much like its own surrounding environment. Yet it has a form which can not be ignored.

Contribution to the Discipline

This PhD contributes to a body of knowledge about design practice that commenced in 1989 with the involvement in RMIT's Design Practice Research Lab, of Howard Raggatt, Alan Powell, Peter Elliott, Nonda Katsalidis, Alex Selenitch, Michael Trudgeon, and Ian McDougall, and which has since included over sixty practitioners from Australia, South East Asia and Europe. That body of knowledge exists in a significant design community which forms the environment for the work of the PhD.

This PhD is distinguished by its engagement with loose forms of collaboration in design practice. It has extracted some implications for architectural form and for forms of practice which arise from this engagement. The projects are evidence of architectural form developing in a collaborative environment. The thematic structures have identified some key questions posed by those projects.

As part of a body of knowledge that focuses on design practice, the themes that have surfaced here are common to many practice environments. Contending with multiple and incompatible influences on the design process, and the messiness of collaboration are just some of these. This work has examined the potential for such themes to be central to thinking about architectural design in practice, rather than as a repressed impediment to it.

The themes drawn from the projects have aimed to bridge the gap between some of those practice realities, and design as it is often described, insulated from those realities. The projects have addressed the impossibility of architectural composition existing in a pure environment, while recognising architectural form as the primary way of communicating architectural ideas.

This research contributes a framing of the discipline through ambivalence toward its boundaries. On one hand it is open to issues outside design culture; on the other it asserts the value of the spatial intelligence particular to architecture. Rather than viewing the conventional tasks of architecture as constricting, it is designer culture narrowly defines design process. The aim of pursuing this argument is to bring the spatial intelligence of architecture to bear on a broader range of situations.

The propositions of this work navigate space between a series of issues constructed as binaries. Contemporary debates in form, at times divided between geometric complexity and minimalism are sidestepped, throwing emphasis on the performance of form relative to its situation. The bifurcation of the built environment into the ordinary or everyday versus the exceptional signature building is another example which limits the contribution of architecture.

A binary of formalist aesthetic positions versus the ethical anti-formal is rejected with the consequence of drawing compositional questions into fields peripheral to them. Environmental sustainability or building affordability are examples.

Using philosophical terms, an idealist asserts the autonomy of architectural form, and its generation while an empiricist verifies that form against the observable. The pragmatist, occupying a third pole, is not so much constrained by reality's impurity, but open to the possibilities of contingent influences. This research claims to be in that third territory.

The danger of aestheticising the shed in its various definitions remains present. Conscious of Koolhaas' attachment to canonical modernism, of the attachment in Venturi and Scott Brown's decorated shed to historically derived ornament, this research seeks to emphasise to open – ended aspect of their arguments. The shed as a rustic vernacular or as a form of functional purity are similarly aesthetic attachments.

The terms of noise and junk used here are useful. As contingent categories, they are of little use without the discussions that delimit them. Recycling or reappraising lifts objects out of the junk category, just as cultural goods can return to that category, depending on their relevance. For noise the question of distinguishing useful meaning is one of more subtle and specific tuning to an environment. In either case, these notions resist a fixed aesthetic.

There is scope for greater interrogation of notions of impurity, and of how design culture is constituted as valuable (as opposed to noise or junk) through operations of media, of professionalism, or of patronage. For the practitioner, these projects begin to address these dilemmas through architectural design.

Questions of judgement and rigour are weighed against the potential for uncritical acceptance of the environment. The implication of these propositions is not that the design process and its environment remain free of critique. Rather, the whole environment may be subject to judgement rather than blind dismissal. Further, the design process may then be subject to a wider range of appraisal, taking in a wider range of considerations over a longer time frame.

For an educator such a reframing of the design process might release the student from the sometimes painful experience of the studio – one that is narrowly defined, individualised and momentary. Collaboration in the many forms described here might paradoxically make the complexity of design process more approachable and sharpen critical judgement.

The research carried out in the discipline through design practice might similarly benefit from the frank admission of its realities and a widening of its environmental focus.



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fig. 166: RMIT Building 8 viewed from Antarctica's studio, Melbourne 2008

