

**Platforms for Imagination:
Interaction With Minimal Furniture Forms**

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Signed Statement of Originality.

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Abstract

This research project is an investigation of furniture within the public domain, both interior and exterior. Looking closely at the physical interaction with form in public space, it is a body of work that examines and questions traditional notions of function within furniture and re-interprets them through the use of forms that are hybrid objects, mixing the functional and the self-expressive asking; Can reduced furniture forms still provide a variety of functions and how can they stimulate the imagination of the user?

Underpinning this research is the development of a strong minimal aesthetic, where forms have been pared back to simple basic components. This minimal visual language is used to create a functional ambiguity in the work and at the same time allow for, and develop, the possibility of creative personal interaction and functional choice on the part of the user. The research questions the nature of function in furniture and argues that reduced form does not necessarily restrict function, but rather enhances and engages it. Investigating the nature of the minimal form to provide multiple functional opportunities, the research also questions our traditional expectations of furniture. It examines the notion of the ambiguous form and identifies and explores the ability of people to find function in non-furniture objects. Blending the sculptural with the functional the project experiments with ideas of what furniture is and what it is supposed to look like.

Intersecting the functional explorations of the project are examinations into the role of the imagination of the user. The project looks at the blending of the imagination and interaction through studies of children's toys, play grounds, play equipment, theatrical set design and stage props. Linking with theories concerning these subjects, the research investigates

how a minimal form can be something different to each person and how, through imagination, these forms assume a variety of different functions.

The project is located in a contextual field of artists and designers whose work is either concerned with minimal form or with questioning traditional notions of function. Minimalist designers such as Donald Judd and Enzo Mari are examined in relation to the aesthetics of the research whilst designers like Verner Panton, Karim Rashid and Andrea Zittel are identified through a connection with the functional concerns of the project. The theatre and playground designs of Isamu Noguchi have also been an important influence on this project.

The resulting furniture pieces produced through this research are conceptual experiments not only with the functional and aesthetic aspects of furniture but also experiments in a social sense. It is furniture that seeks and encourages interaction personally and publicly. By distorting, expanding and playing with accepted ideas of furniture this research produces pieces that defy direct recognition as furniture and create a playful ambiguity in both their form and utility.

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Introduction

My research is about experimenting with the reduction of form to heighten the physical and emotional experience of the furniture. Thus, one of the main focuses of my research has been to create furniture that provides stimulus for imaginative function, without spelling that function out in fully articulated traditional furniture pieces. I am creating furniture that provides a variety of possible uses or functions but also at the same time provides an opportunity for choice and imagination by the user.

Like all furniture, this project is at heart about the relationship and interaction of the human body with form. It is both a physical and an emotional journey. The physical interaction can dictate an emotional response, just as the emotional experience can dictate a physical one. From the outset this research project has set out to both examine and re-interpret what we use as furniture in public space and how we use it. The aim has been to create works that force a new approach to furniture both aesthetically and functionally, allowing at the same time for personal creative input or decision making concerning the function by the user. Through my work I intend to create furniture that develops choices and creates enthusiasm for creative playful function from the user.

Key to my work is this notion of moving away from traditional furniture forms in favour of more reduced minimal forms. I have purposely set out to reduce the recognition of my work away from what might be standard furniture in public places.

The research looks at how people use a variety of different non-furniture objects in everyday life as furniture. People will find utility in the most unpredictable places. Whether it be sitting on stairs, fences, or leaning against poles and walls we can find furniture and all its various functions in the most basic of forms. When assessing these purely functional

necessities, the actual tangible requirements for furniture are small. However this should not mean that the experience with an object should be an ordinary one. As artist Robert Morris said ‘Simplicity of form is not necessarily simplicity of experience.’¹

The use of imagination is a concept that is central to this project. I am interested in the projection of imagination by the user onto the furniture. Through the work, this project examines and promotes the idea of a child-like investigation of objects. I examine the development of imagination through the use of non-suggestive toys and sculptural play grounds. Like children’s play equipment, public furniture should entice investigation and exploration to create a more compelling experience and not just simply provide a single resolved solution, but rather many possible functional solutions. Where there is imagination there is a diversity of potential and possibility.

An interest in theatre set and film design has always been an influencing factor on the nature of my work. In the theatre where a simple prop can become any number of interactive objects, so too this project is about the imagination and development of function from a base set of stimuli or props. I relate to the idea that my furniture works in the same way theatre props function within a play, whereby both the actors and the audience allow themselves the ability to believe an object to be whatever the context of the play needs it to be at any particular time. In this situation an object becomes multi-functional purely through imagination. Like a theatrical set, I see my furniture as creating a scene allowing for a diverse range of personal preference in utility.

I am looking to gain an interaction from the user both physically and creatively rather than one that is structured or finite. The necessary physical functions of furniture are few. Fundamental to this project is a questioning of the way these functions are resolved or at least altered and experimented with. I therefore seek furniture that suggests a range of

¹ Marzona, D (2004:78)

possible functions, rather than designating a specific function. I am creating the matching base forms that are the preliminary points to an ambiguous functional solution.

Throughout all the facets of this research, I see my work as predominantly a vehicle for self-expression first and utility second. It is a blending of conceptual sculpture and furniture into objects that are, in the end functional art pieces.

This exegesis is divided into three major sections, the central argument, the contextual reference of the project and the description of the process and the body of work. The central argument will outline the major theoretical concepts that underpin this research. Looking firstly at the ideas surrounding interaction with ambiguous form, it explains how and where the project emanated from as well as its functional basis as furniture.

The connection of minimalism to furniture and in turn its relationship to function is discussed in the second part along with the connections with the modernist furniture movement. The final part of the central argument outlines the relationship of the imagination to my furniture, through the examination of theories related to childhood play, playground equipment as well as looking at the project's interest in theatricality.

The second section of the exegeses, the context, places this research into its field. It is an analysis of the work of artists and designers both current and past, which deal with similar concerns to mine. These artist and designers are identified in relation to the major concerns of the project. This section examines, compares and contrasts the work of the artists and designers I have picked as being relevant by their association with the major concepts of the research. For example Donald Judd, Gerrit Rietveld and Enzo Mari are discussed in relation to the minimal aesthetic of the project whilst designers like Verner Panton, Karim Rashid and Andrea Zittel are discussed in relation to the functional investigations.

Finally in the last section I outline the process and development of the final body of exhibited work. It outlines the literal journey of the research

from start to finish. Looking at each piece in the context of the theoretical aspects, this section also outlines the technical aspects, material choices and design issues faced throughout the research.

Past Work

The work that immediately preceded this project was done in my honours year here at the University of Tasmania. Looking back at the furniture that I produced in honours, one can easily see the connections to my current work both in the underlying themes and also in the aesthetics. Many of the concepts and ideals of that work were to set the scene for the continued investigation within this PhD. Within that year I really set about to challenge all of my previous undergraduate studies and to produce a body of work that was more aligned to self-expressive ideals as the main focus, rather than chasing any commercial values. It was research that attempted to delve into the more cerebral aspects of furniture. Put simply, I wrote at the time that my work was 'about creating furniture that is a response of the imagination and not the market place.' Looking back I can see that I was also attempting to provoke people and to purposely rebel against what I perceived as the traditional expectations in furniture. Though this insurgence was part tongue in cheek, it was sincere in so much as I had a strong personal desire to genuinely do something unusual and challenging.



Fig 1: *Arctic Swing Mk 1* 2002

My honours project investigated through furniture, themes such as the physical and emotional functions of furniture, theatricality, social

interaction amongst form and notions of play. These thematic elements and aims of the work were blended with a strong reductive aesthetic that had been becoming an interest in my undergraduate degree. In honours I went all out to reduce furniture down to base forms, removing elements like legs, arm rests amongst others or what I called at the time removing the 'bells and whistles'. The work drew inspiration from and made aesthetic links with the work of minimal artists like Robert Morris and at the same time blended this aesthetic with a playful function. What emerged were pieces that were not only reductive in form but also in colour. I found that minimizing the use of colour together with virtually no use of pattern focused both the work and the users experience of the furniture on the theoretical qualities of the work.

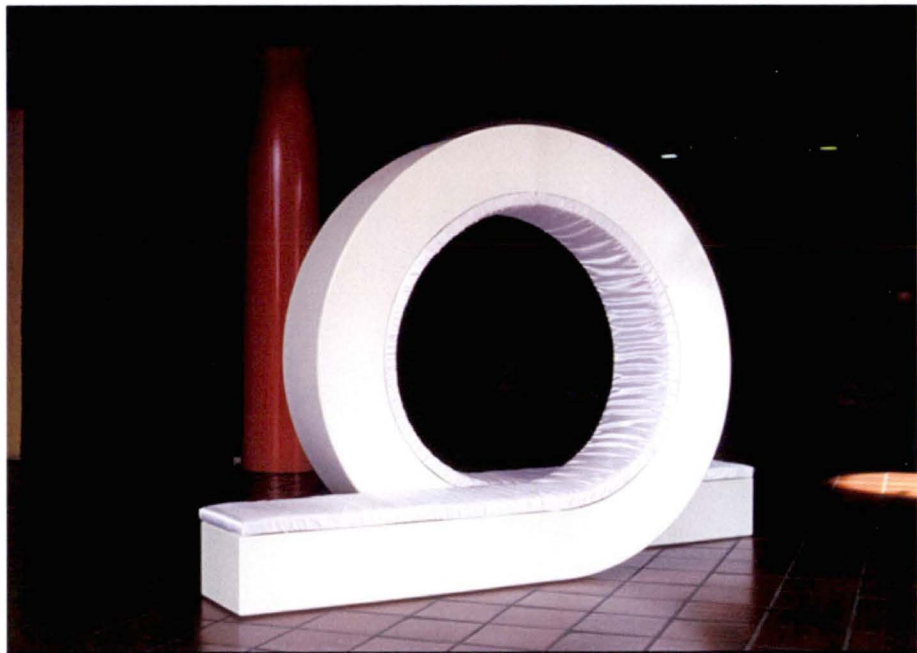


Fig 2: *Loop Chair* 2002

Whilst there was a move towards a visual reduction of my work the opposite was happening with the size of the work. The use of a large scale in my work was a new development that happened to my art practice during the honours year. This started from a desire to create works that were visually exaggerated and soon fused with ideas that looked into some new ways of social and physical interaction with objects and space. Through making larger works I saw the potential to create furniture that

could accommodate multiple users with a variety of functional alternatives. In a way the Honours project for me was a seminal year in the development of the ideas that were to coalesce in this research project. Interaction, scale, the minimal aesthetic amongst other things, are all aspects that were to solidify themselves in my future art practice.

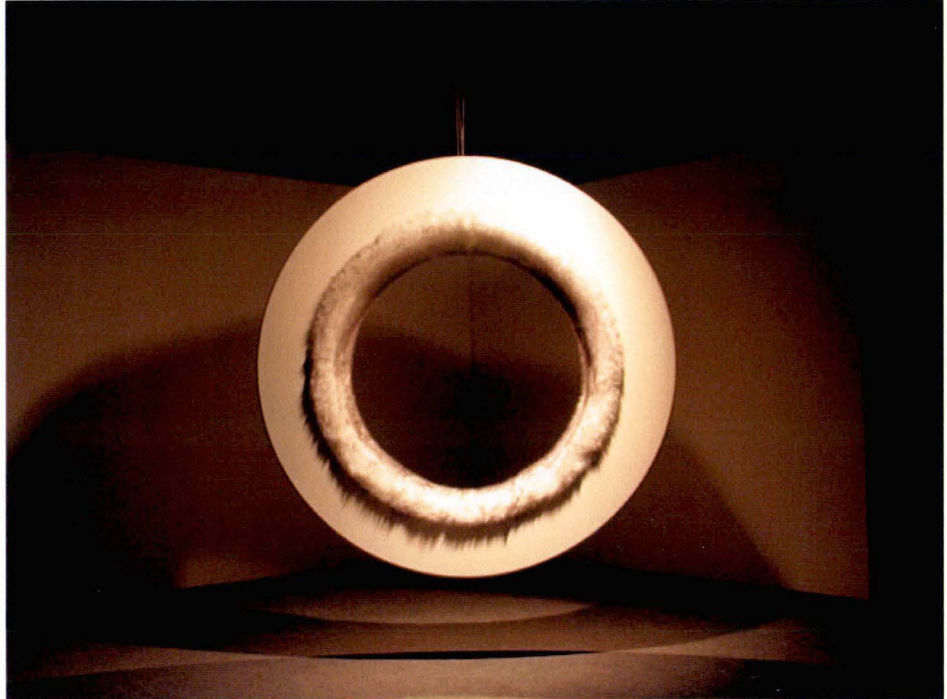


Fig 3. *Arctic Swing Mk 2* 2002

Section One: Central Argument

Part One: The Platforms

Functional Interaction with Ambiguous Form

The embryonic thoughts for the nature of the work within this project started to emerge whilst looking at the work of two particular artists, Australian painter Geoffrey Smart and Hong Kong based photographer Michael Wolf. Whilst seemingly miles apart in style and technique, I saw in the work of these two artists a link, in the way they looked at the human form and its relationship to objects, in particular the objects and shapes that surround us in everyday life. It is the work of these two artists that was to sew a seed in my mind that would greatly influence both the PhD research and my art practice and were to set me thinking about my work in a whole new way.

Of all his work, it was Smart's modernist depictions of urban landscapes that stood out for me. Many of Smart's paintings are, to me a beautiful blend of the human figure amongst the minimal austere shapes of the city environment that he portrayed. Although a strong sense of urban alienation permeates these works, the mundane and obscure objects are in a way celebrated by Smart. Road working bollards, fences, staircases and general industrial paraphernalia all become the backdrop for the figures in his portraits.

Paintings like *Plastic Tube. 1980*, *The Breakwater, Fiumicino. 1986-87* and *Playground Mondragone 1997* amongst many others, link the body and minimal form together. Here are examples of people in a variety of poses either interacting directly or juxtaposed against basic structures that seem to become the symbolic props for the characters within the paintings.



Fig 4: Jeffrey Smart *Playground Mondragone* 1997

It was this contrast and mix of the human figure with the minimal sculptural shapes of the city that started me both thinking about and reassessing my own work. In *Plastic Tube* for example, there was something about the way the men are interacting with the tube that appealed to me in a structural sense, suggested that perhaps an object like that could somehow be furniture.



Fig 5: Jeffrey Smart *Plastic Tube*. 1980

With *The Breakwater, Fiumicino*, the bathers and the anglers interact together finding different uses amongst a jungle of cement barriers designed for the completely different function of stopping the tidal waters. Although I am sure it was never in the thoughts or intentions of Jeffrey Smart, I took from his work an example of the possibilities of finding function in objects where function does not exist or was not intended. In other words, I saw the adaptability of minimal form into utility, through lateral and creative thought.



Fig 6: Jeffrey Smart *The Breakwater, Fiumicino* 1986-87

I also saw that perhaps these simple forms could provide the functional requirements of furniture and that by using minimal form, they could go beyond just the barest requirements and in fact make public furniture more adaptable and diverse both functionally and visually.

One of the most influential books that I have read both in regards to this project and also to my overall art practice is *Sitting in China* by photographer Michael Wolf. It is this book and its simple beauty that was to make me completely reassess my attitudes to furniture as a whole. As the title suggests, this book is quite simply a photographic document of what people sit on in China. Although a study, as the author puts it, in the inherent beauty of used things,² it is in a sense an anti-design book that

² Wolf, M *Sitting In China* (2002:2)

celebrates the mundane, the unsophisticated and the old. This series of photographs doesn't just limit itself to furniture but it shows us a broader definition of the function of objects that surround us. Short on words but large on information, *Sitting in China* illustrates to me the basic and necessary requirements of function within furniture as well as our ability to find utility where it doesn't always seem obvious or expected. The egalitarian and unrestricted nature of seating and sitting in a public place is demonstrated through Wolf's documented examples of people sitting on fences, in gutters and generally on objects that are not usually considered as pieces of furniture. His photographs remind me of the playground, with people hanging, sitting crouching perching and generally interacting on or around form. These forms are designed for a specific purpose, though the user has decided to impose a contrasting type of function upon them. It is furniture at its most simple and unrefined yet at the same time it does not deny the possibility of choice and provides multiple utility for a number of people. Although the general aesthetics of these examples are not necessarily what I seek within my own furniture, I find the rawness and integrity of these pieces to be refreshing. They are unglorified and non-embellished forms that provide a function in the manner of furniture through the use of lateral thinking by the user.



Fig 7: Untiled image from *Sitting in China* by Michael Wolf 2002



Fig 8: Untiled image from *Sitting in China* by Michael Wolf 2002



Fig 9: Untiled image from *Sitting in China* by Michael Wolf 2002



Fig 10: Some local Hobart examples of imaginative function.



Fig 11: Hobartians at rest.

It was with images like these of Geoffrey Smart and Michael Wolf in mind that I deliberately decided to develop the project in a direction where the work became an openly defiant rejection of some the more traditional notions of furniture design. A sense of playful rebellion has always been a part of my art practice to date and I saw here in my research, an opportunity to push or at least tweak the boundaries of the accepted norms both aesthetically and functionally.

In the book *Form Follows Idea; An Introduction to Design Poetics* by Maxine Naylor and Ralph Ball, they wrote:

If there are now fewer material and manufacturing problems to solve in the general arena of furniture and lighting design then we must find forms of expression where structure and material resolution are taken as a given and the design object as cultural information can be contemplated. Invention now lies more in the reconnecting and building authentic, narrative layers of meaning back into objects that have lost meaningful significance, rationale and value under the shear proliferation of bad copies.

Today production belongs to everybody with a computer. Speed, quantity and the seductive power of production have become ends rather than means. Meaning disappears as method takes over.

It is important to re-establish visual contemplation and communication; to put the brakes on unreflective proliferation and superficial replication. It is time to provide critical, ironic and playful commentary on our condition and our cultures of consumption of both material and information.

It is time to play and to play seriously. It is time to put the poetry back into design.³

Furniture is more often than not explained or defined by its function: tables to put things on, chairs to sit on, shelving to put things in etc. In general, all of these are based around a set of visual clues that allow us to see this function immediately and easily. For instance a table being a horizontal plane approximately 750mm above the floor and supported by usually four legs or a chair being with a horizontal plane 450mm above the floor also supported by legs and perhaps with a backrest and armrests.

³ Naylor, M and Ball, R. (2005:27)

There are also clues to indicate other functional aspects like cushioning and softness for comfort

Although the shapes and styles of furniture differ enormously, any history of furniture book will show you in the majority of situations there is this instant visual formula that indicates to a viewer, that what they are looking at is, in fact, furniture. Followed with that is an instant understanding of how to function with that furniture. Looking at the following examples one can see the stylistic differences and effects one hundred or more years can have on furniture, yet there is essentially little difference in the function of the pieces or the recognition of these examples as furniture.



Left Fig 12: Michael Thonet *Chair Model No: 14* 1859.
Right Fig 13: Ross Lovegrove *Magic* 1997

My work does not function through any of these visually recognisable furniture shapes and there is nothing to immediately indicate that the work should be approached as a piece of furniture. There are little of the visual clues to help the user function within the piece. I have purposely set out to create an ambiguity both in the form and use. The pieces don't look like furniture and do not indicate a specific function. Although there is some accommodation in my work for some of the purely functional rules of furniture, I have sought not to make them a noticeable feature or the main focus of the pieces.

These ‘clues’ have been removed in the furniture to promote exploration and therefore discovery of the various functions. Because of its ambiguous form, the pieces can’t be approached with preconceived ideas and expectations with regard to the interaction of the body with the form. This leaves space both physically and emotionally for the imagination of the user.

By reducing my furniture down to these bare essentials and by playing and experimenting with all the aspects of furniture design like ergonomics, comfort, scale and utility for example, I am attempting to break away from a prescriptive and recognised formula for public furniture. Much of the current public furniture revolves around a very limited set of aesthetic and functional values that follow a basic utilitarian premise. It is furniture that is dictated by the constraints of mass manufacture, mass production and stringent council or government regulations. A section from the Australian Capital Territory’s Design Standards for Urban Infrastructure illustrates these ideals:

Seats with an all-metal framework, durable finish, armrests, slats perpendicular to the length of the seat are preferred. Seating surfaces should have ample space between slats; this type of surface tends to dry more quickly after rain. Seats should be designed to avoid entrapment hazards (see Australian Standard AS 1924.2 for head entrapment and Design Standard 15 Playgrounds and Playground Equipment for finger entrapment). Armrests and slats perpendicular to the length of the seat help to reduce vandalism; especially the danger and damage caused by in-line skaters and skateboard riders.⁴

I am not saying there is necessarily a problem with public furniture that is utilitarian only. Many of these regulations are there for good reason, for

⁴ Australian Standard 1428.2 Part2: Enhanced and additional requirement – Buildings and facilities. 1992. Page 24 Furniture and Fittings

example the accessibility of the disabled and elderly as well as general public liability issues. Furniture of this type does its job. It's providing rest, a place to wait (or whatever the requirement might be) and withstands both continual usage, and if outdoor, the elements of nature. However, it is furniture that rarely engages or challenges the user on any aesthetic, emotional or functional level. It is furniture that is limited in the scope of its function. For example at best with most public outdoor seating you can either sit or lie down, although (as can be seen in the above design standards) lying is now often not possible with various obstacles like skateboard deterrents and anti vandal devices attached to the seating. As important as issues of vandalism and public safety are, there must also be a desire for public furniture with a greater focus on the aesthetic and the lyrical.



Fig 14: Public seating and garbage bins in Hobart.

In *Furniture A Concise History*, Edward Lucie Smith states that, 'Furniture is the servant to fantasy just as much as it is a response to everyday needs'⁵ and it is this statement that holds true to my own ideals. I am seeking furniture that provides for these everyday needs, yet is not

⁵ Lucie Smith, E (1993:12)

limited in its functional possibilities and indeed satisfies users and engages them on a multitude of physical and imaginative levels.

The minimal forms and their various configurations are designed to allow a multitude of physical functions and interactions. The forms allow for functions beyond sitting; perching, leaning and reclining now become possibilities. Like a furniture playground, the forms in my work allow people to find their own function in relation to their own body. The furniture in the project varies in the amount of the immediately recognisable function, but all the work is linked through the desire to create a sense of personal discovery in the interaction with the work. Each specific piece will be discussed in the latter parts of this exegesis.

However, it is important to note that some pieces are more obviously functional than others. There are clues and starting points in each piece to indicate function, some of which more obvious than others.

Within all the work that I have produced from this research, the Cambridge Primary School project *Toy Box 2004* would be the work that is the most identifiable as functional furniture within the whole project. Yet, in spite of this it still allows for a diversity of interaction by the children. Yet, a piece like *It's Furniture Gym, but not as we know it Part One* has only a few clues to indicate it as a piece of furniture, yet it is not dissimilar in its opportunities for function and interaction as *Toy Box 2004* is.

There is a linking throughout all my work in its attempts to develop these physical activities beyond just sitting and to increase or change the nature of social interaction with furniture in a public setting. The minimal form mixed with the large scale of the pieces, creates furniture environments that become socially interactive climbing and gym equipment.

Instead of a limited physical interaction, the work aims to create setting where users not only interact with the form in new functional levels but also with each other. The forms in the furniture and the scale, permits for single use or multiple uses and the social experience to match. Like the

conversation pits of the sixties and seventies⁶, it is furniture that seeks to be the stimulus for either contemplation or conversation.



Fig 15: 'Conversation Pit' Poltronova Ltd. *Safari* 1968



Fig 16: 'Conversation Pit' Bonacina Co. *Carrera System* 1969

In a literal physical sense my work allows for groups of people to face towards each other for conversation in a social way but at the same time allows for the space to be more single and personal. Some of the works force more interaction than others, but all the works diverge from the idea of the single use piece of furniture. Whether, one is out on a limb by

⁶ Conversations pits: A general term that covers a style of furniture that accommodated several people at once and often involved a high degree of social interaction with others.

themselves or joins the pack, my furniture and its forms provides the branches for all the various activities.

Beyond just the physical interaction with form there is also the emotional response to the furniture. Not dissimilarly to the way there is diversity in the physical function, I am aiming to use ambiguous form to create emotional responses that are equally varied and personal to the user. The furniture works as a physically functional stimulus as well as an emotional primer. Working in synergy, the ambiguous nature of the forms, are designed to produce unusual function and as a result create an emotional reaction.

If they are in unexpected physical situations or they are interacting with strangers at the same time then there could be feelings of uncertainty. Alternatively, some might approach the pieces with a sense of investigation and enjoyment, seeking out the opportunities that are within the piece.

Overall though, the functionality or response to the work on any kind of level, is really only limited to the imagination of the user. The starting blocks are there in the furniture for whatever the user can find. In section three of this exegesis, the specific functional and emotional nature of each piece is documented, highlighting the various functional possibilities of the furniture and the emotional effects this might have on the users.

Part Two: The Minimal Furniture Form

Minimalism: Sitting on Cubes

From the very outset the heart of this project has been an investigation of the function and the aesthetics that encompass minimal form in furniture. The use of the term minimal evokes a variety of responses in terms of art, design and specifically furniture. For me minimalism exists mostly in terms of simplicity and formal reduction. I do not directly relate my work to the philosophical aims of the minimalist movement. I am interested in minimalism for its simplicity of form but the significance of these forms is quite different in my designs. The aesthetics of minimalism relate well to furniture, the austerity and anonymity of materials suit the functional form. However closely on an aesthetic level I may be linked with minimalism I step away from their desire to pare back external emotional associations. Unlike the minimalists I want my work to suggest or encourage something beyond it's own actual existence. It is an experience not just of perception but also of physical and emotional communication.

Furniture has a history, throughout the twentieth century, of associating and blending with various art movements. Bauhaus, De Stijl and Surrealism amongst others have all transferred their aesthetic onto furniture and other so called useful objects. My furniture and my interest in the minimal form, does not necessarily equate to a fully-fledged commitment to the ideals of one or other particular group. It is the luxury of the post-modern position, to be able to pick and choose the associations one makes, from a multitude of conflicting ideals.

English architect and furniture designer John Pawson describes a similar position,

I think it is important, too, to understand that minimalism is not a manifesto for living spartanly. This is a recurrent misunderstanding

which springs in part from its association with movements where renunciation of one sort or another is a central theme .. One may respond to the aesthetic expressions and indeed share many of the needs which these movements have sought to address without adopting particular codes of behaviour: one can want a place where it is possible to be still, without necessarily wanting to pray in it.⁷

Just like John Pawson puts it. I am adopting certain aspects from the minimal art movement without completely embracing the party line. My links to minimalism are quite straightforward and essentially aesthetically based. The simple use of basic abstracted geometric shape combined with the removal of decoration and detail is something that, quite simply, appeals to me visually. There is a kind of stark honesty in both the form and often the materials that relates well to adaptation into furniture. The reversal of this idea can be seen in the way the Minimalists adapted the products of mass manufacture into their work. Plywood, cement, fluorescent tubes and bricks all became part of the minimalist visual catalogue. It is unsurprising then, that many of the artists associated with the minimal movement, made the occasional crossover to the functional dark side. Artists like Donald Judd, Sol Lewitt and Richard Tuttle all brought the high minimalist aesthetic to furniture.



Fig 17: Donald Judd *Plywood Chairs* #84/85, 1987.

⁷ <http://www.johnpawson.com/essays/minimalism/>

As artists like these dipped their toes in the pool of functionalism, I too take the occasional foray into their world. The reasons for the specific forms of my furniture vary from piece to piece, as do the specific aesthetics. Nevertheless, all the work is linked through the use of the sparsest of shapes and forms mixed together under the umbrella of a functional motif. Despite the fact that similar aesthetic desires are sought in the use of minimal forms, my theoretical rationale behind these choices differs from that of the aforementioned minimalist artists. Minimalist artists were using pared back shapes and forms to reduce their art down to the basic essence of an object. Their intention was to reduce external symbolic associations from an object and focus purely on the physical nature and existence of that object. In other words they treated the object as a thing in its own right, devoid of reference to anything else but itself. Often this meant even removing the touch of the artist by using pre fabricated industrial materials or having the work manufactured by a third party. The work of two of the most recognised minimalist artists, Donald Judd and Robert Morris are described by Suzi Gablik in an essay on Minimalism: ‘Both Judd and Morris were concerned that the work should present itself as ‘one thing’, a simple gestalt that can be perceived as a whole, effective as an all-at-once experience’.⁸

This intent to remove the work of any content other than its physical “thingness” is not the reason that I use a minimal aesthetic. On the contrary, I intend the basic shapes and forms of my furniture to encourage emotional associations. I want my forms to provoke a whole range of functional and emotional experiences beyond their own physical presence. My work is not about this ‘all-at-once experience’; Rather, they are minimal forms to encourage further and prolonged exploration. The minimal forms in my work are just the starting points for personal imaginative interaction. The furniture pieces may be sparse in their aesthetic make up, but I relate this sparseness to a functional blank canvas that is primed and ready for use.

⁸ Gablik, S (1981:245)

The Modernists and Me: Form Hints at Function

Whenever there is talk of form and function, the modernist furniture designers and architects of the first half of the twentieth century are the initial starting point and seminal resource of reductive design. The Modernist designers, famed for their reductive style and the aesthetics of structure and necessity, gave us those celebrated words 'form follows function' that were to become the catch cry of functionalist designers ever since. Albeit, perhaps a generalisation and open to contradiction as it is impossible to reduce the basis all furniture down to one phase, these words in general encapsulated the ideals and general aims of reductionist functional furniture design, to reduce the form down to the functional necessary and pure.

Whilst the visual language minimalism in some ways stems from modernism and its use of reduced form and whilst much of the work in this project draws comparison with modernist design, there are however, fundamental differences in the aspiration for and use of reductive form in my furniture. Without doubt I have a strong visual link with some of the shapes and lines within modernist furniture and design. Strong use of rectilinear and grid like structures show a visual formula that is in tune with the likes of Gerrit Rietveld and architectural modernists like Walter Gropius who, along with Adolf Meyer designed the great modernist Mecca that is the Bauhaus School of Art and Design.



Fig 18: Bauhaus Art School.

Reacting against generations of nineteenth-century designers who placed an emphasis on the decorative surface over the form, the modernists encompassed the advantages of mass manufacturing processes that were emerging to create a reductive ethos in furniture that has remained a dominant force in design till the present day. It was an ethos based around a visual and functional supply and demand, whereby, in a strict formal sense, what was functionally required in a piece of furniture was supplied through its materials and manufacture. Looking for truth in form and material, modernist furniture provided a ‘what you see is what you need’ solution to design.

The early pioneers of Modernism such as the architects Adolf Loos and Le Corbusier promoted a harsh and militantly functional approach to design that seemingly left little space for folly or creativity for its own sake. Their arguments for the reduction of form and the removal of decoration both in architecture and furniture were based in utopian ideals for a better society and a more developed culture. Not dissimilarly to the American Shaker movement, economy of form became linked with a purity of the mind. As Loos wrote in his essay ‘Ornament and Crime’ ‘Cultural

evolution is equivalent to the removal of ornament from our daily lives'⁹. Anything superfluous to a physical requirement was seen as not just unnecessary but as somehow wrong or immoral. The aesthetics of mass production suited the belief that decoration and ornament were 'wasted labour... and wasted material'¹⁰ and also as Le Corbusier believed, decoration was often a tool for covering the mistakes of inadequate manufacture. Le Corbusier wrote of his desire to remove anything beyond the necessary, arguing that 'this is cold and brutal, but it's right and true'.

11

It is this idea of a purely utilitarian focus to satisfy needs that I find to be at odds with my own work. If the modernists were putting function before form, then my work is function following form. The modernist prioritising of function over form leave little allowance for the emotional content within furniture. The rise of post-modernism in furniture design in the late sixties and early seventies saw a new focus of the role of furniture beyond the functional ethos. Criticising and contradicting the basis of modernism, the nature of furniture changed to include notions of furniture as art or as metaphor and political statements amongst other themes. The modernist aesthetic ideals of pure form were discarded and replaced with an eclectic mix of materials and forms that expressed a renewed desire for decoration and free expression. The design boundaries had moved and now the idea that the physical functional result of a piece of furniture was the only worthy result had faded. Italian furniture designer and co founder of the 1970's post-modern design group Memphis, expresses this notion,

When Charles Eames designs his chair, he does not just design a chair. He designs a way of sitting down. In other words he designs a function, not for a function. Memphis tries to look at function with open eyes and ears... as a container or information that one

⁹ Loos, A. (1966:226)

¹⁰ Loos, A. (1966:229)

¹¹ Corbusier, L. (1925:75)

wants to possess... in other words, as an instrument of communication.¹²

The style of post-modern furniture is hard to define as it branched off into many different styles and forms during this time. However the period changed the both the look and intention of furniture drastically from what had preceded it. Design became a vehicle to express the general non-conformist and counter culture attitudes that were building within mainstream society. The social upheaval of the time was reflected in the design world's reaction to the aesthetics, materials and general attitudes to the furniture of the recent past. With a plethora of new manufacturing materials becoming available, furniture designers developed new styles that were seen as a direct reaction to the modernist's functional ethos. Colour and plastics were abundant within uninhibited designs where terms like fantasy and fun replaced others like function and ergonomics as valid concerns in furniture. Sculptor and furniture designer Neal Smalls' one liner encapsulated the vibrancy of the time, 'Furniture doesn't have to be dark and gloomy, like a whale that fell asleep in your living room'.¹³

It wasn't just the materials and colour of furniture that were under scrutiny. Designers began to embrace a variety of concepts that re-evaluated the way furniture was approached intellectually. Despite the varying aesthetic differences amongst the designers, experiments with function and changes of attitudes to the interaction with furniture emerged as a constant theme. Utopian ideas of communal living cells, furniture pods and conversation pits were offered as alternatives not just to furniture but also to interior design as a whole.

Interior design was seen as a conduit for idealistic dreams of a future existence where design was a liberator to the struggles of the human condition as well as giving us the convenience of somewhere to sit while it happened.

¹² Radice, B (1985:143)

¹³ Greenberg, C (1999:20)

Although perhaps too optimistic, and certainly at times impractical these designs were the forerunners for a lot of contemporary furniture. The modular nature of much of today's furniture has its roots in Radical and post-modern Design. The reduction of form and the emphasis on personal choice for the user are still as prevalent in current furniture as they were then.

My furniture does satisfy functional needs. However, those functional needs are not visually spelt out in the construction of the pieces. The use of reductive form in my work is not governed by a pre-determined notion of the function of the object as in the case of the modernists. Rather, my forms are governed by a desire to minimize the imposition of a set function on the audience and leave their function as open as possible.

A key concept to rise from the post modernist re-evaluation of functionalism was the concept of "ad hocism". Which refers to the idea that an object or a building might be used for something other than its original intention or non-intentional design. It is an idea that is at odds with the modernist's intentions for their designs. Originally architect Charles Jencks termed the notion ad hocism in reference to architecture and the function of buildings. A critic of modernist architecture and what he saw as the standardisation of design that went with that type of architecture, he advanced the idea that adaptability and improvisation of design solved more problems than the rigid application of a set of pre-determined values. Charles Jencks wrote,

Today we are immersed in forces and ideas that hinder the fulfilment of human purposes; large corporations standardise and limit our choice; philosophies condition people to deny their potential.¹⁴

¹⁴ Jencks, C and Silver, N. (1973.15)

In his discussions on adhocism, Jencks talks of the idea of improvisation through 'bricolage', which is the practise of the making or constructing something from what is available rather than what is needed. A 'bricoleur' is a person that makes do with what is at hand and finds new uses for it in keeping with his/her own needs. Regardless of an objects original purpose, the bricoleur re-interprets the use of available objects to suit their goals. Rather than creating from scratch, with bricolage the objects can take on a new meaning or function through trial and error by the user.

This idea of improvisation and adaptability is something that relates well to the furniture produced through this research. I see my furniture as objects that open up potential for use through this type of adhoc behaviour. Whilst the forms are designed and structured with careful and considered thought and perhaps to some extent the forms are standardised, the usage of them is an improvisation by the user. My work is a mix between a functionalist modern aesthetic and the ideals of more contemporary post-modern furniture. Like the modernists there is a visual truth in the construction of my work where, what is necessary in a structural sense, is also part of the aesthetic. However the structural form in my furniture is not designed around any specific functional requirement. It does not exist to satisfy any particular need; rather like the post-modern it is furniture to stimulate the luxuries of human imagination and emotion.

Part Three: The Imagination

Less Is More, A Playful Exercise In Fantasy

These notions of interaction with form led me to readings on the subject of play and playground design. The overall interest in this area came from an initial attraction to the forms and shapes of play equipment as well as the way children function with play equipment. Playground equipment is also a lovely mix of physical and social interaction for children. Jungle gyms and monkey bars are places for children to meet and socialise with friends just as much as they are for their physical development. I relate to how the play equipment functions on these different levels and how they become the base forms for the children to find their own use. Whether it is to play, socialise or for physical development, all these uses are developed only through the use of the child's imagination.

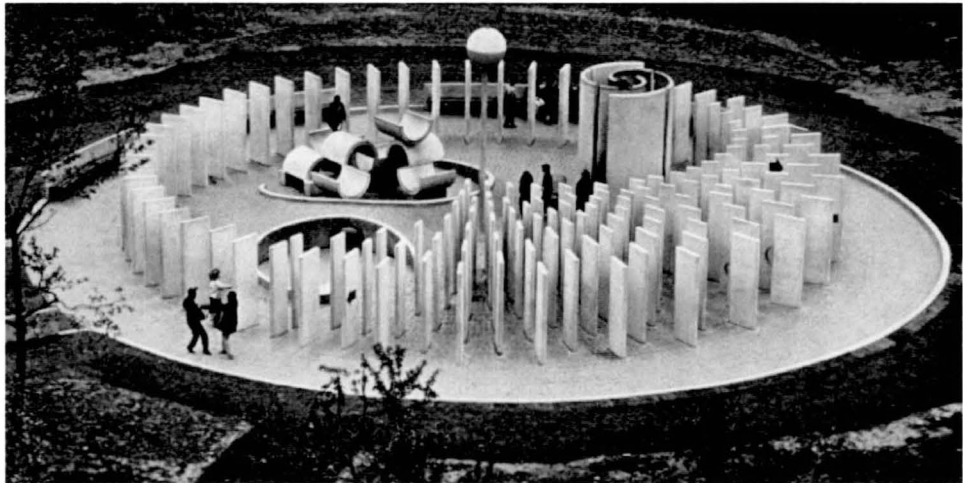


Fig 19: Minimal playground. New York

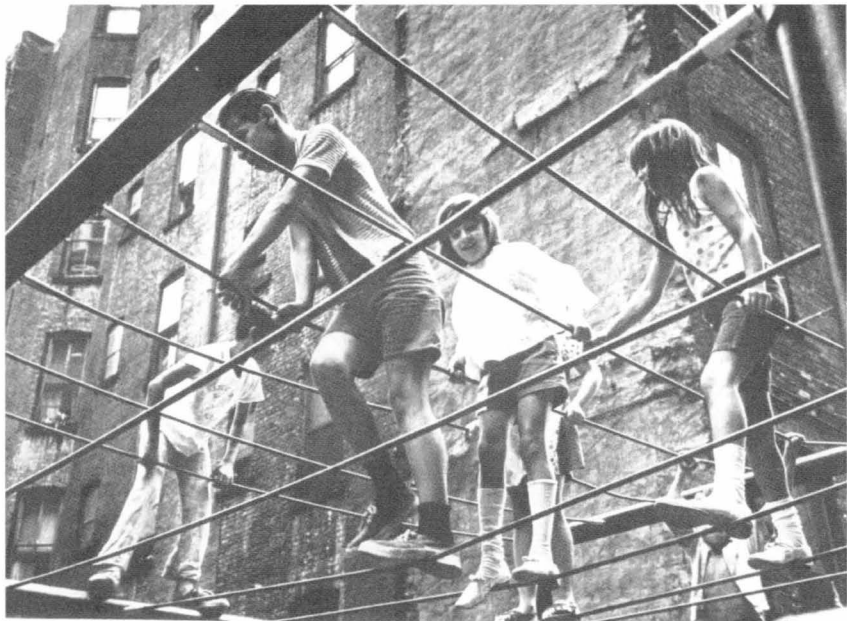
So many of the playground designs I discovered were simply collections of minimal forms with little resemblance to the swings and roundabouts one would normally associate with parks and playgrounds. Starting as early as the 1950's traditional playground designs were rejected in favour of designs that reflect a more abstract concept of the nature of play. What looked initially like an outdoor minimal art exhibition was in fact a

children's play area. These playgrounds encapsulated for me, the idea of interaction with form in a non-directed, self-guided way.



Above. Fig 20: Play area in Reston, Virginia USA,

Below. Fig 21: Minimal play equipment.



Employed in the late sixties (and still popular today) amongst playground designers and pedagogical¹⁵ studies was the notion of the exercise of fantasy. This concept relates to the old adage of a child discarding the

¹⁵ The science and study of Teaching.

bright shiny new toy only to go and play with the cardboard box that it was packaged in. The box has the flexibility to be anything the child wants, a house, a car, a spaceship or whatever. The box encapsulates the excitement of the undiscovered and the unknown. So too, designers did not want to influence a child play by creating structures that stifle imagination. Rather, they saw basic forms as allowing opportunity for the imagination to develop. In reference to adventure playgrounds David Aaron and B. Winawer write,

That five year old who makes repeated announcements that when he grows up he is going to be a fireman and run a real fire engine will contentedly play with a big packing box for two or three hours, day after day. Yet his lively interest in an elaborately fitted out toy fire engine will rarely survive the first few hours. The box is flexible and gives plenty of room for imagination. The fire engine can only be a fire engine and only one kind of fire engine at that. Nothing is left to the imagination¹⁶



Fig 22: Imagination with minimal forms.

The idea that a child will find fun and fantasy in some of the most unlikely places and objects is a part of my interest in minimal forms, forms that provide a stimulus or a platform for creative and diverse occupations. David Aaron continues,

¹⁶ Aaron, D. Winawer, B. (1965:117,120)

Although typical playground equipment is well defined in form and highly specific in function, sculptural playground equipment is vague, abstract and unspecific both as to form and function. Play sculptures are distillations or abstractions of the characteristics that make up play potential.¹⁷

Relating this back to an adult sense, the more general the form the greater the latitude for function and the greater the requirement or possibility for the user to interact with furniture. To some extent I associate the notion play in my work with the forms of play equipment. I also associate play to the work in a thematic sense, giving the user the flexibility of play, the ability to create and play with the options available within the furniture. In the same way as a child's tolerance for a new toy is limited without personal input or imagination so, too, furniture can be a starting block for a variety of emotional and functional responses that will differ from one person to another. Within minimal form exists a sense of possibility where there is no doctrine that stipulates a certain response either physical or emotional. The Steiner educational philosophy concludes that,

Playthings can be very simple indeed, but the simplicity applies only to the externals. For the toys are intended to give the child the possibility of becoming inwardly active through the imagination.... The fewer perfected things children are given, the more they must achieve out of themselves.¹⁸

Roland Barthes's essay 'Toys' in his book *Mythologies* discusses similar ideas. Here he talks of how toys are, more often than not reflections of adult functions. Toys that imitate defined adult occupations like army toys, medical toys and transport toys were seen by Barthes to condition children into their future adult roles. He says that this imitation of adulthood 'produces children who are users not creators'¹⁹. Barthes makes

¹⁷ Aaron, D. Winawer, B. (1965:78)

¹⁸ Steiner Early Childhood Booklet Number 1 2004

¹⁹ Barthes, R. (1972:54)

the point that the more unrefined toys like wooden blocks stop this reflection of the adult world and allow the child to imagine and create their own world. He states in relation to these types of toys that ‘the actions he performs are not those of a user but those of a demiurge.’²⁰ He creates forms which walk, which roll, he creates life not property’²¹.

The projection of function onto an object is in itself a projection of the imagination. By taking a form and reinterpreting it as furniture we are free to decide on a number of personal preferences on how that function is engaged. The work in some cases directly relates to the forms of play equipment and playgrounds. The spirit of the playground with its balance beams, monkey bars and swings can be seen in all the pieces. The aesthetics and materials may differ but the idea of playful function is a background essence. They are furniture cardboard boxes for adults to explore and to make their own.

The project is, in a way a creation of public furniture that could function in the same way children function with the equipment of the playground. Like a child on a jungle gym, we can use our imagination to provide emotional, social and physical experiences to make base minimal forms more accessible and functional. In a nutshell, reduce the form, reduce the recognition, stimulate the imagination and increase the potential for interaction. It is this idea of bringing an undiscovered potential to my furniture that has been one of the dictating forces behind the designs in this research - to create pieces of furniture that, like sculptural play equipment are distillations for potential function.

²⁰ Demiurge: (In Platonic philosophy) the artificer of the world. *The Macquarie Dictionary*. The Macquarie Library 1998

²¹ Bathes, R. (1972:54)

Theatricality: Props, Imagination and Interaction

Ideas surrounding theatricality and the interaction with props and sets, on stage or film, have become undercurrent themes in my research. Parallels can be made between the interaction with form that a child within a playground develops and that of the interaction with form within theatre and film. In a sense the theatre is like an adult playground where through the use of imagination, both the audience and performers use a series of forms or props to help tell a story, like a child would play out an imaginative story with their toys.

It was whilst watching a play a few years ago, that I started thinking about the imagination we use, and the suspension of disbelief that we go through when watching a play or film. In a play, actors will interact with props to create the illusion of reality and the audience, along with the performers can take the minimum of physical stimulus to complete that reality in their minds. This to me is not too different from the exercise of fantasy that a child extends onto his / her cardboard box or these theories on sculptural play. Imagination can create entire worlds with the smallest of stimuli.

The play I am referring to is *Last Cab To Darwin* by Australian playwright Reg Cribb and it is good example of the creative use of props was in theatre. The plot follows a terminally ill cab driver living in Broken Hill and his last journey in life to Darwin where euthanasia was available to him. This is not a single act play, and the nature of the plot required a large number of scene changes from indoors to outdoors and from towns to deserts. Yet the constant prop throughout all these scenes was a divan that changed to anything from a veranda seat, to a taxi to a hospital bed. The divan could have been a cardboard box for all it mattered but the interesting part to me was the imaginative projection.

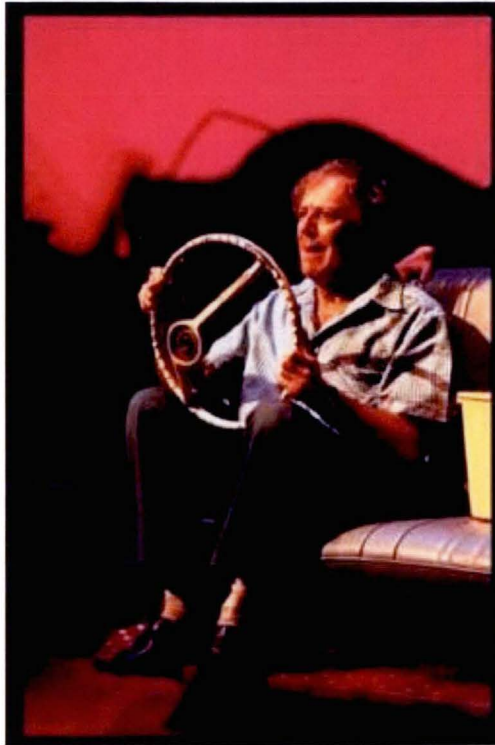
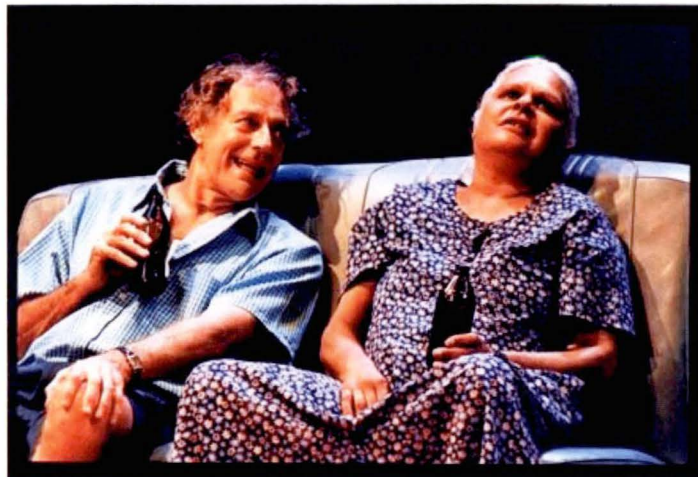


Fig 23 & Fig 24 : Images from *Last Cab To Darwin*



It was a projection by both the actors and audience, of the function onto that object. We used our imagination to take a plain (or minimal) form like a box, or in this case a divan and chose to play with the possibilities that forms provide in a both physical and emotional ways.

Theatre designers work around the idea of the ‘diversity of elements’²² whereby the various aspects of the props and set are studied in terms of their adaptability throughout an entire play. Props are sought that enable

²² Albright. H, Halstead. P, Mitchell. L. (1968:260)

the widest latitude of interpretation. It is a desire to extract the maximum from the minimum and there is an expectation for the audience to fill in the missing information in their heads. But it is the use of minimal form that creates its own adaptability, as in *Last Cab To Darwin* where the props are as infinitely adaptable as that of the audience's imagination.

The projection of imagination in this sense is not just limited to the theatre but can also be found in film. *Dogville* for example, is a film that is set in a small Colorado town with a large assortment of different scenes and characters within the plot. In spite of this the film was shot entirely in one warehouse or on one stage with the barest sets that consisted of line markings on the floor and some basic furniture and props for each particular scene.



Fig 25: Still from *Dogville*

It is to me, a brilliant example of minimal stage or film design that provides only a little yet it does nothing to detract from the film. If anything it helps you to concentrate more on the more cerebral elements of the film. In an interview, the director Lars Von Trier said of the production design:

My theory is that you forget very quickly that there are no houses or whatever. This makes you invent the town for yourself but more importantly, it makes you zoom in on the people. The houses are not there so you can't be distracted by them and the audience

doesn't miss them after a time because of this agreement you have with them that they will never arrive.²³

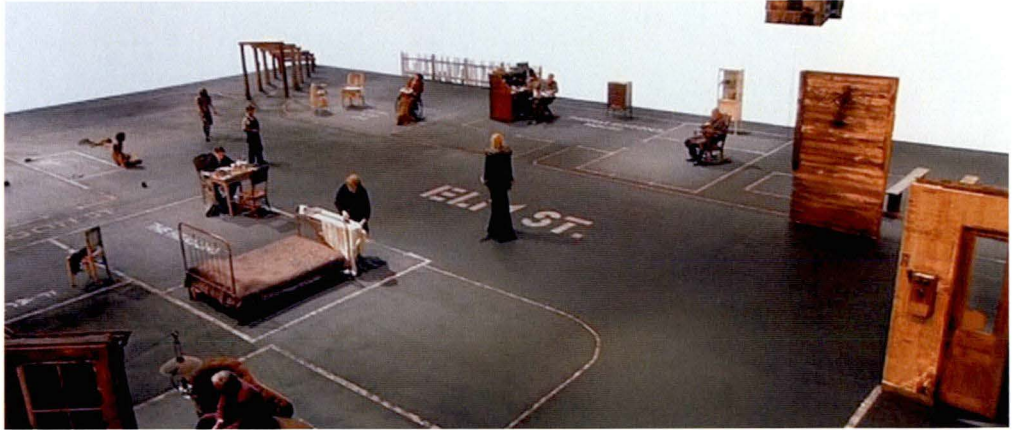


Fig 26: Still from *Dogville*

Similar to Von Trier, contemporary American stage director and designer Robert Wilson also advocates the use of a highly minimal aesthetic as a canvas for his theatrical productions. In Wilson's theatrical designs this minimalism is reduced sometimes down to the mere use of light to provide the setting for a narrative and in some cases to even explain it, with little or no props being used at all. He once said the following in respect to his theatrical design,

At first I thought I should design a set with rich images too. Then I realised that was impossible. I couldn't compete with the richness of the words... so I made the décor minimal, like a blank canvas for the text, so one could see the pictures of the text.²⁴

Wilson's sets often consist of only a few highly considered objects or props. With the lack of any other scenery and combined with overall non-realist feel of the set design, these objects take on even more significance. Beyond the variety of functions a single object will take on in the physical sense, for Wilson these props also take on a variety of emotional

²³ Interview with the Director. <http://www.dogvillemovie.com/>

²⁴ Homberg, A. (1996.38)

functions. His props become conduits of symbolism and metaphor for the audience to engage with as well as the performers.

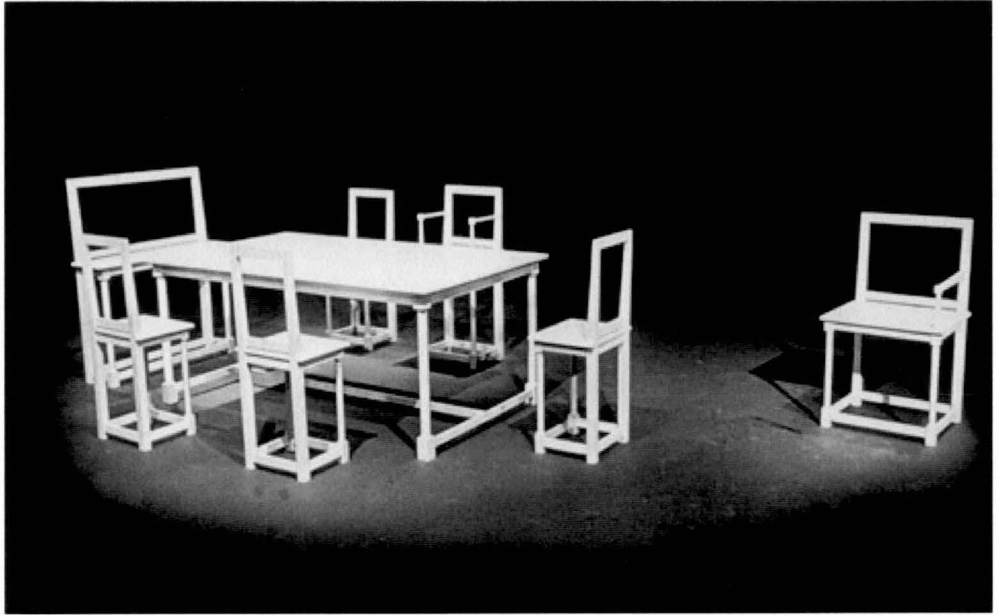


Fig 26b: Set for *the CIVIL warS: a tree is best measured when it is down*. 1982

These contemporary examples of theatre and film design have their origins with ideas promoted in the Expressionist and Constructionist theatre design styles, popular in the early part of the twentieth century. These styles were a reaction against the preceding style of realism that was predominant within theatre of the nineteenth century. Both worked around reduced stylistic elements to either highlight or place emphasis on particular aspects of a play and to allow for an uninterrupted flow in the unfolding action on stage. Whilst Expressionistic sets were reduced down to allow a concentration on the drama and the emotion of the play, the constructionists saw little delineation between the set and the stage. Their aim was for a set that indicated nothing to the audience in the way of location, period or plot. Similar to *Dogville* they were sets that remained the same from beginning to end and were functional but spare of any unnecessary ornament or acknowledgement to realism.

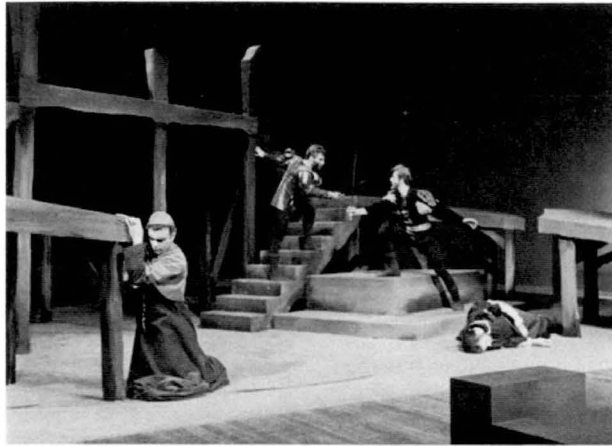


Fig 27: Constructionist theatre sets

Although this can be seen as a modernist and harshly functional approach to theatre design where forms only exist out of necessity for the play, this is only functional in terms of a purely physical sense on the stage and discounts other emotional functions of the set. Whichever way you look at it the requirement for an audiences' suspension of disbelief and projection of imagination still remain, On Constructionist theatre design A.S Gillette wrote:

A stepladder atop a table becomes a second storey window, and an imaginative assortment of boxes, planks, stools or anything else that is handy becomes furniture. Oddly enough there is an appeal about an ingenious arrangement, it is intriguing if for no other

reason than the fun of trying to decide what it is supposed to represent and how it will be used²⁵



Fig 28: *A Mid Summer Nights Dream*. Royal Shakespeare Company. 1970.

Imagination is the key to a successful encounter with these ambiguous and minimal forms, as it is with the work for my project. These examples illustrate to me my interest and desire to reduce the form and visual style of my furniture right down to the bare necessities, though not to the point where it is abstracted out of existence and where the object bears little or no resemblance to anything but itself. Like these minimal theatrical styles, my work is about experiments in the reduction of form to heighten the physical and emotional experience of the furniture, where the user brings or creates their own narrative for the function and interaction with the piece. My furniture pieces are like the stage props, acting as a setting or as a place maker for interaction and/or social discourse. It is furniture made up of basic forms expressed through basic visuals to create maximum potential. They are base forms, that mixed with imagination can become objects of diversity.

²⁵ Gillette, A.S. (1967:178)

Section Two: Contextual Placement

Introduction

The placement of this research into a contextual field involves the breakdown of the major aspects of the project. Different artists and designers are relevant for different reasons and not all of them link fully in every way to the project. To this end I have identified and separated the contextual field into three parts. Part one examines furniture that relates more to the minimal and aesthetic basis of the research, part two identifies furniture that relates in a functional sense. Finally part three looks at visual artists and designers who have both influenced and have a relationship to the research but not with any immediate or obvious link with the motivations of the project.

Regardless of the perceived level of functionality of my work or whether its placement is in a gallery or a more accessible public setting, I am first and foremost a furniture designer and so the contextual field to me is one that belongs predominantly to furniture designers. However, as I have stated earlier, I identify my work as a hybrid of fine art and functional design and nearly all of the cited artists and designers fall into this category, or at least have a body of work that encapsulates both sides of the fence.

This research is, in a sense a blending of the aesthetics and functional concepts of all of these artists and there in lies a part of its significance. What is similar in functional concept is more often than not completely different in aesthetic style and vice versa. ²⁶

²⁶ There are perhaps certain designers and artists that remained unmentioned in this exegesis that some might consider appropriate for this research. Everybody will have their own assessment of this. Furniture design is a huge field and no doubt there are links in my work to all kinds of furniture pieces that I have not mentioned. For example the playful nature of Achille Castiglioni's designs could be seen as relevant to this research. Yet beyond what I believe is a tenuous theoretical connection through the ideas of play, there is little to no functional or aesthetic relationship between his work and mine.

Influence from and associations with other artists come from all directions, often from the simplest of reasons. A material, a shape, or colour out of an artist's entire body of work could be enough to spur an idea, and that could be the limit of the association. These more random associations are covered in the process section with the relevant work whilst the identified artists in this section have a direct correlation to this research and when combined create the field for its placement.

Part One: Furniture and the Minimal Aesthetic

Minimalism in furniture does not limit or prevent a variety of styles. Even under the assumed grouping of minimal furniture there are many differences in the use of materials, colour and scale for example. Minimal furniture on one hand can be soft and upholstered or hard and unforgiving on the other. As the relevance of minimalism to this project is predominantly one of aesthetics, I have selected minimalist furniture designers whose work closely relate to my own in this way.

Gerrit Rietveld (1888 -1964)

The furniture of Gerrit Rietveld, although mainly designed for the domestic environment and not the public domain, has had a considerable influence over the aesthetic style of this project. Both in his choice of materials and methods of construction, Rietveld's furniture is a blend of the essential and the ordered. Mixed with a repetition of basic geometric forms, the construction of the furniture was his aesthetic. His experiments and studies involving the intersection of, and relationship of volume and planes added to his use of intersecting horizontal and vertical lines are all aspects of Rietveld's work that I can identify within my own.



Fig 29: Gerrit Rietveld *Hoge Stoel or Highback Chair*, 1919

There is a purity of form to Rietveld's designs that I too aim for in my own work. Whilst for me this idea purity stems from a desire to provide what seems like a minimum of functional form and thus engaging further investigation from the user. For Rietveld the concepts behind his designs stem from his associations with the de Stijl movement. The order and clarity of the paintings by the artists of the movement like Piet Mondrian and Theo Van Doesburg had considerable influence over the designs of Rietveld's furniture. The simplified reduction to the essentials of form and colour in the art of de Stijl reflected their utopian ideals of spiritual harmony and order, looking for structure in a post World War One Europe.

The order and composition of my work is designed to allow a base for functional freedom and usage. It is not an attempt to find any sense of control from chaos. In a way the use of this similar aesthetic to Rietveld is there to allow the potential of the opposite of order.

Rietveld's series of *Crate (Krat)* Furniture from 1934, is a body of work designed around the materials of packing crates. Initially consisting of a

chair, a table and a shelving unit, the furniture was entirely constructed of flat wooden planks and a few screws. It was ‘some assembly required’ furniture way before that phrase became common in commercial retail furniture. The Crate series created an emphasis on the basic utilitarian nature of the materials more than ever before. Whilst this choice of cheap timber was no doubt motivated by the desire produce furniture that was affordable in a time of economic downturn, the use of cheap pine timber is also an anti elitist stance that rejects notions of fine cabinet making. Rietveld, through this Crate series brought the use of so called lowbrow materials into the design world. To use timber that was otherwise meant for packing containers was considered somewhat radical for its time. The use of materials that are considered low-end is something that I relate closely to in my own research. A large part of the body of work for this research has employed the use of pine and other so called low-grade timbers.

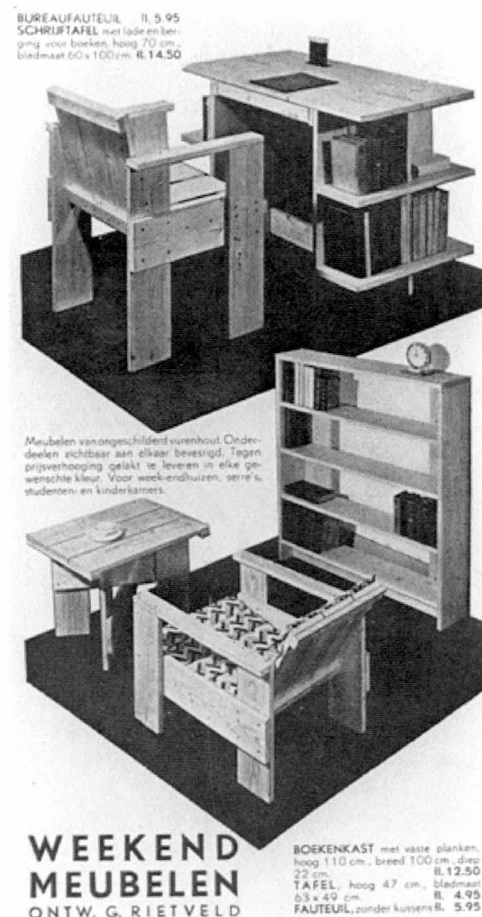


Fig 30: Advertisement for *Krat Furniture* from Metz and Co 193

The constructionist style of his early furniture with its unpretentious joinery of overlapping dowel-jointed beams along with the basic forms of the *Crate* series was minimal furniture that was way ahead of its time. The significance of Rietveld's furniture cannot be underestimated. In a commercial sense his *Crate* series predated the consumers desire for flat pack furniture decades in advance. In stylistic terms his reduced abstracted forms mixed with his devotion to basic materials was to set a visual language in furniture that can still be seen today.

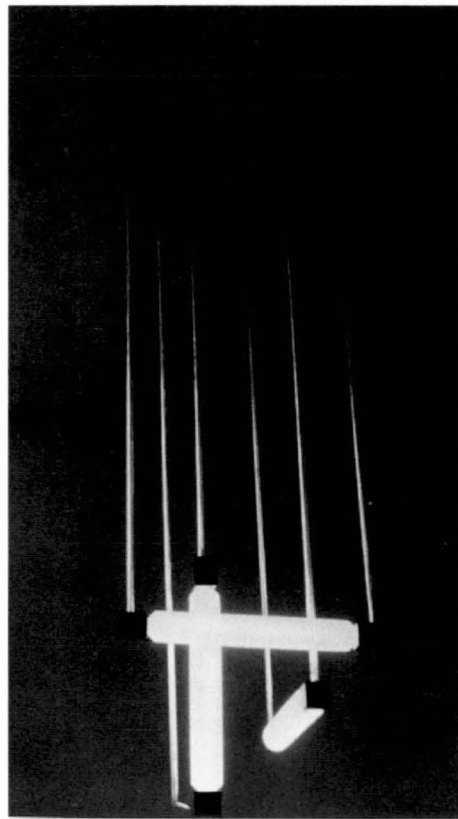


Fig 31: Gerrit Rietveld *Hanglamp*, 1920

Donald Judd (1928 – 1994)

If there is one artist/furniture designer that is synonymous with the term minimalism, then that person would be Donald Judd. A visual artist for fifteen years before making the crossover into functional design, furniture design for Judd started from the need to furnish his studios in Marfa and New York. Donald Judd had already been experimenting in industrial manufacturing materials in his artwork for years so the characteristics of furniture making were not completely foreign to him.



Fig 32: Donald Judd *Table 70 / Chair 67* 1989

The functional and theoretical intent behind this work is obviously different to mine, Judd was all too clear as to where his furniture stood in terms of the delineation of art and design. There is no doubt that he brought his artistic visual language to his design, though he saw little dilemma in the role of his furniture. It existed for its function alone ‘the art of a chair is not its resemblance to art, but is partly its reasonableness, usefulness and scale as a chair’ he wrote in his essay *It’s Hard to Find A Good Lamp*. Like his minimal sculptures there were no external symbolic

or emotional associations connected to his furniture. He continues, 'A work of art exists as itself; a chair exists as a chair itself and the idea of a chair isn't a chair'²⁷. Donald Judd's furniture is what it is, a chair is a chair and a table is a table. The focus was always on the object alone.



Fig 33: Donald Judd *child's desk* 1977

Art versus design debates aside the real linkage of his work to mine lies in formal connections of material and construction. The strong lineal visual language of rectilinear forms and the complete lack of decorative features are akin to my aesthetics. When he used colour it was always in singular bold terms and never were colours mixed or used in a pattern. Like my work his aesthetics produced little concession to ergonomics in the furniture. However, his pieces were single function pieces with an immediately obvious use. His purification of the form was not used to create ambiguity in function. When accused that his furniture was uncomfortable his response was quite simple and concise 'The furniture is comfortable to me'.²⁸

²⁷ Judd, D. (1993:189)

²⁸ Judd, D. (1993:196)

Enzo Mari

Italian Enzo Mari is a prolific designer of furniture and domestic items. Considered in general terms to be a minimalist functionalist designer, he is at any one time a designer, academic and philosopher who sees design as a tool to effect social change.

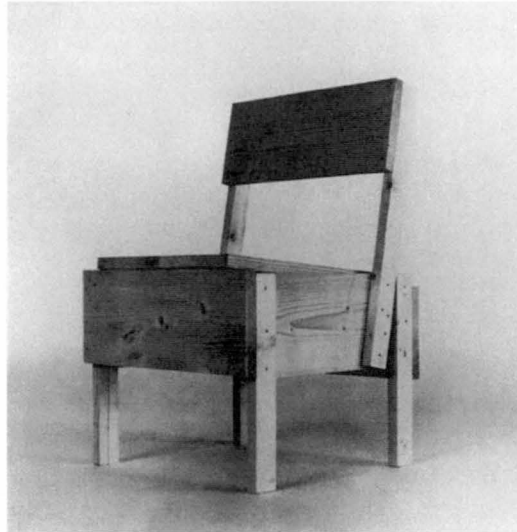


Fig 34: Enzo Mari *Chair* 1974

The real connection I make to his work is with his design project *Autoprogettazione? (Self Design?)*. Released as a book in 1974 it was as Mari put it ‘ a project for making easy to assemble furniture, using rough boards and nails’²⁹. The book contained the design drawings, instructions and material lists to enable anyone to be able to produce the furniture themselves.

Like Gerrit Rietveld’s Crate furniture *Autoprogettazione?*, is in its way an anti design statement that rejects the emphasis on the necessity of fine craftsmanship and celebrates the rawness of low quality mundane materials for construction. Like Rietveld the aesthetics and the construction blend into one. It is literally furniture that is banged together from a few rough-cut planks of wood and some nails. Much of the furniture from this research uses Radiata, which is a cheap fast growing

²⁹ Mari, E. (2002:1)

and easily available timber. It is a low-end timber often rejected by furniture makers as inferior, holding little status in the world of fine furniture making. Whilst Mari's choice in materials suited his project on a political level, my choice for the use of low-grade timber is made on more simple aesthetic reasons. However I share the sense of rebelliousness with Mari in this use of mundane materials in a design/art context. This idea that the rough and ready nature of this furniture can find a place in the design world is an appealing one to me. In a design world of the early 1970's where pretty much anything was being touted as furniture this was still considered rebellious in an unfashionable way.

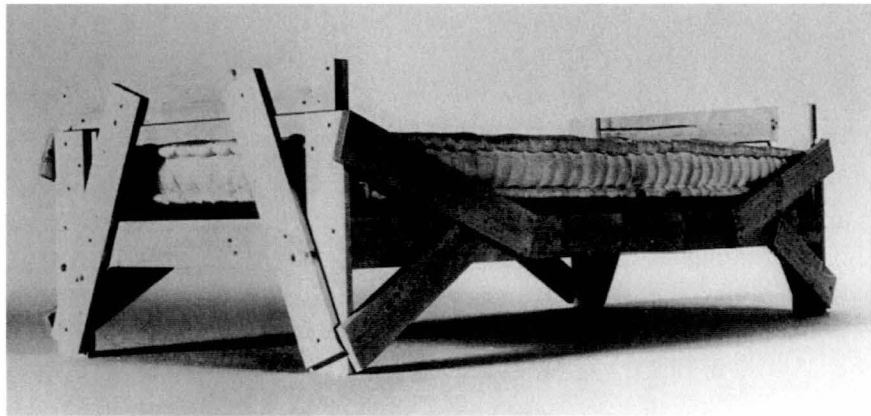


Fig 35: Enzo Mari *Bed* 1974

Questioning the idea of design as social status symbol, Mari designed furniture that was hyper basic in its construction and aesthetic and placed it at the forefront of the current design dialogue of the time. Design as a tool for rebellion and protest formed the foundations for much of Italian design of the early seventies. Reacting against as what they saw as a society engulfed by mass consumerism, work such as Mari's *Autoprogettazione?* became statements of politics just as much as they were statements in design. Post fascist Italy saw a fast and dramatic rise of capitalism and as a consequence, the development of a large industrialised output of furniture and other design products. Designers like Mari reacted against the system by creating works that questioned notions of fashion, wealth and good taste. With *Autoprogettazione?* he created furniture that

was accessible to most people regardless of their income and at the same time undermined the system of manufacture and retail of furniture.

Republished in 2002 this book is just as relevant today, perhaps more so with the increasing environmental considerations of design manufacturing and renewable resources. In a time where design is linked so closely to consumer fashion and dictated by economic and manufacturing demands even more than when the book was published in 1974. The attitude of this work would come as a sea change worthy of consideration. It is of course, unlikely to make anyone much money.

Part Two: Furniture, Multiple Use and Ambiguous Function

A major focus of this project has been to look at concepts of furniture that question the nature of functional interaction. The project looks at a type of interaction that twists the functions of furniture in different physical ways. The work that inspires my own, and is of direct contextual relevance to this project is furniture that in some way pushes and experiments with similar ideas of function. This section looks at furniture that, like my own work, investigates functional forms that encourage a personal investigation into their possible uses. The employment of large-scale form that creates the opportunity for use by more than one person is also a linkage between both these designers and my own furniture. Like me they looked at scale as a tool for creating furniture that allows for interaction on many different levels.

The concept of ambiguity of form in furniture is also relevant to many of these artists and designers. Many of them made deliberate efforts to move the shapes and style of furniture to aesthetic areas that weren't so obvious or recognisable in a functional sense. This ambiguity, forces interaction from the user in a conceptual and physical way that is different to specifically functional furniture. The user is required to make decisions without the help of the more obvious visual clues normally found within furniture.

This idea of a required exploration and personal choice in function are themes that crossover any of the aesthetic or stylistic differences between these artists.

In addition to the functional or aesthetic results, there is always a desire to question, push and provoke the accepted norms in furniture design of the time, to develop concept over commercialism and to put higher value on the self-expressive over functional solutions.

Radical Design: A Re-interpretation of Furniture

I have included a section on the Radical Design period as I feel the furniture produced from this era relates closely to my own work in developing new ways of functional and emotional interaction with furniture and form. Furniture design from this time varied enormously in visual and formal styles and as a result I link my work contextually, more closely to some designers and less to others. Whilst minimalist design was not always their direction, I align my furniture with many of the same goals or questions that these designers faced. The attraction for me is in the underlying subtext of rebellion constant throughout Radical Design in which there was a questioning of the various functional and aesthetic elements of furniture. The furniture from this period was a complete turn around from anything that had come before and has influenced the style and attitude of furniture makers ever since.

Radical Design or Radical Modern as it is sometimes termed usually is considered to cover the period in furniture design from the mid to late 1960's through to the early seventies. Radical Design is an umbrella term used to cover a gamut of international designers and studios, with a particularly large influence from Italy and Europe. The styles were as broad as its influence and it encompassed more specific evocations as Post-modern furniture, Pop furniture, Anti-Design, the Avant-Garde and to a lesser extent minimalist furniture.

Although not perhaps radical by today's terms it is an apt description for a period where concepts of furniture were (sometimes literally) turned inside out and upside down.

The legacy of Radical Design provides a part of the contextual basis for the investigations within my project. Looking at themes of interaction with

³⁰ Greenberg, C (1999:20)

minimal form and examining different attitudes to function makes these designer/artists directly relevant.

The following designers (out of this era) are the ones I position myself closest to in respect of my own work.

Verner Panton (1926 – 1998)

Of all the designers of the sixties, the furniture of Danish born Panton probably epitomised the spirit of innovation, experimentation and creativity like no other. His furniture and interiors fused the concepts of art installation and design, broadening ideas of functionalism and becoming all encompassing sensory experiences. As he says in his own words,

The main purpose of my work is to provoke people into using their imagination. Most people spend their lives housing (sic) in dreary, grey beige conformity, mortally afraid of using colours. By experimenting with lighting, colours, textiles and furniture and utilizing the latest technologies, I try to show new ways, to encourage people to use their fantasy.³¹

Panton was very much part of the trend to question the conventional forms of social interaction that had previously been the accepted style of furniture design. His reductive use of form, removed 'the forest of legs' as he once described it and was seen as a way to make his pieces more flexible and more approachable.

³¹ <http://www.panton.ch/bio/index.htm>



Fig 36: Verner Panton *Pantower* 1968 -69

One of the pieces that he is most remembered for was his living tower or the *Pantower* as it came to be known as. A full production piece, The *Pantower* (1968-9) was the result of a purposeful investigation into new forms of seating for the future. Vertical rather than horizontal and room for multiple users; it was Panton's solution to a future of limited living space. It was high-rise seating for high-rise living. The soft upholstered forms and comfortable seating positions were intended to not only solve a functional problem but also create a relaxed social environment.

The *Pantower* was eventually to develop into the *Visiona II* installation for the Cologne furniture fair of 1970. This was the penultimate exploration of colour, form and social interaction. It was a collection of *Pantower* like structures that filled a room and created the ultimate furniture playground allowing for a seeming endless variety of seating options. Installed only a few times *Visiona II* was treated more like an interactive furniture happening or installation that blurred the line between functional furniture and sculptural self-expression.

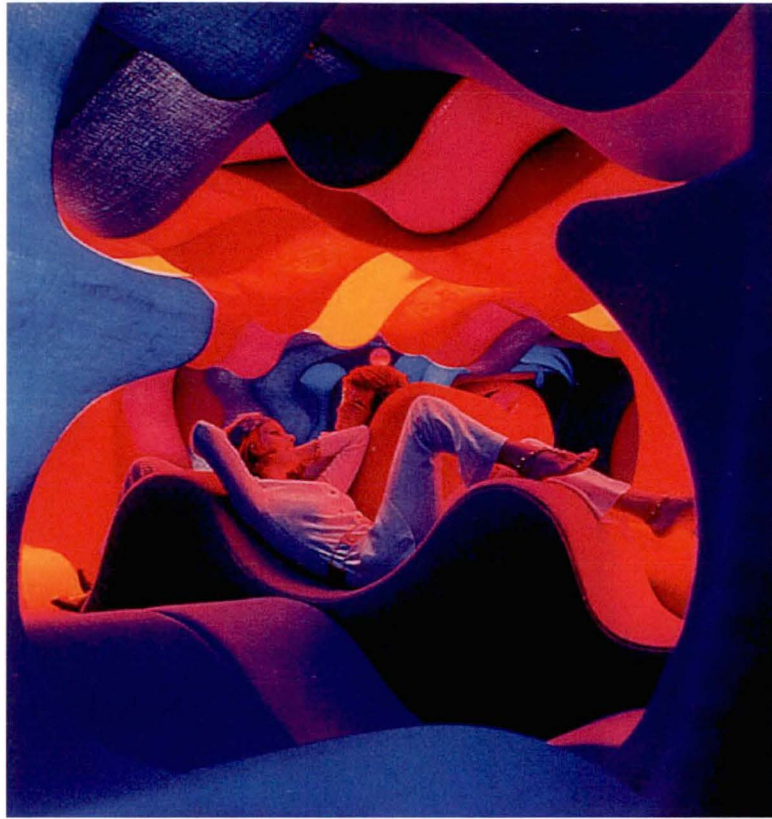


Fig 37: Verner Panton *Visiona II* 1970

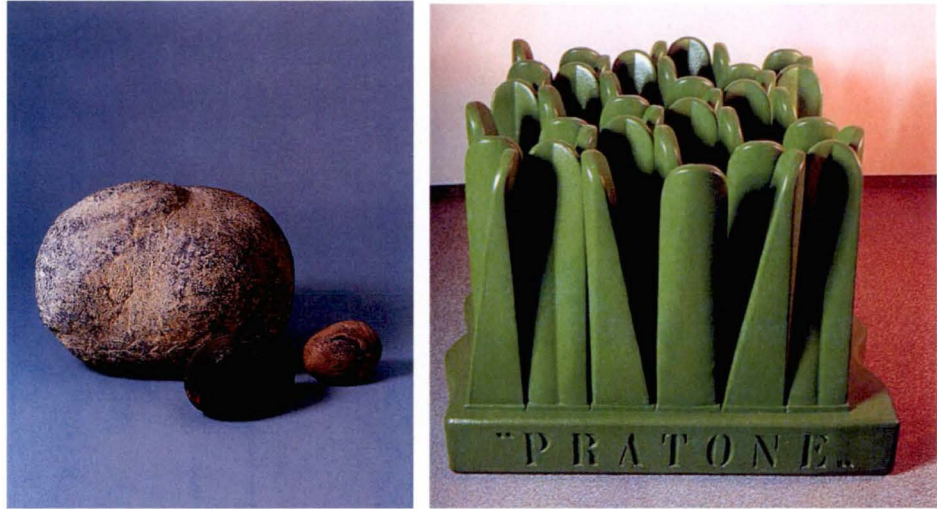
Gufram Manufacturers and The Gufram Multiple Series

From 1967 through to 76, Gufram a progressive Italian manufacturer produced some of the most interesting furniture pieces of the time. In association with Gufram, a loose collective of artists and design studios (such as Studio 65 and Archizoom, the embryo that was to become Memphis) were to produce furniture that would put the final nail in the coffin of modernist design. Grouped together under the banner of Anti-Design their furniture flung the question of function right out of the window. They turned their work into ironic art metaphors that bore little or no resemblance to domestic furniture or even little resemblance to furniture at all.

With an emphasis on creative freedom over the demands imposed by production, Anti-Design furniture aggressively concealed function through

form, forcing not only a reassessment in the nature of utility in furniture but also a reassessment in its aesthetics.

The idea of what was considered good taste was playfully challenged through a mix of contradicting materials and form.



Left. Fig 38: Piero Gilardi *Sassi* 1968. Right. Fig 39: The Strum Co. *Pratone* 1971

Gufram began production of the Multiples Series in 1967 in collaboration with Italian artist Piero Gilardi. Gilardi designed the first series of *Sassi* (stones) in 1968, a set of foam rocks that could be thrown about the house to suit personal requirements.

In 1971, members of the architectural group Strum designed the *Pratone* (large lawn), a seating unit looking exactly as its title suggests, like an overgrown lawn. This was furniture on the very margins of functional, a patch of heavily varnished foam grass that forces a re-think on what is sitting. Along with the *Sassi* and Franco Mello and Guido Drocco's *Cactus* hall stands (1971) the seat suggested that the outside could now be brought inside. This was apparently a metaphor commenting upon the cultural position occupied by radical design groups such as Archizoom and their acceptance into the so called mainstream design world of the time.



Fig 40: Franco Mello and Guido Drocco *Cactus* 1971

Joe Colombo (1930 – 1971)

Mixing design with a strong social conscience, Joe Colombo's furniture represents an interesting contrast of mainstream functionalism and avant-garde creativity. Whilst Verner Panton was developing his colourful fantasy installation / interiors, Colombo's ideas of multi-functional furniture were slightly more grounded in the realities of manufacture and production for domestic space. Still sharing similar ideas to his contemporaries of revitalising people's notions of how they lived with furniture, central to his vision was a desire for his furniture to be genuinely accessible to the greater public and thus he saw mass production as providing the answer.

Most of his designs combined technological sophistication with simplicity in both the shapes and surfaces. Functional and aesthetic simplicity with the repetition and combination of singular forms to create the larger whole, were commonplace in his aim for compact furniture that was also multi-purpose. *The Additional Living System* (1967-8) and the *Tube Chair* (1969) encapsulate these aims.



Fig 41: Joe Colombo *Tube Chair* 1969



Fig 42: Joe Colombo *The Additional Living System* 1967-68

All these examples combined a number of upholstered forms that could be re-arranged and re-joined to create an assortment of seating possibilities and adjust to different body sizes. The end result was mass-produced, off the shelf furniture that was visually simple and personally adaptable. As Colombo said himself,

Now a chair or a table will only be designed as part of a system of furnishings, when these units are used in a child's room, they look

childlike. When an adult lives in them, they look adult, the individual client does not exist.³²

His initial work with modular style domestic furniture led to him to investigations into all inclusive living pods or living-scapes. Colombo believed uncomplicated design and simplicity of form was the pathway to making what he described as ‘an inhabitable system that could be adapted to any situation in space and time.’³³

Although never really commercially successful, his furniture cells are excellent examples of non-guided design that require a degree of personal involvement, both creatively and physically from the user.



Fig 43: Joe Colombo *Visiona Apartment* 1969

³² Reif, R (1996:32)

³³ www.joecolombo.com/index2.htm

Contemporary Radical: The Next Wave

Wayne Z. Hudson

Wayne Z. Hudson completed his PhD at the University of Tasmania in 2000. He is currently the head of the Sculpture department at the University's Launceston Campus. The title of Hudson's thesis was *Props for Social Discourse*. Through his research Hudson developed a series of works grouped together under the general title of *Leaning Posts*. Drawing on the experiences of his rural background and mixing it with his skills as a trained upholsterer and blacksmith, Hudson's work is a collection of furniture that encourages a different type of interaction. He has studied the way people sit in public both together and by themselves. It is public furniture that at one level, is a casual and social experience and at the same time, a personal and intimate one.



Fig 44: Wayne Z. Hudson *Leaning Post Super* 1997

The interaction with his furniture is two fold in concept. Firstly it examines the physical stance of leaning in social situations and secondly it adds to this experience by experiments in touch and tactility. His interest in the action of leaning started from his observations of people in rural

communities, talking and socialising whilst leaning on gates and fences. He has blended this activity with a bold aesthetic of metals and leather inspired in places, from fashion, body armour and sensuality. His forms are easily accessible in a functional sense, yet at the same time they engage an emotional response depending on the particular piece. It is a paradox of the personal thought process in a public setting. Some of his furniture pushes this concept by forcing the user to engage in the obvious sexuality of the aesthetic, like in *Solo*, whilst other works are examinations of personal space in a public setting, like in *Leaning Post Super* 1997 and *Sit and Lean* 1999, where he examines the desire for privacy in a public setting.



Fig 45: Wayne Z. Hudson *Sit and Lean* 1999. Below, Fig 46: Wayne Z. Hudson *Solo* 1999



Andrea Zittel

Zittel is a Masters graduate from the Rhode Island School of Design. Working with sculpture, installation and furniture Zittel's work is a hybrid of design and art that examines the daily functions of life. Existing within a mock corporation called A-Z Administrative Services, she creates work that challenges function on a domestic and public level. Looking at a macro idea of function rather than the specific, she creates works that are conceptual solutions to the greater gamut of functional needs. Going beyond the standard functional services of furniture she looks at other aspects like dishwashing, eating and bathing blending these activities into artistic objects that both comment on and function within day to day existence. Whilst some of her furniture comes from a quite literal and formal response to these functional needs, much of her work is abstract, allowing for interpretation from the user. Varying from highly conceptual installations to self contained living units, nearly all of Andrea Zittel's furniture work develops new ideas about function and interaction with furniture form.

Out of the huge body of work A-Z has produced, it was her *Carpet Furniture* that really captured my imagination. This is furniture with a big figurative question mark next to it. Visually or in its construction this work has no resemblance to traditional notions of furniture. Issues and concerns of furniture making like ergonomic and structural integrity aren't even a concern because there is essentially no structure to begin with. The idea of what furniture is and how we interact with it and how it is used has been reduced down to the purest of concepts into what is perhaps the ultimate in minimal functional furniture. Zittel's *Carpet Furniture* is conceptual in its design and conceptual in its use.

As the name implies, it is literally furniture made from flat two-dimensional carpet. You could argue that you are just as well off sitting on the floor, yet somehow she has managed to embody these rugs with a

multitude of functions that make these objects more than just floor coverings.

Dining, sleeping, socialising and more are all options available to the user. As in the set design for *Dogville* that I spoke of earlier, the furniture (or living area) is constructed only by a few marked out spaces on a flat surface. Nevertheless we are able to imagine what we need to be able to function within it.

As Zittel says herself,

The A-Z Carpet Furniture is luxurious, easy to store and versatile. One room can serve several functions and the furniture can be hung on the wall when not in use.³⁴

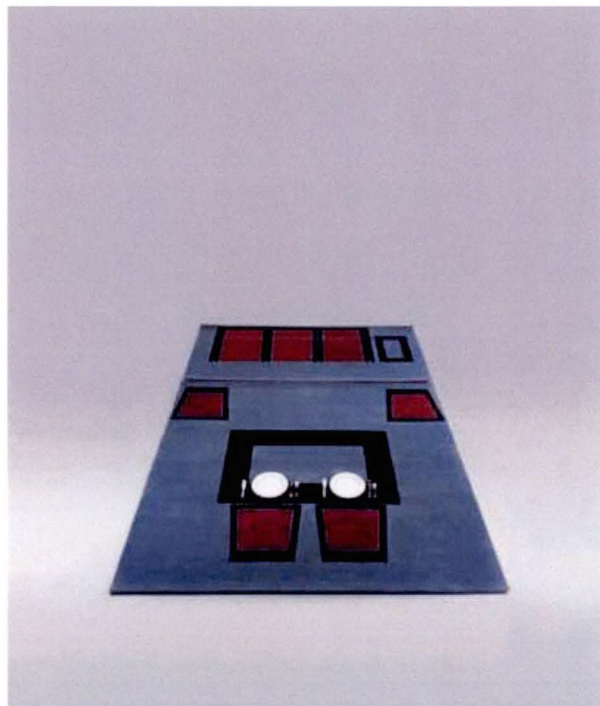


Fig 47: Andrea Zittel *Carpet Furniture* 1997

Not dissimilar are the A-Z pit beds. Reminiscent of the utopian furniture pits by the Radical designers of the sixties like Verner Panton, Zittel's pit beds are base forms for living and all its functions. At first glance there is

³⁴ <http://www.zittel.org/>

little to offer visually. However, the function is in the personal experimentation and exploration of the form.

This quote from an exhibition essay sums up these works nicely,

Andrea Zittel's Prototype for A to Z Pit Bed resembles a kind of hot tub for meetings, just without the water. It is a silly wooden and carpet structure made for people to climb on and sit in. Although it is well built, to the uninitiated the Pit Bed has no apparent function. Zittel gives us this wacky object and lets us make of it what we want.³⁵



Fig 48: Andrea Zittel *A-Z Pit Bed* 1994

Her series of work called *Rough Furniture* (pronounced raw) are, what at first glance, appear to be large rock or granite formations that look like a scaled model of some kind of topography. They are in fact a series of large sliced and sculpted pieces of foam arranged into multi level seating and resting platforms. Reminiscent of a colony of seals on a rock platform this is furniture that creates a community of its own. These pieces examine

³⁵ Cobb, C. (2002)

both the functional and aesthetic aspects of seating and are at the same time an examination of the social context of furniture.



Fig 49: Andrea Zittel *Rough Furniture* 1998

These large yet minimal forms create a seating playground that is full of functional opportunity. The multi level forms allow for a variety of seating alternatives both solitary and gregarious creating a personal choice and a decision by the user on how to interact with the piece. The very aesthetic nature of the work, being so far removed from anything that looks like interior furniture, creates an immediate dilemma for the viewer/ user in terms of how to approach the work. The emphasis is shifted from a fully resolved and obvious piece of furniture to an abstract form that requires personal imaginative input to find one's own way to interact with the piece.

Karim Rashid

One of the foremost and recognisable designers of the world, Karim Rashid's collection of work is enormous. Trained as an industrial designer, his work ranges from small product design, furniture design, fashion and interior design. From garbage bins to entire buildings and all the contents in between, Rashid has designs for every aspect of life. However the work of Rashid's that I associate with my own project are his designs and prototypes for his experiments in large seating environments. These pieces explore the crossovers of interior space, functional furniture and sculpture. Reminiscent of Verner Panton's furniture and installations this work provides whole new interpretations of furniture and how we interact with and use it. Like Panton, these works are room-filling installations that are multiple person, socially interactive pieces. Rashid uses the word Scape as part of many of the titles of these works and there couldn't be a more apt description, as this is furniture that provides a landscape of opportunities for its users.

Working with a style that he describes as a sensual minimalism and mixing this with elements of scale and modularity Rashid has created maximum minimal style of furniture, minimal in its formal aesthetic sense but maximum in its scale and more importantly in the functional potential of the furniture. Rashid wrote in his own book of this idea of multiple functional from the minimal form.

The desire for a single object to do more – to provide multiple functions and to transform – is a natural impulse and an intriguing design objective. Ultimately, more is more. A bed that becomes a divan that becomes a chaise lounge is like James Bond's Aston Martin transforming into a plane and a submarine...One of the multi-functional icons of our last century is the wooden crate: a building block that started as storage for milk, became a vinyl

record holder, then shelving, a bed support and so on. Generations adapted the ubiquitous object to their personal use.³⁶

Karimsutra

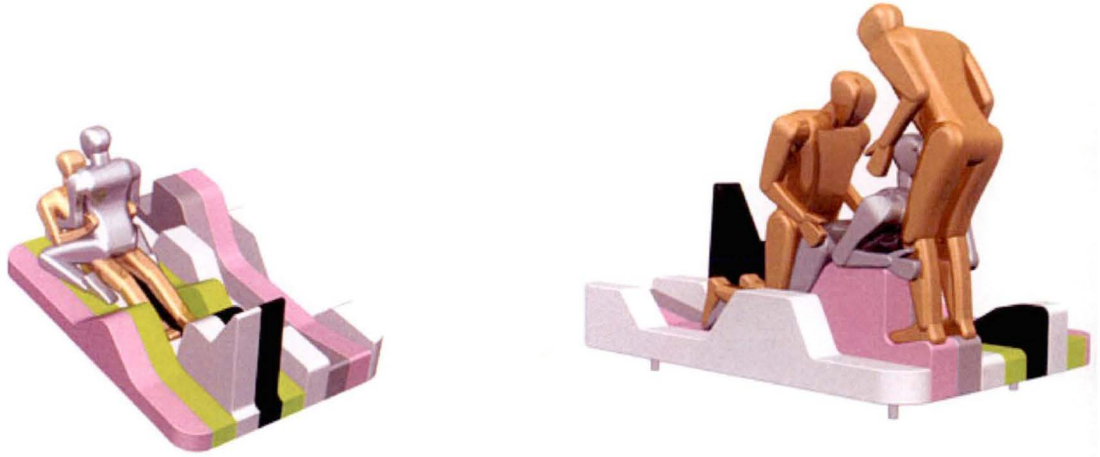


Fig 50: Karim Rashid *Karimsutra* 2004

The *Karimsutra* is a series of multiple upholstered forms joined together into a platform and designed, as the name suggests for sexual activities. It is very socially interactive furniture indeed and it is furniture that does, truly rely on the imagination of the user. Obviously with the very nature of the functional intentions of the piece, every user would bring their own interpretation of use to the work. Rashid has supplied through the design a few basic shapes that hint at use but true functionality comes from the personal investigations of the user. This sexual landscape gives the user a physical platform for the mind and body to wander within, and with every use a new interpretation.

³⁶ Rashid, K. (2004:95)

Momo Pink 100

Originally produced for the Belgian Biennale in 2000, this huge piece of furniture get its name from the fact that it apparently has a hundred seating spaces within its overall length. Looking not dissimilar to a theme park roller coaster *Momo Pink 100* is a big pink furniture playground, fun interactive and social.



Fig 51: Karim Rashid *Momo Pink100* 2000

Momo Pink 100 questions tradition notions of furniture construction by blurring all the traditional furniture experiences into a singular piece. With one continually flowing form Rashid provides armrests, tabletops, bench seating, and lounge seating for a multitude of people. The furniture now has the potential to become much more than its own form; a dinner table, an office or a lounge room are all roles for which this furniture can provide the backdrop.

The Furniture Scapes

Turboscape, *Pleasurescape*, *Stratascape* and *Clearscape* are all part of a large series of furniture installations that Karim Rashid has produced, mainly for exhibition in galleries. Like his above reference to milk crates as a multi-functional item, the furniture scapes are predominantly constructed from four separate units that can be reconfigured and repeated to create an infinite landscape of furniture options.

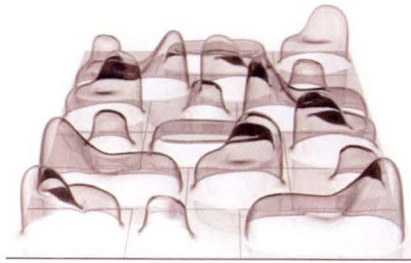


Fig 52: Karim Rashid *Clearscape* 2003

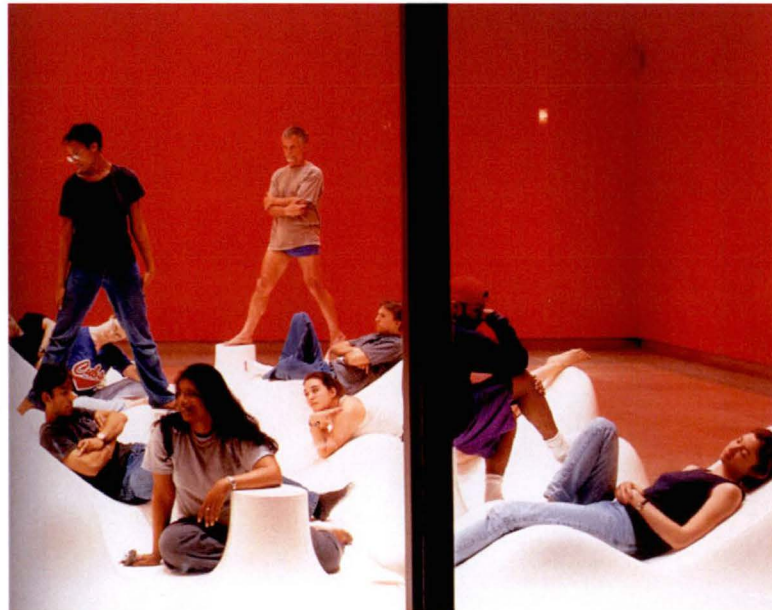


Fig 53: Karim Rashid *Pleasurescape* 2002

Roppongi Hills, Tokyo: Streetscape Public Art Project

Roppongi Hills is a massive private residential and retail development within the city of Tokyo that opened in 2003. Essentially an entirely new suburb built in the centre of the city its intention is to provide Tokyo with a new cultural, business and community hub that would stop the dominance of office space within the city. Spread across just over eleven hectares, A large focus of the Roppongi Hills development is its dedication to the creative arts and education with an aim to create what they call an 'Artelligent' city.

Of particular relevance to my research is the Streetscape Public Art Project in Roppongi Hills. Eleven designers from an international selection were invited to create a piece of public street furniture. Those eleven designers were Andrea Branzi, Ettore Sottsass, The Droog Design Company, Ron Arad, Jasper Morrison, Tokujin Yoshioka, Thomas Sandell, Karim Rashid, Shigeru Uchida, Toyo Ito, and Katsuhiko Hibino. Their brief was to explore the images of the forest within urban life and to create resting places within that busy environment.

The Streetscape Public Art Project produced a series of public furniture that is both creative and innovative in its approach to public seating. Whilst I don't associate all the work in this project to my own, several of the responses by the designers to the issues of public seating, share similar concepts and themes to that of my own work. Many of the pieces are large-scale interactive works that allow for a multitude of users at any one time. These pieces also create opportunity for a diverse range of functional outcomes. Moving beyond just a place to rest they have created socially interactive gathering points. Of the eleven pieces the following are the ones that I link closest to my own work.

I Can't Give You Anything But Love

Designer – Shigeru Uchida

Steel, Fibreglass mat and ceramic paint. 2003³⁷

This long six metre flowing form constructed of steel and ceramic paint is a beautiful example of the use of a reductive form to create a variety of seating options. One piece of steel that is moulded into this ribbon like formation creates seating for several people in a variety of different ways. This is a great example of how the minimal form can create maximum potential.



Fig: 54

³⁷ Details of artworks came from the Studio 80 website, <http://www.studio80.co.jp/> and from the Roppongi Hills Public Art & Design Project web site, http://roppongihills.com/en/facilities/publicart_design/. Studio 80 is the design company of Shigeru Uchida.

*Where did this big stone come from? Where does this river flow into?
Where am I going to?*

Designer - Katsuhiko Hibino

Glass Reinforced Concrete (GRC), colouring and ceramic paint. 2003

This continuous organic form visually and functionally blurs the boundaries between furniture and sculpture. The only clue to its function is perhaps the provision of some flatter areas at seating height. However this does not limit the function of the piece to those areas. Perching, climbing and leaning can all be interactions made with this form. Not only does this piece create a visual curiosity, but also a curiosity that is extended into finding its use.



Fig: 55

Arch

Designer – Andrea Branzi

Concrete Ceramic Paint. 2003

Bringing the inside out, Branzi has brought the domestic space out into the streets of Tokyo. Looking like a cross section slice of a lounge room and all its inclusions of tables, chairs and lamps, Arch is fun and interactive casual furniture in a mock formal style. The lineal block forms make for a piece that is functional, accessible and creates seating space for many people.



Fig: 56

Evergreen?

Designer – Ron Arad

Bronze pipe, steel pipe and bronze plate. 2003

This large flowing sculptural piece is about six metres long and nearly three in height and whilst the seating area in this piece is more limited than other furniture in the Streetscape Project, there is still ample opportunity to recline or clamber on the structure. This form is on one level very inviting and tactile yet on another it is ambiguous enough to require personal investigation and creativity in its function.



Fig: 57

Day-tripper

Designer – Droog Design Company. Jurgen Bey with Christian Oppewal and Silvin v.d. Velden

Polyurethane forming, Fibreglass Reinforced Plastics, Polyester paint, Silkscreen. 2003.

Like Arch by Andrea Branzi, Droog are playing with the idea of interior space brought outside. In an interview for Interior Design Magazine Jurgen Bey described the work;

I was inspired by the postures of people on the street. I observed and took photographs throughout the day. Then, on the computer, I arranged the postures, morphing one position into the next. This produced the overall wavelike silhouette of the 23-foot-long bench. Along that length, I inserted old furniture—so there are places to sit, kneel, lean, or recline.³⁸



Fig: 58

³⁸ Interview from http://www.interiordesign.net/id_article/CA6348554/id?stt=001

sKape

Designer – Karim Rashid

GRC, urethane paint. 2003

sKape described as ‘an island of flowing colour, designed as an extension of the Tokyo landscape’³⁹ is like the others, a large multi functional piece that can seat a large amount of people. Rashid has created a furniture playground that offers all kinds of fun activities to the user, some of them are even functional. Sliding and climbing have now been added to seating and reclining as part of Rashid’s functional requirements from a piece of furniture.



Fig: 59

³⁹ http://roppongihills.com/en/facilities/publicart_design/

Part Three: Visual Artists Who Have Influenced The Research

Charles Ray

A big influence on my thoughts within the research is in the work of American sculptor Charles Ray. I have developed a strong attraction to his forms and the especially the works where people interact with them. Ray has said that he found himself pushing and pulling his sculptures around the place so much, that it only made sense that he should become part of them. His sculptures have become his functional props within his art pieces. It is interaction with form in extreme ways but it gets me thinking. For example could this be furniture? A portable bench seat for two or even more perhaps.



Fig 60: Charles Ray *Untitled* 1974

Or how about this? No matter where you are, you have a place to rest and recuperate.



Fig 61: Charles Ray *Plank Piece* 1973

This is obviously an extreme attitude and these pieces probably wouldn't be a big seller on the retail furniture market, however as strange as it might seem I am inspired by a kind of rebellious lunacy that I feel exudes, from Ray's performance sculptures. In a unique way it is functional and creative interaction with minimal form.

In some works Ray does the opposite, by providing an easily recognisable furniture form and immediately removing any notion that the object should function as a piece of furniture.



Fig 62: Charles Ray *Untitled* 1976



Fig 63: Charles Ray *Untitled* 1971

To me his works create a sense of frustration and desire for something that is unobtainable yet so very nearly accessible and still (at the same time) he is playing with ideas about function, form, the body and perception. It seems to me, in these works that he is playing with theatrical notions of illusion and reality, the ground between the accepted and the imagined.

Isamu Noguchi 1904 -1980

Although Isamu Noguchi is probably best known for his sculpture and furniture design, it is his work in theatre design and his playground design that is of interest to me. His motives behind his designs for theatre and playgrounds relate to my own. Added to this is a minimal aesthetic that filters throughout all this work that mixes his sculptural visual language with the interaction of human function. Noguchi seemed to really like to see his art interacted with in all kinds of ways

Noguchi work for the theatre started as early as 1929 with the making of costumes. However, he is most remembered for his collaboration with the famous American dancer and choreographer Martha Graham. Noguchi saw theatre as a 'space that became a volume to be dealt with sculpturally'⁴⁰. His very early designs for theatre were dealt with in an extremely minimal approach. His sets were rarely anything more than just a few sculptural props and were not props that were literal representations of the 'real' world.

The sets became abstract representations of space where the forms mixed with the performers and the imagination of the audience, created the full picture.

When describing his set design for a production called *Appalachian Spring* he talks of this minimal theatrical style:

I attempted through the elimination of all non-essentials, to arrive at that essence which flows out to permeate the stage. It is empty but full at the same time. It is like Shaker Furniture.⁴¹

⁴⁰Noguchi, I (1968:125)

⁴¹ Noguchi, I (1968:125)

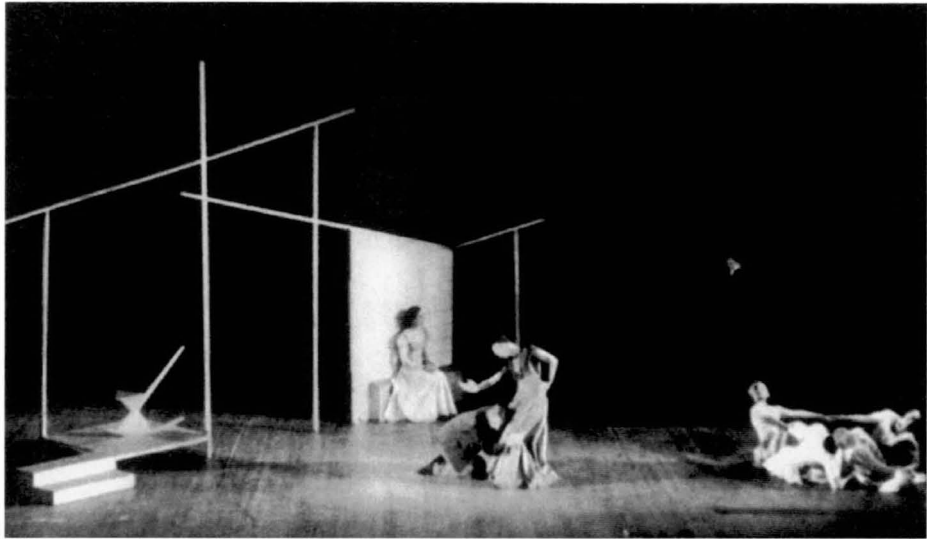


Fig 64: Isamu Noguchi. Set for *Appalachian Spring* 1944



Fig 65: Isamu Noguchi. Set for *Frontier* 1935

Noguchi's theatrical work with its minimal style and ideas of human interaction seems to have blended into his designs for playgrounds. Reading his autobiography, you get the impression that he really quite likes children and that he respected them enough to design playgrounds that challenged them on many different levels apart from physical play. He wrote about his playground designs:

Children, I think, must view the world differently from adults, their awareness of its possibilities are more primary and attuned to their capacities. When the adult would imagine like a child he must

project himself into seeing the world as a totally new experience. I like to think of playgrounds as a primer of shapes and functions; simple, mysterious and evocative... The sculptural elements here have the added significance of usage.⁴²

Like his theatre sets, his playgrounds were sculptural gardens open to the interpretation of use by the children. They were visually and functionally non specific and abstract in their style, mixing organic minimalism with the sharper geometric forms. Instead of creating specific equipment, Noguchi designed seamlessly connected landscapes where one play area blended into the next. An article in reference to his proposed playground for the United Nations Headquarters in New York captured this essence; ‘In other words, the playground, instead of telling the child what to do (swing here, climb there) becomes a place for endless exploration, of endless opportunity.’⁴³

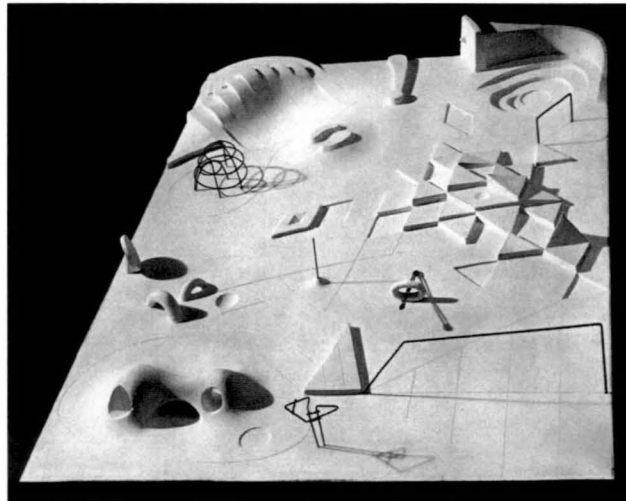


Fig 66: Isamu Noguchi United Nations headquarters playground design. 1952

Unfortunately many of his greatest playground designs never got past the planning stages due to design issues with various local government bodies, usually disputed in regard to safety issues. Despite the fact that many civil welfare and disability groups applauded these designs he was constantly frustrated by the worries of bureaucrats.

⁴² Noguchi, I (1968:161)

⁴³ Noguchi, I (1968:177)

Sol Lewitt

The relevance and influence of Sol Lewitt to this research is not necessarily something that I fully concede to. However he is a minimalist artist whose forms, to some extent reflect similarities to my own and on that basis at least, he should be addressed. Incorporating both sculpture and furniture design within his art practice, it is in fact his sculptures that are of more relevance to me than his furniture, particularly his large outdoor sculptures and installations. Lewitt's strong geometric aesthetic within his art works is something that I find appealing in a structural formal sense. His interest in the grid and cube formations especially when large scale was used links visually with my own work. However, where as the intention of my work is for functional exploration and physical interaction, Lewitt's sculptures are motivated by different intentions. Reflections of a conceptual process, his work was based around studies of mathematics, regulated order and repetition. More often than not, his sculptures were based on cubes using precise, measured arrangements and expanded variations. The objects were the physical manifestation of a concept and thought process, and not intended for any further functional or physical requirement beyond its existence.



Fig 66a: 2-3-1-1 by Sol Lewitt, 1994

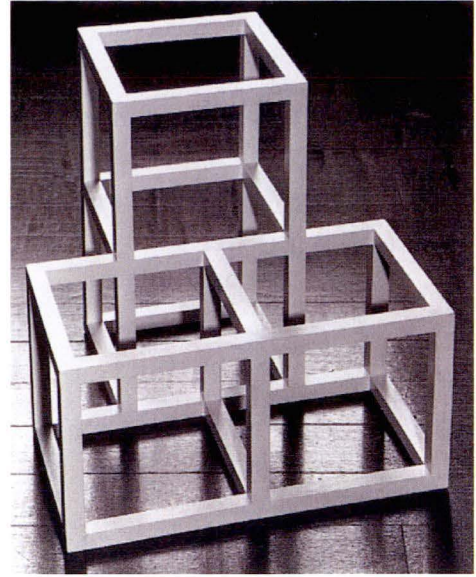


Fig 66b: Two Cubes Vertical, Two Cubes Horizontal. 1971

Sol Lewitt did crossover into the realm of furniture design, bringing his geometric aesthetic into functional design. From as early as the 1960's Lewitt investigated notions of design mainly through tables, shelving units and room dividing screens. His interest in furniture stemmed from his desire to make functional items for himself and was not originally meant for public consumption. It was Lewitt's sculptural investigations within his furniture that made them interesting; in a functional sense they are simple utilitarian items, not dissimilar to the furniture of Donald Judd.



Fig 66c: Coffee Table 1981

Context Conclusion

The placement of my research within the contextual field that has just been identified in this section highlights the fact that my work is a blend of art and design. This research both develops the use of the minimal aesthetic in furniture and at the same time extends investigations into the nature of functional interaction with furniture. Looking at the body of work as a whole, there is no one artist or designer who is completely equivalent to my work. The critical link is that their work, like mine, is a mix between the functional and the self-expressive.

The artists and designers mentioned in this section are the ones that relate most closely to the focus of the research. There are other artists who have had an effect on my work and not all of them have been mentioned yet. In the following chapter the development of each of the project's furniture pieces will be discussed in detail and where appropriate reference to influences and connections with other artists will be made.

Section Three: How The Research Was Pursued

Introduction

Her head was burning with dreams of glass, shapes she saw in the very edges of her vision, structures whose function she had not even begun to guess. The idea danced around the periphery of her vision, never long enough to be clear. When she attempted to make a sketch, it became diminished, wooden, inelegant. Sometimes, in her dreams, she felt she had discovered its form. But if she had, it was like an improperly fixed photograph, which fades when exposed to daylight. She was wise enough, or foolish enough, to believe this did not matter, that the form would present itself to her in the end.⁴⁴

Oscar and Lucinda.

The following section describes in detail the body of work that was the result of the research undertaken. Each piece is an end result of experiments in creating both a functional and visual language that stemmed from the initial research questions and investigations. These questions were always at the forefront of the design process. With each project within the research varying they still remained linked in their attempts to answer the main underlying research investigations. Such as; ; Can reduced furniture forms still provide a variety of functions and how can they stimulate the imagination of the user? Throughout the research thoughts change, problems arise and aesthetics vary. This section covers this journey and the reasoning behind all the decisions that affected the final body of work.

⁴⁴ Carey, P. (2001:356)

Each individual project had its own methodology in the pursuance of its creation and is explained within. Together they form the collective responses, answers and outcomes to the research questions.

Cambridge Primary School Seating Commission

Toy Box 2004

The Cambridge Junior School seating was the first major body of work completed for this PhD. The commission was an opportunity through a Tasmanian Government arts initiative called Arts For Public Buildings Scheme run by the government body *arts@work*. This initiative allocates a percentage of all major Tasmanian Government building renovation or development funding towards the creation of public art works.

The brief for the Cambridge Primary School redevelopment was to create a series of seats that were to be the focal point of the new playground area between the new classrooms.

The seating was to be predominantly for the use of the children but also accessible for adult use. The commission was through a competitive selection process of which my response to the brief was selected. Here is a selection from the expression of interest that I submitted for the commission:

Researching closely the concepts of play, fun and playground design, I am looking at how these areas can be related back to furniture both internal and external. ...For this project I envisage seating that is a mix of the functional and the creative. I would design the bench seats with a strong sculptural focus, whilst at the same time remaining accessible for the user... Investigating and developing both a play aesthetic in my work as well as developing furniture that encourages interaction and personal choice for the

user I see the seating as visually and thematically mixing ideas of fun and uninhibited creativity associated with learning... The seats would not only be a physical link from the classroom to the playground but also a thematic link that reflects a combination of play and learning.

The initial designs for Cambridge were for a series of arc shaped bench units that were identical and could be linked together to form seating to suit both parts of the play area where the seating was required. The arc benches were to be made in fibreglass and held in place by red steel pipe leg structures designed as armrests and anti skateboard devices.

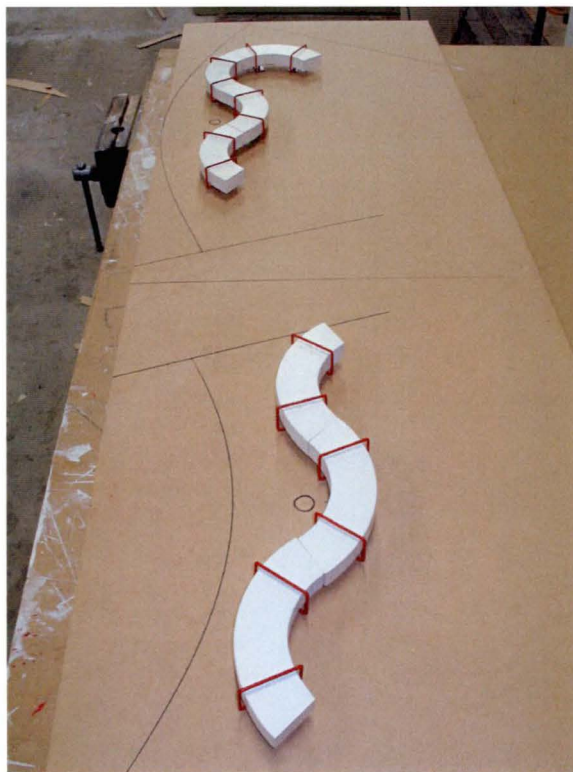


Fig 67: First Design

This design was shown to both the school and the project architects, was approved was and given the go ahead. However I was having nagging doubts about the design for a number of reasons. Above all, I felt that the furniture belonged to the children first and so I wanted a result that I thought the kids would really react positively to, something that, like their

playgrounds, was fun, vibrant and interactive. I felt that these first designs were too much of a reaction to functional rules and requirements and in simple terms, just too stifled and not much fun. Aesthetically they were rigid and functionally not interesting or interactive enough and in truth, did not follow what I outlined in my expression of interest. Beyond this there were some design issues relating to the head and neck entrapment rules that I was not entirely happy with even though the design complied with all these guidelines. So, having got the design completely approved by all parties I then went and changed the design completely.

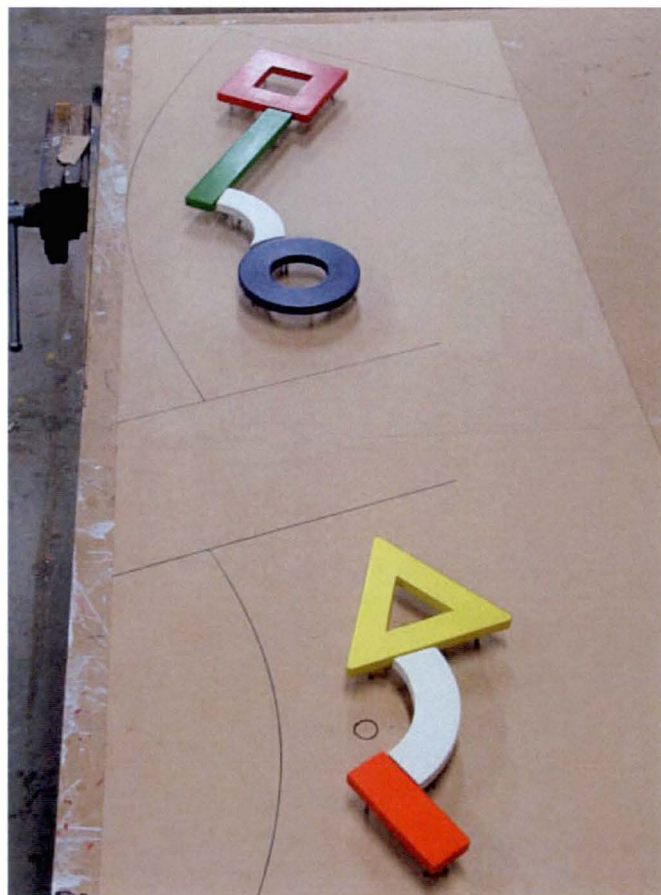


Fig 68: Final Design for *Toy Box*.

Given all the concerns and issues that I had with the previous design, instead of adjusting the design, I almost completely ‘wiped the slate clean’ and started again. The next set of designs, were again accepted by all concerned parties and were to be the designs that were eventually fabricated.

The concepts behind what was to become *Toy Box*, were based on ideas about making the bench seating by playing with the simple building shapes that are often part of children's toy block sets - basic shapes and geometry mixed with the bold use of primary colours.

As part of the design process I cut out scale size paper shapes and quite simply moved them around into a multitude of configurations until I decided on the final layout. I also started to use a 3d computer design program⁴⁵ to do exactly the same thing as I was doing with the paper except in a three dimensional virtual space. The 3d design program had the added advantage of being able to easily change aspects like colour and size.

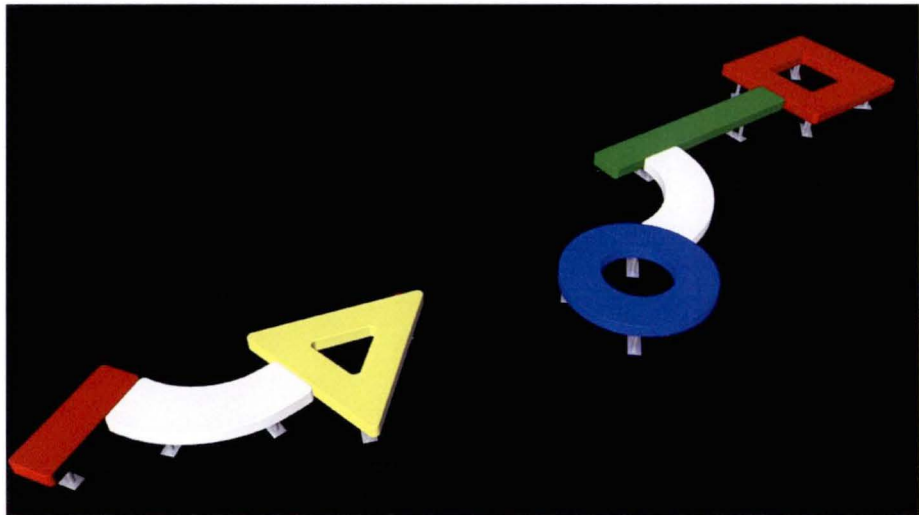


Fig 69: Computer Render

Added to these themes was my ongoing interest in making furniture that was more interactive and provided the children with some choice as to how it was used. The final design was to be made up of seven individual pieces (one square, one circle, one triangle, two rectangles and two arcs), placed together to form two large seating areas, with an overall seating space of about seventeen lineal metres. All of the benches allowed for access and seating from both sides. The circle, square and triangle had the centres removed to create areas for more inward based seating to

⁴⁵ Cinema 4D by Maxon.

encourage conversation and social interaction. The choices of colour were essentially made to be bright and fun. However, the association of colour to the square, circle and triangle was taken from the Bauhaus symbol, with a yellow triangle, red square and blue circle. This was not done out of any particular homage to Bauhaus design. Rather, I was reading a book on the Bauhaus at the time⁴⁶ and Kandinsky's colours just somehow infiltrated their way into my decision making. The book explained the symbol:

In 1923 Kandinsky claimed that there is a universal correspondence between the three basic shapes and the three primary colours. Moving from hot to cold, light to dark and active and passive, the series is an elementary sentence in the "language" of vision.⁴⁷

In the end, the colour scheme of the seating was to affect the overall project. The staff, having liked the colours so much, changed the colour scheme of the surrounding buildings to match.

Each piece was made of a plywood and pine torsion box construction for the main shapes. These were then covered in two layers of fibreglass matt, sanded and painted with a two part polyurethane marine paint. The leg sections were made from aluminium pipe and flat plate. There are skateboard deterrents imbedded into the seating, which were made from steel plate and painted to blend with the seating. I constructed the main shapes and did fibreglass work, whilst the steel work and painting was done by contractors.

⁴⁶ Lupton, E. and Miller, J. (1993) *The ABC's of The Bauhaus and Design Theory*. London: Thames and Hudson.

⁴⁷ Lupton, E and Miller, J. (1993:22)

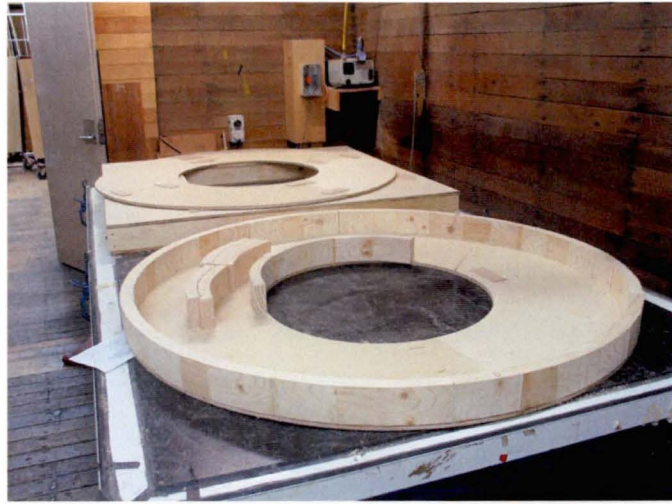


Fig 70: Manufacture in Process

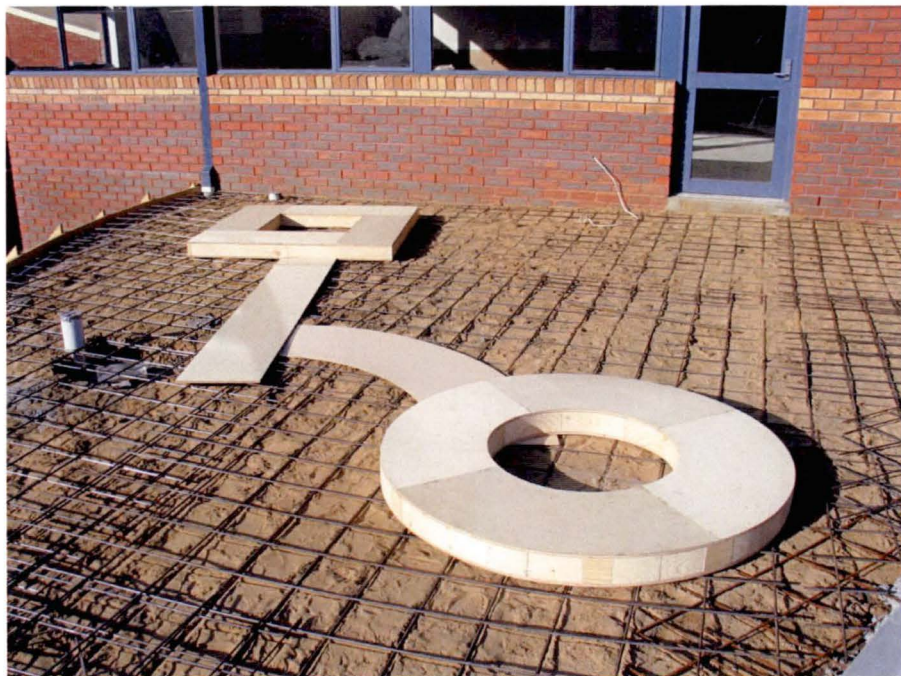


Fig 71: On site preparations



Fig 72: Finished Installation.

The entire process of the Cambridge Primary School commission from design to final installation took about seven to eight months. There were several delays in the construction of the redevelopment though this only helped by giving me more time to finalise a design with which I was happy. This project was an interesting mix between my conceptual aims and the aesthetics of my research, the requirement of satisfying a client's needs, and the legal realities and requirements for public furniture. As I said previously, my overall desire was to give the children something that they could really respond to emotionally and physically and the response I got from them was overwhelmingly positive. On the day of installation they could not wait to climb all over the work and find all the different ways to use it. Some chose their favourite colour, others their favourite shape. Not only were they sitting but also running, jumping, lying and socialising in groups. It was designed both aesthetically and functionally to be like a collection of toys for the kids to play with and use in their own

imaginative ways. I wanted a collection of very contemporary furniture that was beyond the normal dull furniture that is found in most schoolyards and would show to everyone involved that bench seats can be more than just for sitting. To me the success of *Toy Box* lies in the children's reaction to it. Where some of the adults were hesitant in their approach and acceptance of the work, the open minds of the children saw nothing but fun, and possibility.

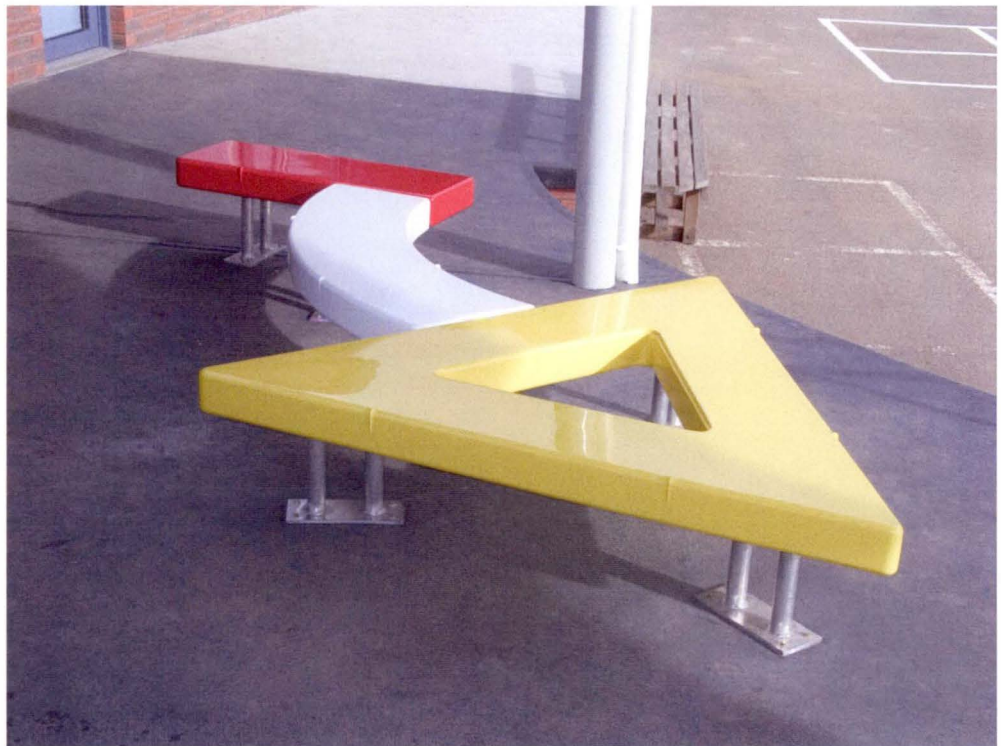


Fig 73: Finished work.

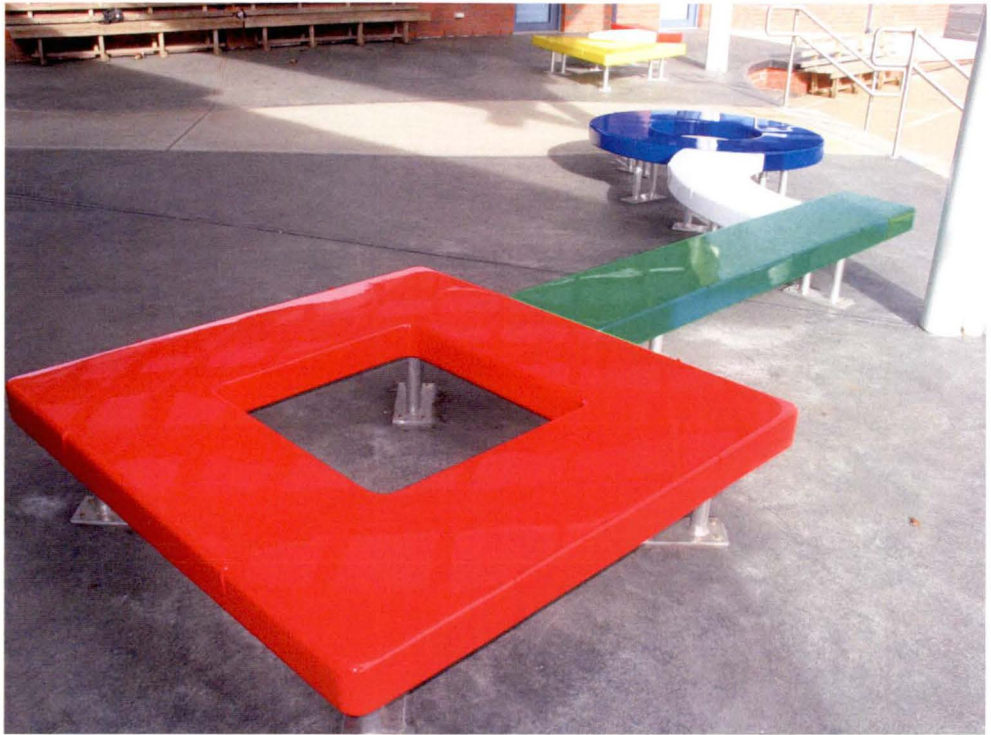


Fig 74: Finished Work



Fig 75: The seating in use by the clients.

Post Cambridge: A Rethink and a Refocus

The *Toy Box* seating for me, was a long and arduous project. I had never done such a large commission and in general I was tired. Regardless, I persisted with the research and continued with the designing of a number of pieces. Although mainly working with scale models, I took some of these ideas to full mock up stage but none of these designs ever went past the early prototype stage. A number of concepts were being considered, still based around the visual language of children's toys and play, though for whatever reasons I was struggling to come up with a design with which I was really happy and I felt that the research was heading in a direction with which I wasn't completely satisfied.



Fig 76: Belinda and Daniel as functional guinea pigs.



Fig 77: Mock-ups of early experimental designs.

I knew I was intent on creating furniture that challenged standard functional activities yet I wasn't convinced about how those intentions should manifest themselves in the rest of the work. As a result I decided to take time away from the workshop and really try to focus in on what direction I wanted the research to proceed.

If there was a disappointment for me with *Toy Box*, it was that it was still visually recognisable as furniture. Regardless of its functional possibilities, it still had all the visual clues to indicate what it was. There was still so much I wanted to experiment with and investigate. The school project left me wanting to push the conceptual and aesthetic boundaries of furniture even further and to really develop this idea of creating furniture forms that were more obscure and ambiguous.

It was with this in mind that I set out to refocus the project and to see if I could reduce my furniture down to even more basic forms and platforms and following this was a change in the type of materials I was using. I went right back to basics and looked at materials and form first, before I thought about furniture or function. Instead of making specific models, I

‘played’ with shape, form and texture and created abstract models that were visually unrelated to furniture forms. The majority of these models were made from scrap bits of pine with absolutely no colour. It was an aesthetic that was growing on me.

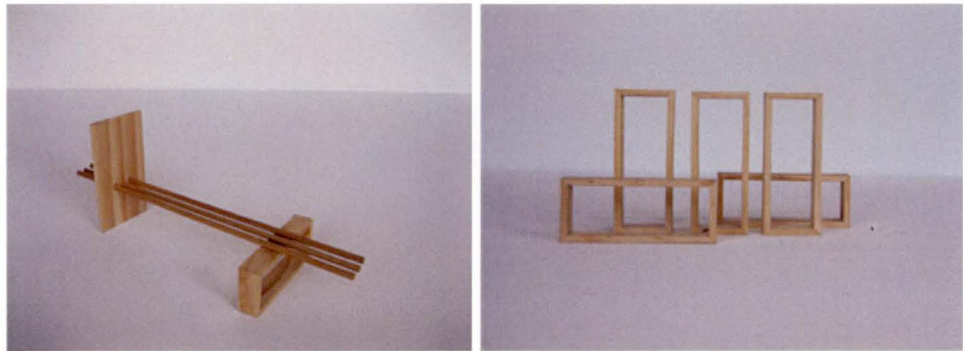


Fig 78: Pine Models

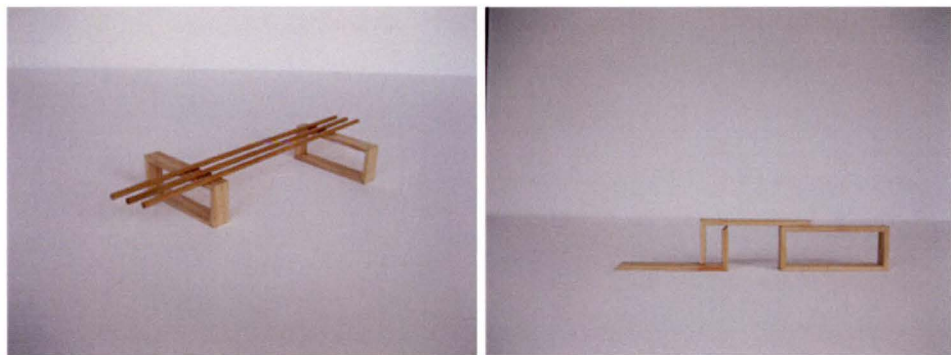


Fig 79: Pine Models

While the focus on basic geometry and colour in the Cambridge project worked well with the style needed for a primary school, it was an aesthetic in which I was becoming less interested. I was beginning to get a strong desire to change the materials of my furniture away from the ‘plastic’ look of fibreglass and painted surfaces and in turn, to retreat to materials that were perhaps more in keeping with the way my thoughts were changing in respect of the project.

I am reminded again of Roland Barthes’s essay *Toys* in which he talks about the different styles and qualities of toys;

Current toys are made of a graceless material, the product of chemistry, not of nature... A sign which fills one with consternation is the gradual disappearance of wood, in spite of its being an ideal material because of its firmness and its softness, and the natural warmth of its touch. Wood removes, from all the forms it supports, the wounding qualities of angles which are too sharp, the chemical coldness of metal.⁴⁸

Perhaps this is a little romantic in sentiment but this essay echoed the way I was feeling about my material choices. After the many months of using fibreglass, resins and paints in the manufacture of *Toy Box*, I also wanted to get my furniture back to basics in a fabrication sense as well. At this time I decided to develop the use of pine (Australian Radiata in the first instance) into the full-scale finished pieces. Essentially the major reason for choosing pine was to pick a timber that suited the attitude of the direction in which the work was heading. It is a basic so-called 'down market' timber that suited the minimal aesthetic that I was developing as well a material that linked well with the theoretical aspects of play and interaction.

The reaction to my choice of timber surprised me. It was as though I had broken some unwritten law about furniture making, that 'quality' furniture and design did not use such a lowly timber as radiata. There is no doubt that there is a disregard amongst furniture designer/makers for radiata especially here in Tasmania where it is considered a poor cousin to all the other timbers that are available. To some extent I accept and revel in this disregard but this is not the primary reason for the choice. It is rather to do with my wish to enhance imaginative possibilities by using the simplest materials available. Minimal artist Robert Morris, although talking about mirrors, sums up this affection with the unloved.

⁴⁸ Barthes, R (1972:54)

In the beginning I thought mirrors were a rather tawdry, cheap, discredited and vaguely surreal material. It gave me satisfaction to use a material with such associations. Maybe there is a moral here: in the pursuit of the rejected and discredited we sometimes find new worlds.⁴⁹

To me I wanted some timber to get from point A to point B, and to provide its function without fuss either visually or structurally. I don't associate myself with the romanticism sometimes attached to the use of timbers in furniture. Although, I have nothing against the traditions or aspirations of fine furniture making, it is not where I believe the focus of this research lies. This project has never been about the development or extension of the knowledge of fine cabinet making. It is not an exercise to highlight features of a craft skill like dovetail joints. That is not to say that I don't take pride or care in the fabrication of my work or seek a quality finish. Those aspects should be taken as a given, but at the same time blend into the background to allow the user's attention to focus elsewhere. Another unsuspected reaction to my decision to use pine was in people's assumption that I was doing this for reasons of environmental sustainability. Radiata pine is a fast growing plantation timber that is a renewable resource. As much as I would like everyone to assume this was the case, it is, unfortunately not true. No doubt, in some way, it was a reaction to the rather toxic nature of the materials I had been using up until then. The chemicals and resins were certainly something I wanted to remove from my daily practice but it was always an aesthetic choice first. Having said that, I do occasionally feel a twinge of guilt when I look at the environmental footprint that will remain bolted to the Cambridge school for a long time to come and I am pleased that I have (to some extent) reduced the environmental impact of my materials. However, I feel that this a personal issue for me to dwell on and not particularly relevant to the overall themes and outcomes of the research.

⁴⁹ Morris, R (2000:176)

Environmental concerns aside, overall this new, more reductive aesthetic, suited the style and scale of furniture that I was starting to design. It was an aesthetic that might be perceived as a bit brutal and harsh. It lacked the comforts of cushioning and the concessions to ergonomics were little, yet at the same time it increased the functional potential and interactive access of the furniture. Beyond that though, quite simply I just felt at ease with it. I liked it.

This time of reassessment would prove to be somewhat seminal within the overall project and although it certainly changed aspects, it was time well spent. The visual language that I was chasing was becoming clearer and the conceptual theories were being pushed and developed further and further.

It's Furniture Gym, But Not As We Know It! Part One.

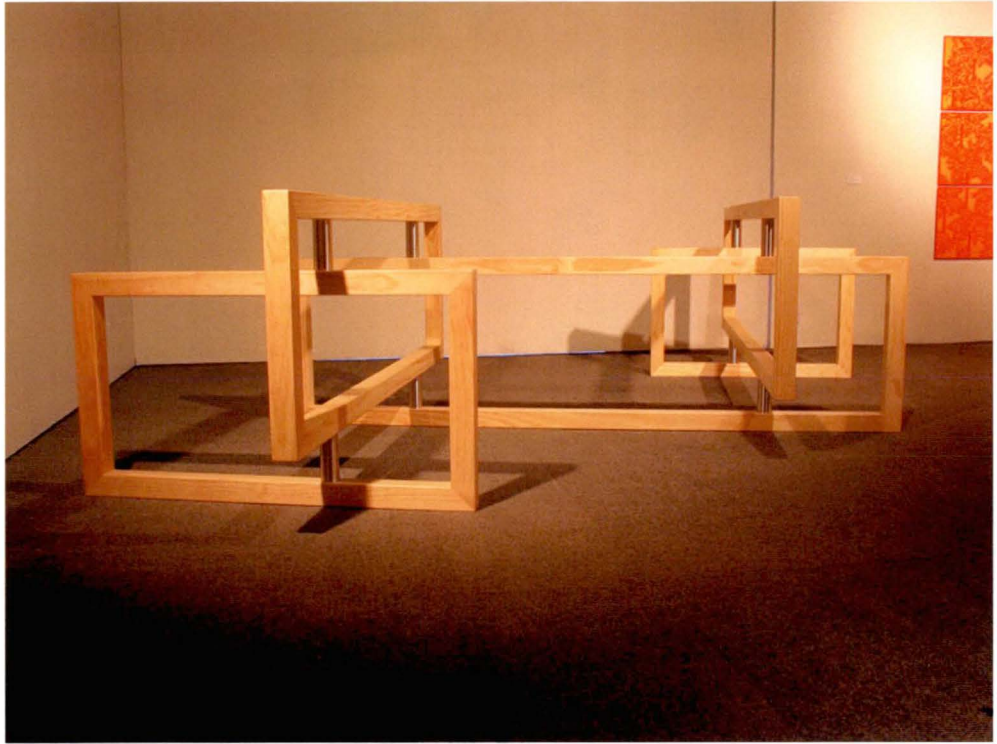


Fig 80: *It's Furniture Gym, But Not As We Know It! Part One.*

This was the first piece of work to come after the Cambridge School Project and as a result, is arguably the most reductive piece out of the whole body of work. It was the result of all the reactions to *Toy Box* that I have mentioned above. Within my work there has always been an underlying desire to be just a little bit controversial, albeit small and perhaps self perceived. This isn't a large fundamental part of my ethos. More so, it is a case of occasionally listening to the little devil within and letting loose. Having had enough of thinking about issues like public liability, head and neck entrapment, correct seating heights, skateboarders and in general being so completely answerable for my design process and manufacture, I decided that I needed to shake off some of these design shackles.

What I wanted with this piece was something that completely turned the idea of furniture, what it looked like and how it functioned completely on its head. I wanted a piece that was almost unrecognisable as furniture in

any traditional way, i.e. furniture that was unrecognisable in a visual sense and vague in its functional intent. There is little to indicate how to approach this piece, yet on closer inspection one discovers the various heights, position and spaces or the timber and through investigation discovers their use.



Fig: 81

The piece is made up of the interlinking 80 millimetre (mm) by 80mm hollow pine beams with stainless steel tube connectors that hide a threaded rod bolting mechanism. The beam sections are constructed from what is called a torsion box construction with the four sides mitred⁵⁰ and glued together. These hollow style beams were designed to allow for the fittings required for the connectors. Added to this, by having four glued mitred edges, it creates a large glue surface and a very rigid and strong beam section.

⁵⁰ Mitred- The joining or glued faces of the timber are cut on an angle. In this case at 45 degrees.



Fig 82: Torsion box pine beams.

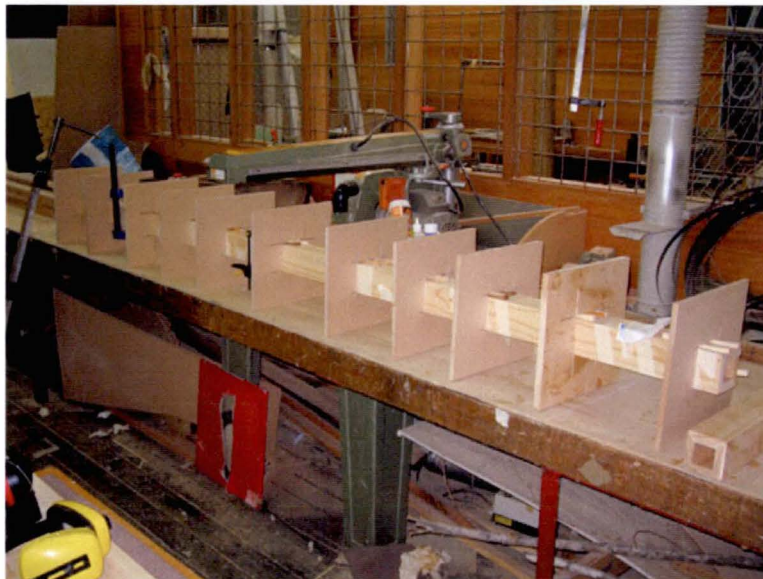


Fig 83: Glue up jig.

It's Furniture Gym, But Not As We Know It! Part One was the first piece to use this 80mm by 80mm beam as the major constructional aspect of the work and it was the measurement that was to become the major aesthetic and functional force throughout the rest of the project. This measurement and indeed any of the others were not nominally picked out of thin air. Different widths were tested both smaller and larger looking at the relationship of the visual to the functional. 80mm by 80mm was found to be the most desirable on an aesthetic level whilst still providing a level of functional ergonomics that was not completely uncomfortable or unusable. The nature of the work with its intersecting lineal design was determined

by the need to remain visually light and functionally strong. As with the beams, all the lengths and sizes of the rectangles were experimented with to find the right distances and heights between each of them. A lot of consideration was given to the composition of the piece both aesthetically and functionally. As it is furniture that is designed for a number of different body types, much time was spent ascertaining the various measurements of the piece, through the use of a full- scale mock up. At the same time there had to be the correct visual balance between all the parts of the work to create a piece that was aesthetically pleasing from all angles and views. Because of this, a different interactive configuration is presented to the viewer at every approach.

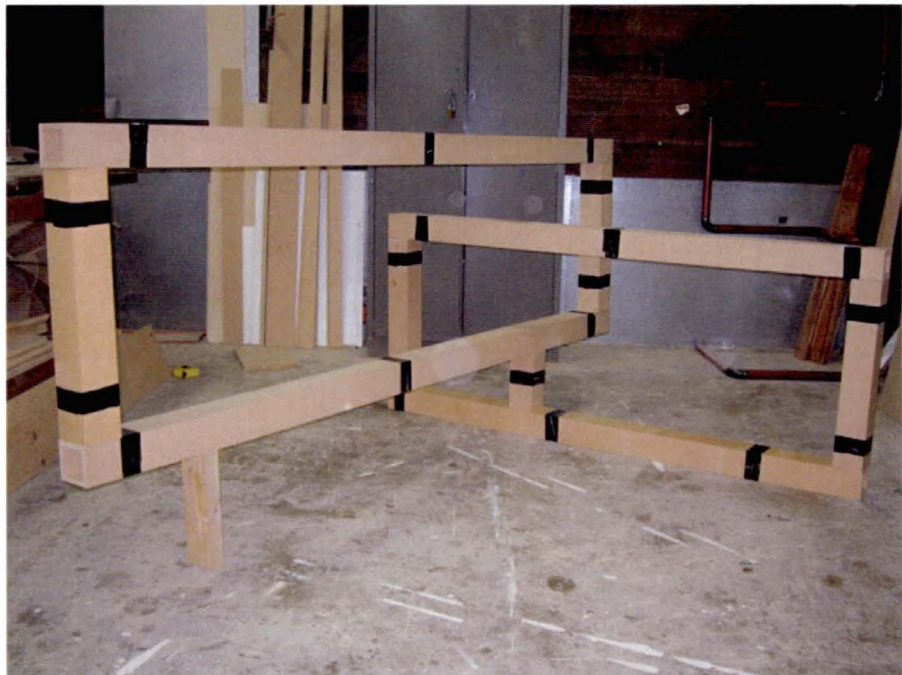


Fig 84: Tests for measurements and dimensions with a mock-up

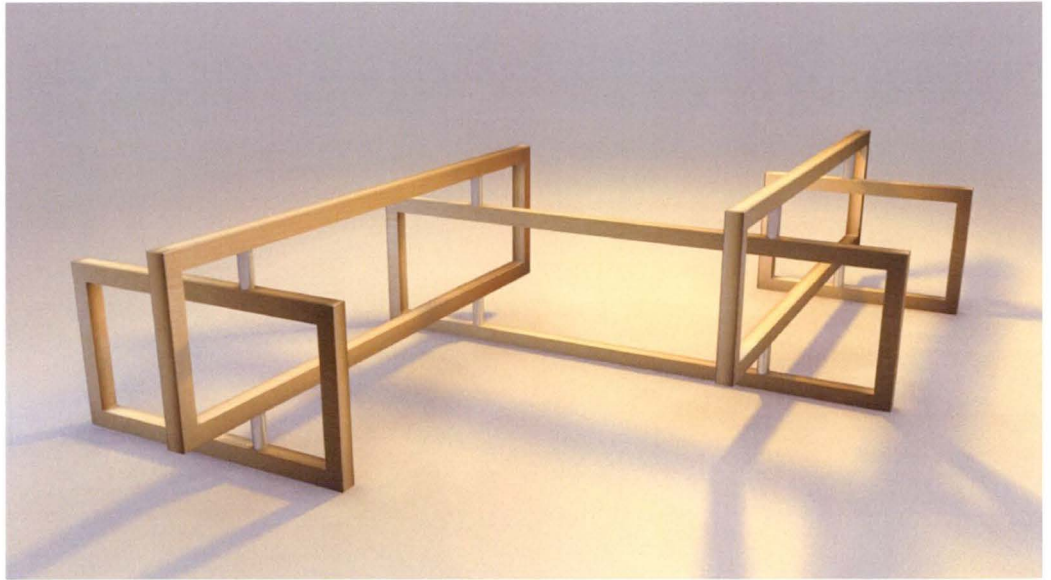


Fig 85: Computer render.

This piece is perhaps harsh in its aesthetic and unforgiving in its comfort levels, though it was never meant as piece of domestic lounge furniture. Looking like a mix between a horse corral and a set of complicated gymnast's balance beams, it would be well suited to a foyer or other transient environment, and with some slight alterations it could also easily be adapted to an outdoor setting. It is designed to be interactive and fun to use. Like an all-in-one gym machine, it becomes a focal point for sitting, resting and waiting. It is furniture that is designed for a number of people to use in a number of different ways, with the interlinking rectangles creating a social jungle gym of actions and activity. (Refer to figures 81, 86 & 87)



Figs: 86 & 87



It's Furniture Gym, But Not As We Know It! Part Two.

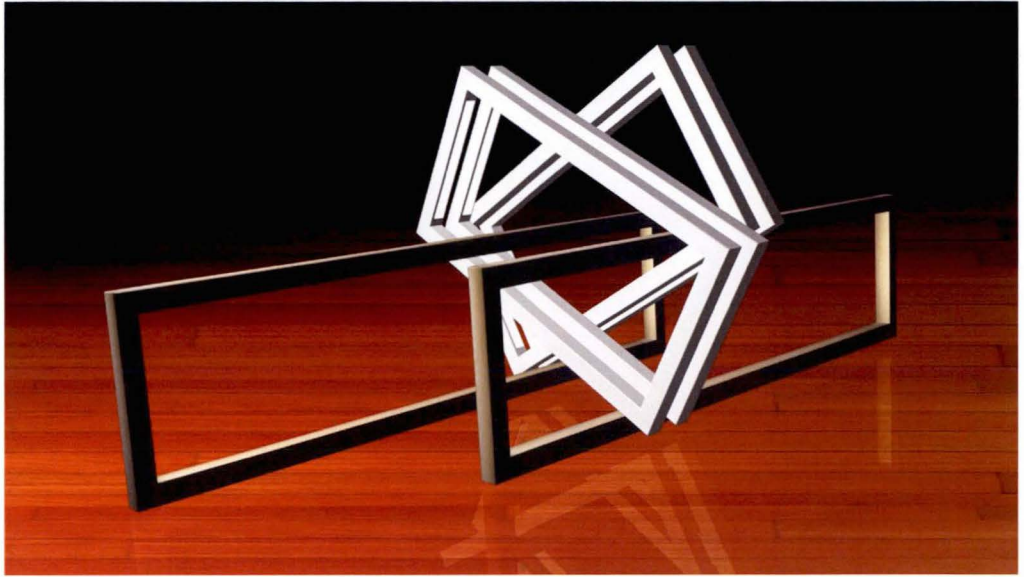


Fig 88: *It's Furniture Gym, But Not As We Know It! Part Two.* Computer render.

This piece was a direct follow-on from *Gym Part One*, using the same beam construction and rectangular seating shapes. I was still aiming to minimise the 'furniture recognition factor' of the piece but here there is a lighting element, which perhaps indicates function more directly.

Although this piece still provides options and choice with how it is approached and used, here its functions are a little more defined. Created mainly for leaning in this case, it is designed more as an ambient piece to walk into rather than to climb on. The lighting within this piece creates a more emotional type of interaction with the piece, one that is atmospheric and ethereal. However, it is still a piece that can be approached and used from all directions and its parallel rectangular shapes divided by the four light sections, create areas both for closer social interaction and more solitary areas. The parallel structure allows users to either choose to face each other within the piece or face outwards back to back.



Fig: 89

Being a reaction to the outdoor seating commission, *Gym Part One* was quite militant in its reductive aesthetic with absolutely no colour or decorative feature. In *Gym Part Two* whilst obviously keeping to a very similar style, I started to experiment again with some of these aspects such as colour for example. Whilst the light sections do form part of the overall structural integrity of the piece they are in a way, an experiment exploring function and decoration. Having created such a lineal style to my furniture, I found that colour could be used to provide a visual break in the layout of the work as well as adding an emotive feature to the piece.



Fig:90

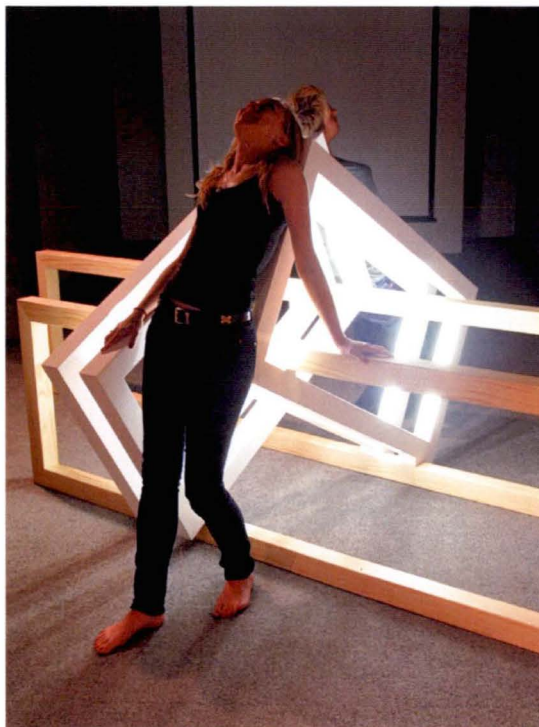


Fig: 91

I have always liked the work of Dan Flavin and the kind of ambient minimalism he created in his works with fluorescent tubes. What I like is the way Flavin took lights away from their regular position on the ceiling and placed them in other positions within space and this is what I have experimented with in *Gym Part Two*. He also used repetition as tool in his

work, which is something that I also explore in this piece. *Gym Part Two* has more defined and separated seating areas and it is the lights that not only unify the whole piece structurally but also provide the visual connection between these seating areas. The repeated lights form a tunnel of light that triangulates the structure solidifies the piece visually creating a central focus point around which to interact. (Refer to figures 89, 90 & 91)

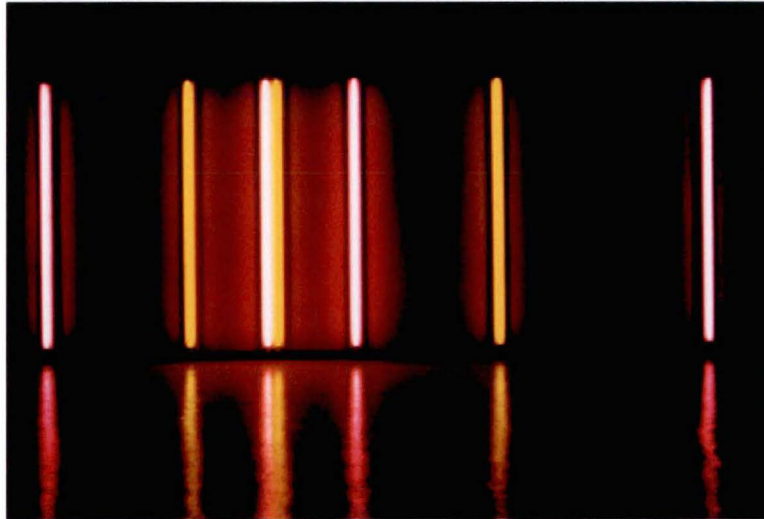


Fig 92: Dan Flavin *Alternating pink and "gold"* 1967.



Fig 93: Wiring the lights.

The parallel pine rectangle seating areas are constructed in the same way as *Gym Part One*. The hollow pine beam creates strength and allows space for the various connecting fittings and wiring that is needed for the lights. There are eight fluorescent tube lights in total, which are all wired together

off one switch. The light sections are constructed in the same way as the pine rectangles out of Medium Density Fibreboard (MDF) and painted with a strong polyurethane industrial paint. Bolt type fittings were manufactured to hold the light rectangles onto the pine. To retain the same minimal visual style, it was extremely important to me that the lights were enclosed within the same 80mm by 80mm parameters as the pine beams. I wanted all the parts of the piece to join as seamlessly as they could with as little visual disturbance as possible. To this end, a lot of time was spent in designing a complicated arrangement of lights, wires and connecting mechanisms to appear as invisible as possible. The success of *It's Furniture Gym, But Not As We Know It! Part Two* always lay in this attempt to make the complicated appear simple.

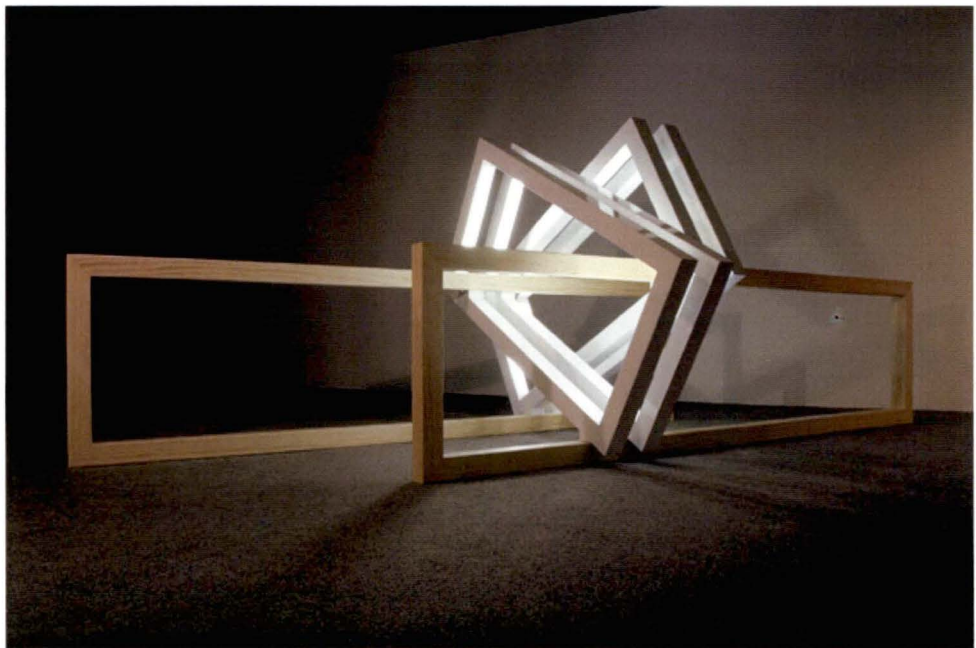


Fig 94: Finished piece

Snap To Grid. (a.k.a. STG Swings)

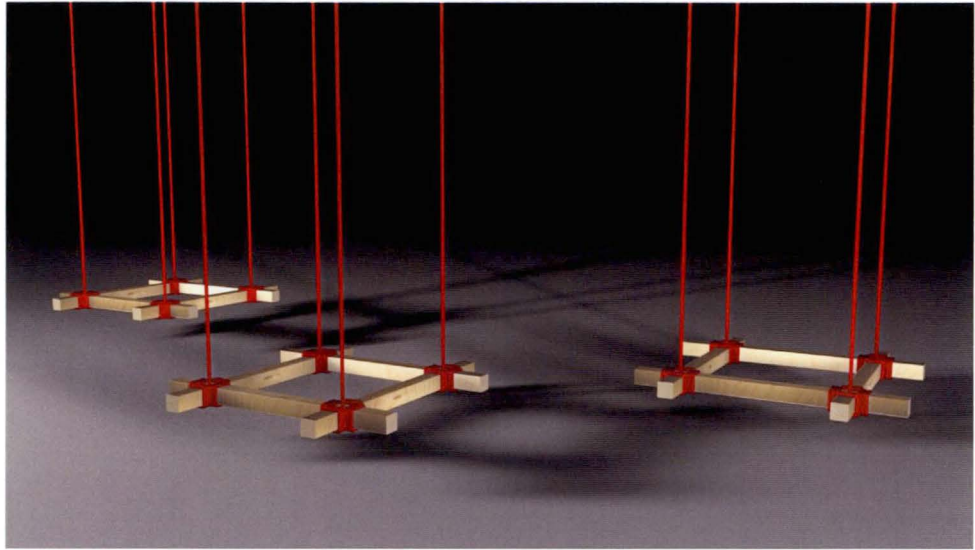


Fig 95: Computer Render of *Snap To Grid*

This next set of works brought with it a slight shift in the style of furniture that I had made up until this point. Still remaining with the now firmly established aesthetic, I decided to lift the furniture platform off the ground and create interior furniture swings.

Swings as furniture is not something that is new to my design practice, as I had made two of them for my honours submission and the idea of designing furniture based around the swing had been on the periphery of my thoughts for quite some time. One of the unsuccessful designs in which I experimented with in the time after *Toy Box* was a large-scale swing. At that time, it was just the aesthetics that I could not resolve, but the idea of bringing some kind of swing into the project was to stay with me.

Reminiscent of childhood playgrounds, swing style furniture immediately creates a sense of fun about the functional nature of the piece. Swings are also associated with a sense of relaxation. By hanging it, the piece is free from a solid grounding, creating a gentle movement that can change the interactive experience of the piece.

Originally conceived of as one large swing, I found that what I desired both visually and functionally could be resolved in a collection of smaller units. The simple visual nature and construction of the *STG Swings* conceals a variety of ways to interact with these works. Each swing can accommodate up to four people, depending on the way it is used. The make up of the grid creates four defined seating spaces between the corner intersections. Each space allows for one person to sit or perch facing inwards or outwards. Like all of the furniture for this project, these swings play with ideas of social interaction by creating areas where people can face each other and engage with other people, or choose a less gregarious engagement facing away. (Refer to images 98, 99 & 100) When used by one person, the swings provide a more relaxed hammock type experience. The ropes can be used for back support and the corner intersections (although not big enough for seating) can be used as a foot-rest or to casually hang a leg over.



Fig 91: Experiments with different types of rope binding.



Fig 92: Early mock up of *STG Swing*

The swings are made from solid Hemlock Pine, originating from British Columbia, Canada. This timber makes a strong contrast with the vertical red ropes. The rope bindings are not decorative and in fact add to the structural integrity of the swing. The lineal grid of the wooden seats are intersected by the four red lines coming from the ceiling, creating a pattern that is the vertical reflection of the horizontal lines of the timber and visually linking the three pieces into one. Like the intention of their use, The *Snap to Grid* swings were designed with a sense of fun; a fairly quickly resolved idea that was both visually and functionally interesting. They can be seen as individual pieces, or when combined, the three swings add up to create a playground of functional interaction for many people.



Fig's: 98



Fig's: 99 & 100



Piles of Stiles

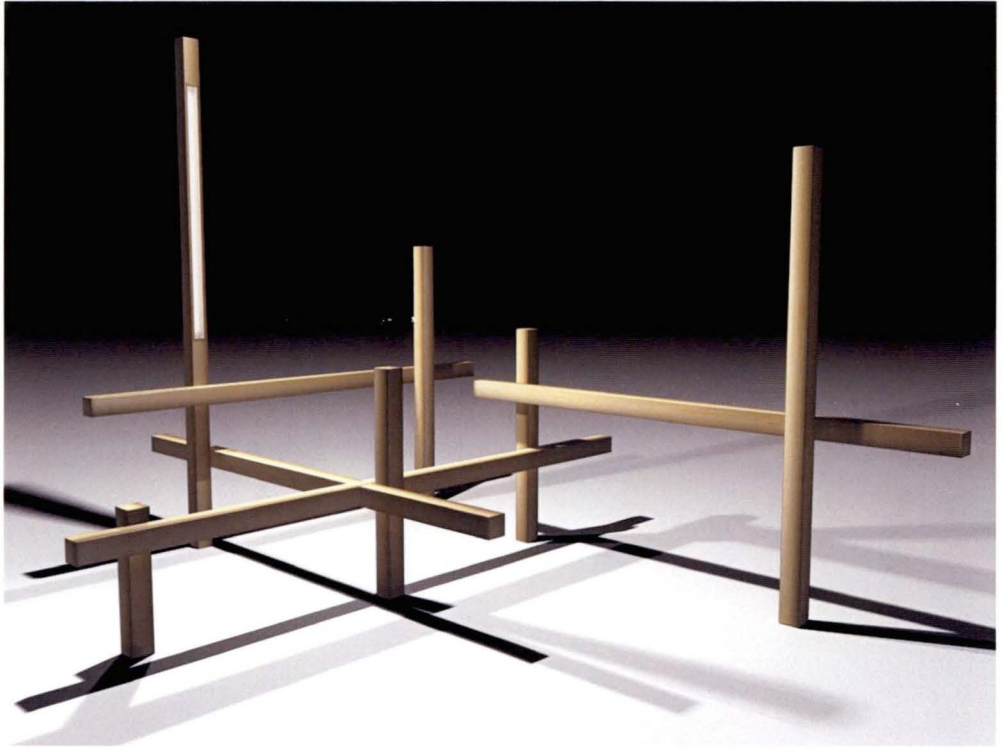


Fig 101: Computer render of *Piles of Stiles*

Unlike the *STG Swings* where the idea and design came quickly, *Piles of Stiles* evolved through a long, drawn out process. The initial basis for this piece came from the visual style of the constructionist theatre sets that I had been looking at. Like the theatre sets created in this style, I wanted the piece to have a very basic and utilitarian look, suggestive of something that could easily be fabricated. The rudimentary look of constructionist theatre sets that were evocative of building scaffolding suited the feel of this piece and the visual look that I was after.

The preliminary models for this piece were very much theatrical in nature, involving experimentation with the idea of creating a piece of furniture that, like a stage set, was a room without walls. Through a series of model making, I came up with a design idea that linked all of these concepts together. However, I was never totally happy with these models finding them too stifled and regular in their geometry. The design needed opening

up and so I dismissed the cube style of these models in favour of the final more open plan design.

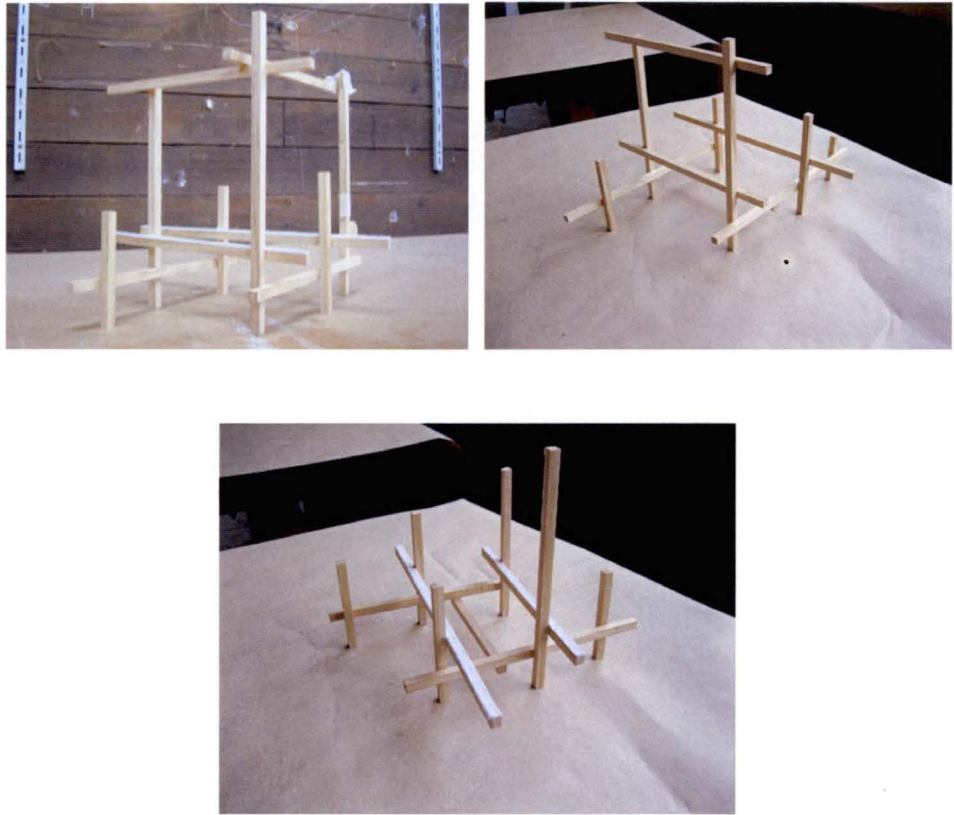


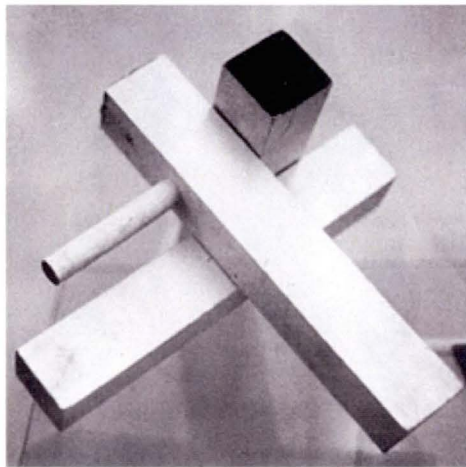
Fig 102: Preliminary model concepts for *Piles of Stiles*

Functionally, this piece links back to *It's Furniture Gym, But Not As We Know It! Part One* with the visual style of interlinking and intersecting beams that are split between two different seating levels, creating a variety of opportunities. (Refer to figures 103 & 107) Unlike some of the earlier design incarnations of this piece, all the various functional options it provides are easily engaged with. The two higher beams are intended for either leaning or seating whilst the lower level beams are at a standard seating height. The idea to include a light came from the original models where the high horizontal beams were intended to be lighting sections. Although not strictly necessary in this piece, it creates a focal point. Looking like a solitary street lamp it adds to the feel of theatricality within the piece.



Fig: 103

Similar in look (though on a much larger scale) to the work of Gerrit Rietveld, this piece probably has the simplest construction methods of all the pieces within the project. There is little that is hidden in the make up of *Piles of Stiles*.



Left. Fig 104: Joinery by Gerrit Rietveld



Right. Fig 105: Drawing of *Hanglamp* 1920

Constructed of straight beams of Hemlock pine, the joints are a mixture either of simple glued dowel joints or bolted unglued joints that allow for disassembly. The nature of the design with its high vertical beams and unsupported cross sections, always required some kind of supporting connection to the ground. If *Piles of Stiles* were to be permanently

installed somewhere then it would probably have steel rods sticking out of the base of the vertical beams and be cemented in place. Whilst the intended placement of this design would be in a public area, for the sake of this project, it will be exhibited first in a gallery. Therefore, to suit the gallery environment (where permanent installation was not an option) steel plates were fabricated and attached to the base of all the vertical sections of the piece and coloured to suit the carpet of the gallery. These plates can either be re-coloured or removed at a later date to accommodate installation elsewhere.

Piles of Stiles gets its name from the stiles that are used on walking trails to negotiate fences. I happened to find a picture of a stile by accident and immediately saw the resemblance to the aesthetics of this piece. The basic construction and simple functional nature of these objects was very appealing to me and linked well to the visual investigations of my work.



Fig 106: Walking Stile



Fig: 107

Function Room at the O.K. Corral

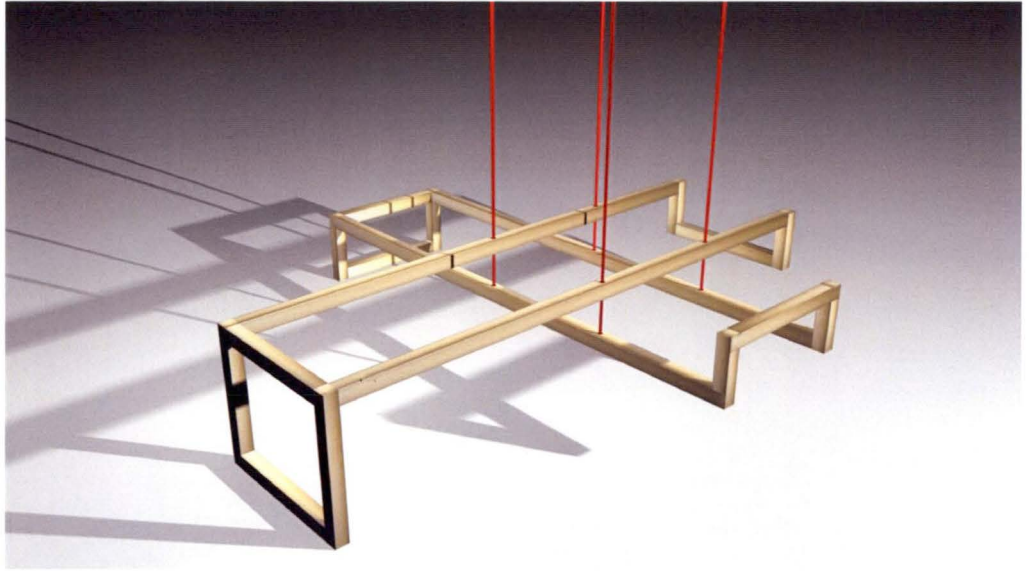


Fig 108: Computer Render of *Function Room at the O.K. Corral*.

Function Room at the O.K. Corral was the last piece to be constructed for this research project. This final work draws together many aspects of all the other furniture. It is another large-scale interactive piece that mixes the functional aspects of the swings with the multi-levelled seating arrangement of some of the other pieces. Visually it reflects the grids of the swings and at the same time uses the parallel structure of *Gym Part 2*, to create an area for face-to-face interaction and conversation.

Supported by four ropes in the middle and attached to the floor at the far end, there are two main sections intersecting at different levels to create a seating environment with many functional options. Again, like the other work *Function Room* can be approached from any angle and a new functional situation appears from each new angle.

The split-level design of the piece indicates that perhaps the lower section is for sitting and the higher for leaning on. However, this is really only the start of the functional possibilities with this piece. The large scale provides places for both solitary use as well as group interaction. At each end are crosspieces that are really only big enough for one person, creating

singular seats amongst an overall group environment. (Refer to figures 112 & 113)

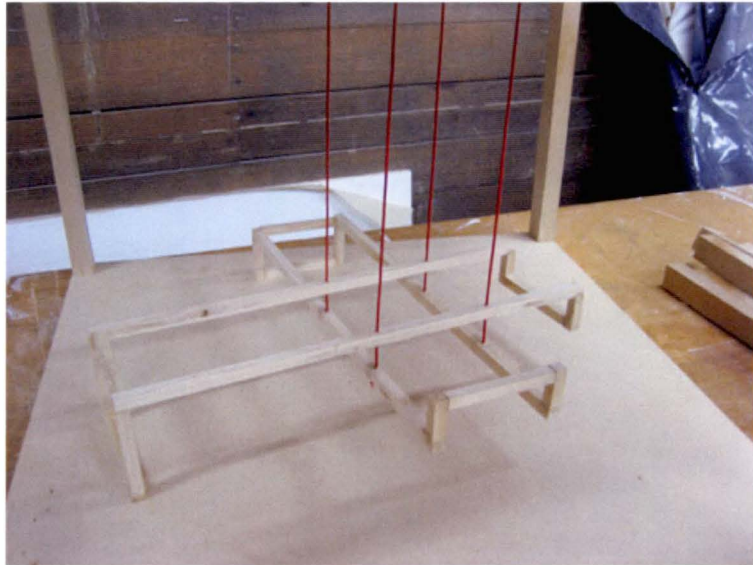


Fig 109: Scale Model.

I revisited the same radiata box construction of the furniture Gyms, as the long lengths added to the pivoting nature of the piece required strength and straightness over a long distance. It would have been possible to make this piece out of solid timber. However, these boxed beams make the work lighter and much less susceptible to timber warping.



Fig 110: Pine beam torsion box

As mentioned above in relation to other work, the hollow section of the boxed timber was developed to hide fitting and jointing mechanisms. In

Function Room' the only mechanisms, are at the two places where the piece touches the floor. Here (concealed by the timber) is a steel plate that attaches directly to the floor and on that plate is a single bolt that allows the two major parts of the piece to pivot left and right. The plate is also sandwiched with high-density foam to allow for movement up and down. Without these accommodations for movement the timber joints at each far end would be under too much load bearing. The intersecting design of the piece with the four ropes connecting at the same points and on the two different levels actually limits the movement of the piece and thus reduces the load bearing on these joints. The hollow core of the radiata beams also gives space for the certain parts of the construction to be strengthened by filling the core with solid timber. This was done where the ropes go through the beams and also to support all of the mitred joints throughout the piece. In particular, the three-way mitred joints are essentially replicated internally with solid timber, creating strength where it is needed the most.

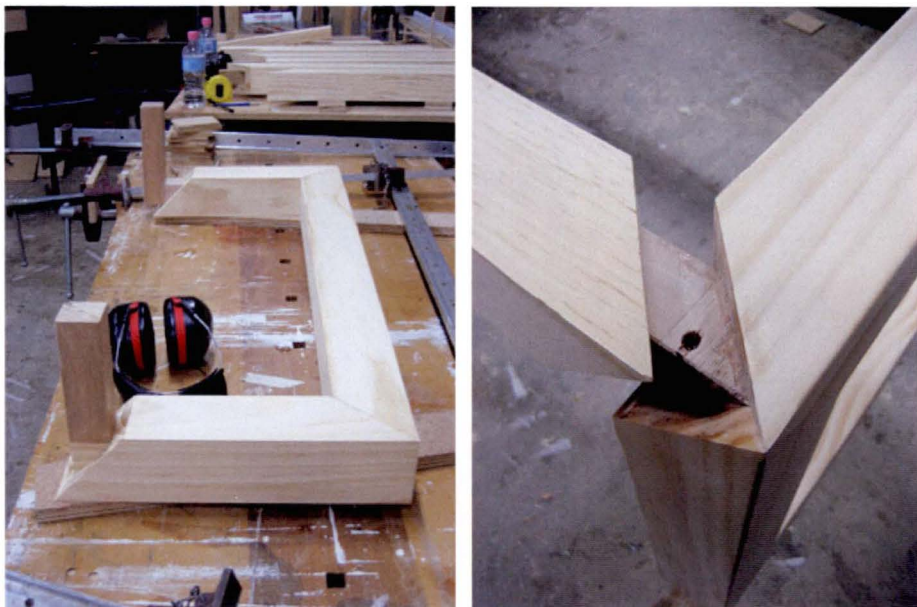


Fig 111: Solid timber support for the internals of the joints.

Regardless of its internal strength, *Function Room at the O.K. Corral* is a piece that, unlike the others, creates a feeling of precariousness both visually and functionally and this is something that was intended. In the case of the *Snap to Grid* swings, they are supported by rope in each corner

and although they are not grounded, they are still visually stable. On the other hand, *Function Room* has two extruded ends that cantilever unsupported 800mm past the rope, creating a sense of visual instability.

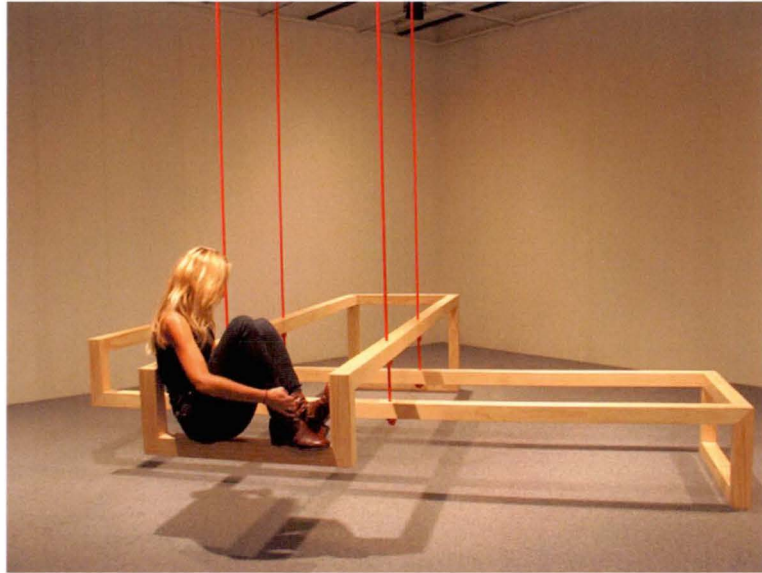


Fig: 112

Added to this, the slight movement of the piece enhances the uncertainty of how it could be approached and changes the pace of exploration by the user. These are all notions that contrast the perceived idea that a swing is an object of relaxation.

It is of course, completely structurally supported and can sustain any usage stresses. The ropes are beyond the balance points of the beams and the

attachment to the ground stops any radical movement. *Function Room at the O.K. Corral* is a piece which generates contrasting emotions. On one level it is a fun and physically interactive work and on another level it plays with notions of stability, risk and uncertainty.

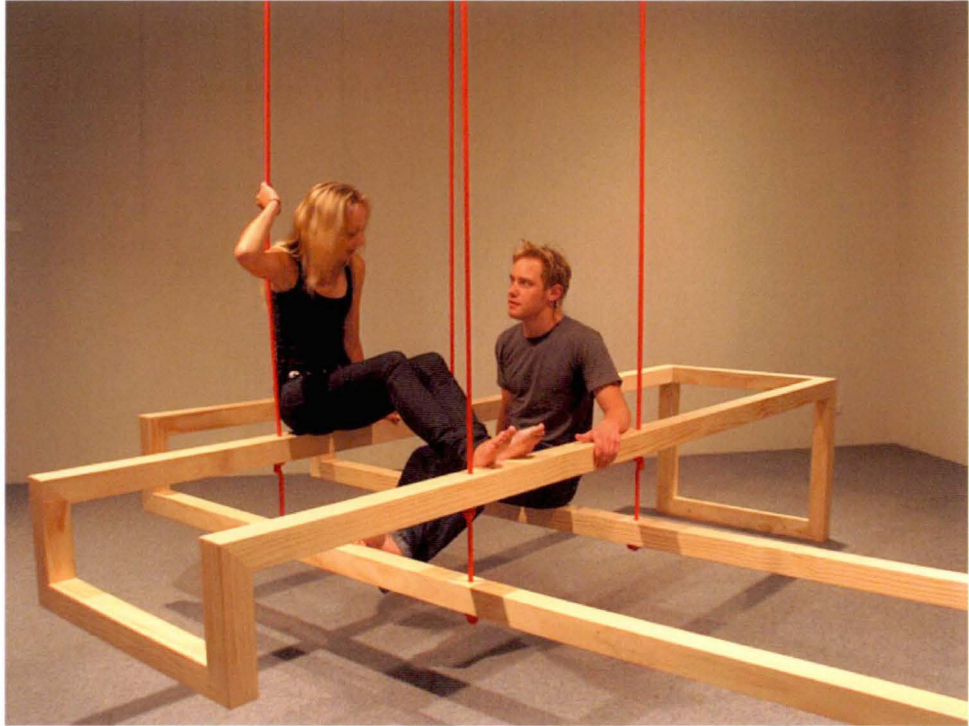


Fig 113

Section Four: Conclusion

Early in this research project I read the following quote by Paris based furniture designer Arik Levy in which he describes his designs and it is a quote that has always remained at the forefront of my thoughts with respect to my own designs.

A useful object that promises and delivers emotion and surprise, the way an art object could, is more inviting and can provide new suggestions about how to be used. Surprise is the connection between art and design.⁵¹

To me, these words, express what motivates me as a furniture designer and in particular the underlying impetus for this research project. Within furniture there are few functional or technical issues that have not been resolved. Two hundred years after the industrial revolution, the manufacture of furniture is a well resolved pathway of forms and their respective functions. On a mass consumer level, furniture is processed with greater efficiency than ever before and as a result is more affordable than ever. Yet, I believe that within this process there is little emphasis on, or priority for, the creative process. What is produced is safely continuing on with the expected functional and visual formula of the past. Safety is fine for its part. However it rarely challenges, provokes or stimulates the senses. Emotional content in furniture such as fantasy, imagination and poetics is often sidelined in favour of the economics of scale and of the market place. The result of which is furniture that continues to provide the same solutions with the same aesthetics.

I believe that new developments in the field of furniture design need to stem from the advancement of the self-expressive process rather than manufacturing processes. What really defines innovation in contemporary furniture design is how these emotional creative issues are expressed in cohesion with the functional aspects of furniture. Whilst the very nature of

⁵¹ Levy,A & Lionni, P (2003:9)

furniture design links closely to the commercial world, my furniture and the results of this research have never been about satisfying any market demands. Rather it is first and foremost the result of a desire to develop furniture which stimulates the imagination of the user.

Over the course of this research I have sought to create furniture that is a genuine attempt to step away from any kinds of traditionally accepted notions of furniture design. The furniture that has been produced through this investigation explores and reinterprets the fundamental concepts of furniture as objects of utility and the relationship between functional expectations and aesthetics. Sitting on the cusp between art and design, the work re-addresses and experiments with functional furniture related issues like ergonomics and structural integrity and at the same time focuses the role that furniture can play in stimulating imagination and personal interaction.

This research has produced furniture for both interior and exterior public spaces and experiments with and develops the nature of functional forms within these spaces. Taking inspiration and motivation from the use by the public of non-furniture forms in urban areas, the research has developed a new style of public furniture that is ambiguous in its form and therefore its intent. At the core of this project is the aim of stimulating the use of the imagination by the user to find their own ways of interacting with the furniture. Furniture can be so much more of an experience than just a few tightly regulated functional activities and this project has set out to allow that experience to be heightened both emotionally and physically. This research has sought to explore and created furniture that engages a number of people with new functional possibilities within one piece.

By challenging preconceptions of function, the work seeks to encourage alternative levels of social interaction and provides personal choice in how these activities are undertaken. This claim was clearly achieved in the seating project for the Cambridge Primary School, where the children responded to furniture forms through a variety of different ways. Whilst

there was not the opportunity to test the response of the users to my other furniture pieces in 'real life' settings, nevertheless, as the photographs and the written descriptions indicate, they allow for a range of possible interaction.

Underpinning this project is the development of a strong minimal aesthetic, where forms have been pared back to simple basic components. This minimal visual language is used to create this functional ambiguity in the work and at the same time allow for, and develop, the possibility of creative personal interaction and functional choice on the part of the user. This project has created a body of work that broadens the scope of furniture both functionally and aesthetically. The pieces are highly conceptual responses to public furniture that are deliberately designed to provoke and push the conventional boundaries of what furniture is, what it looks like and how it is interacted with. By experimenting and blending this minimal aesthetic with theoretical concepts of play, imagination and theatricality, ideas surrounding the notion of functional form in the public domain have been both challenged and advanced. The resulting body of research consolidates all these aspects to create a playground of sculptural furniture, which seeks to encourage new modes of interaction both with the forms and between the people engaging on those forms. The furniture that has been designed for this project are base forms for a variety of functional activities. They are furniture platforms that through their design, provide starting points and hints as to how they can be used. Indications of function are provided through the various design elements within each piece. Elements such as seating heights, arm-rest heights and the positioning and makeup of each component part suggest the possibility of different functions. However, the discovery of purpose and function ultimately rests with the user.

Appendix I

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 All computer images were created by Adrian Read.

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Appendix III

List of Works Submitted

Toy Box

17000 mm x 1500mm x 400mm

Plywood, Aluminium, Polyurethane Paint and Fibreglass.

2003-2004

It's Furniture Gym, But Not As We Know It! Part One

4500 mm x 3000 mm x 1050 mm

Radiata Pine and Stainless Steel.

2005

It's Furniture Gym, But Not As We Know It! Part Two

3950 mm x 1800 mm x 1450 mm

Radiata Pine, Polyurethane Paint, Perspex, Fluorescent lights.

2005

Snap To Grid. (A.k.a. STG Swings)

1500 mm x 1500 mm

Hemlock Pine and Rope.

2006

Piles of Stiles

3550 mm x 3000 mm x 2300 mm

Hemlock Pine, Perspex, Fluorescent lights.

2006

Function Room at the O.K. Corral

3400 mm x 3400 mm x 775 mm

Radiata Pine, Rope.

2006

Appendix IV

Curriculum Vitae

Adrian Read. B.F.A. Hons

Education

- | | |
|-------------|---|
| 2003 - 2006 | Continuing PhD Studies
Awarded Tasmanian Postgraduate Research Scholarship. |
| 2002 | Bachelor of Fine Arts with Honours : First Class

University of Tasmania, School of Art
Hobart 7000. |
| 2002 – Feb | Australian Film and Television School

- Cinematography For Designers Short Course |
| 1999 – 2001 | Bachelor of Fine Arts

University of Tasmania, School of Art
Hobart 7000

<ul style="list-style-type: none">- <i>Furniture Design (Major)</i>- <i>Photography (minor)</i>- <i>Art and Design Theory (minor)</i>- <i>Digital imaging</i>- <i>Wood skills</i> |

TAFE Tasmania Certificates

- Professional Development Short Course in Web Page Design.
- Certificate in Autocad.

Professional Experience

2000 –2006

State Cinema
Elizabeth St North Hobart
Tasmania 7000

Projectionist

Dec 98 – Feb 99

Yates Wood Products

12 Lancaster St, Ingleburn NSW 2565
Ph. 02 9618 3499

Production Adviser

May 98 – July 98

Briggs Veneers Pty. Ltd.

Unit 4/17 Stanton Rd, Seven hills NSW
2147
Ph. 02 9264 5000

Production supervisor.

Oct 97 – April 98

Spry Fly N.Z.

Tasman St, Twizel, New Zealand.
Ph. (NZ) 64 3 4350135

Professional Fishing Guide and Tutor.

1990 – 1997

G & R Veneers Pty. Ltd.

Unit 4/9 Hume Rd, Smithfield NSW

Production Manager

Commissions

Art For Public Buildings through arts@work – Bench Seating for the Cambridge Primary School redevelopment.

Entrepot Art Products: 6226 4313
Shelving and Cabinets

Represented in Sydney by Metalab Gallery, Surry Hills.

Publications

Books

Claiming Ground: Twenty Five years of Tasmania's Art for public Buildings Scheme

Other Publications

Vogue Living Australia. January 2006

Sydney Saturday Telegraph, Homes Supplement. November 30, 2002.

Western Australian Sunday Times July 4th 2003

“Art Condition” Judith McGrath , X-Press Magazine. Issue # 854
26th July 2003

Selected Exhibitions

May 2006	Deluxe: Decorous crossovers between art and design. Plimsoll Gallery Hobart.
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Nov –Dec 2005	“Belinda Marquis and Adrian Read” Metalab Gallery, Surry Hills Sydney
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May – July 2003	Hatched Perth Institute of Contemporary Art
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February 2002	Design = Function & Fibre Long Gallery. Salamanca Arts Centre.
November 2001	Tasmanian Wood Design biennale Hobart City Hall, in association with Tasmanian Wood Design Collection.
February 2000	Design = Function Long Gallery. Salamanca Arts Centre
November 1999	Tasmanian Wood Design Biennale Hobart City Hall. in association with Tasmanian Wood Design Collection.
Other Exhibitions	
November 2002	Tangent Plimsoll Gallery. Centre of Arts Hobart.
November 2001	3YF. Graduate Exhibition. Antarctic Centre. Salamanca Square. In association with the University of Tasmania.
April 1999	Me Myself I, an exhibition of Self portraits. The Fine Arts Gallery, University of Tasmania. Travelling to the Sydney Collage of Arts.