



# STEEL

**STEEL: art design architecture**  
**EDUCATION RESOURCE**

A JamFactory  
Touring Exhibition

Jam  
Factory



*STEEL: art design architecture* Exhibition, JamFactory Adelaide, 2017. Photo: Grant Hancock

# CONTENTS

## **1 BACKGROUND BRIEFING**

- 1.1 About this exhibition
- 1.2 STEEL: a quick history
- 1.3 Why I Like STEEL: extracts from the Catalogue Essays

## **2 FOR TEACHERS**

- 2.1 About this Education Resource
- 2.2 Visiting the exhibition with students

## **3 FOR STUDENTS**

- 3.1 Getting started: the whole exhibition
- 3.2 Activities for student consideration of the exhibition as a whole

## **4 EXPLORING INDIVIDUAL STEEL WORKS THROUGH FOUR THEMES**

**Theme 1** *Steel for domestic spaces*

**Theme 2** *Steel for your kitchen*

**Theme 3** *Steel shelters*

**Theme 4** *Large or small?*

Other Perspectives (views by critics and commentators) follow each designer maker

Research & Guiding Questions and Links follow each theme

## **5 CONSIDERING DESIGN**

- 5.1 JamFactory: what is it ?
- 5.2 Design: making a mark
- 5.3 Extended research: Design resources

## **6 ACKNOWLEDGEMENTS**



# STEEL

## 1 BACKGROUND BRIEFING

## 1.1 ABOUT THIS EXHIBITION

*STEEL: art design architecture* is part of a series of JamFactory travelling exhibitions designed to present and explore the core materials by each of the disciplines used in art, design and architecture. This third exhibition follows two previous and highly successful presentations, *WOOD: art design architecture* and *GLASS: art design architecture*, also conceived and designed to travel interstate.

Curated by Margaret Hancock Davis, this exhibition brings together 29 contemporary Australian artists, designers and architects, some of whom work in, or are alumni of, JamFactory's studios.

The exhibition catalogue for *STEEL* includes historical information, inspiring images of works by all contributors and fascinating essays on the impact of steel on contemporary Australian art, design and architecture.



Design by Them, *Tuck Stools and Tuck Table*, 2013. Photo: Pete Daly



## 1.2 STEEL: A QUICK HISTORY

Steel is a malleable alloy of iron and carbon. It began as an accidental by-product of smelting iron in small local kilns or bloomeries, from as early as 3,000BC. A bloomery is a small scale furnace for smelting (separating) iron from its impurities. The resultant pure metal is then manually forged (beaten when hot) into useable iron objects.

During the Iron Age forged iron was primarily used for making weapons, and being so important to life, was considered to have magical properties. Many archaeological sites on the Indian sub-continent, in China and East Africa have revealed artifacts demonstrating the evolution from iron production into steel, from the 5th century BC. Iron workers discovered that the accidental mixing of carbon from burnt wood or other sources into the melted iron made a better metal, now called steel.

Iron is an element found in abundance in the Earth's crust and is soft and malleable in its pure form. When carbon is added to iron the resulting steel can be up to a thousand times harder than iron. Depending on the mix of other ingredients, different types of steel can be produced.

Early steels from different regions were of variable qualities, so steelworkers were keen to find good quality steel, which led to expansive trading between continents. Highly prized high carbon steel made in the Indian sub-continent, referred to as WOOTZ steel, was exported to the Roman, Egyptian, Chinese and Arabic worlds between 400-500BC.

More recently steel has evolved through mass production using the European Bessemer and Siemens-Martin processes, followed by the Linz-Donawitz process, which have enabled steel to become the extensively used product it is today. English inventor Henry Bessemer invented the process named after him in 1856. His process removes impurities from pig iron by oxidation with air being blown through the molten iron. Oxidation raises the temperature of the iron mass and keeps it molten.



Blue Scope Port Kembla Steelworks, New South Wales. Photo: Sylvia Liber, Fairfax Media

However, the Bessemer process was superseded by the Siemens-Martin method. Called the Open- hearth method, it decreases the molten materials' exposure to nitrogen, which makes steel brittle. Now Open hearth has been replaced with another improvement, the oxygen converter method of steel production. Ninety eight percent of raw iron-ore dug from the ground is made into steel, which is an indication of the world's dependence on this versatile and sustainable material.

One of steel's star qualities is that it can be recycled many times making it more sustainable than other metals that cannot be reused or remolded. Although steel making has moved from country to country over the centuries, steel continues to contribute to the economy of many manufacturing economies.

Vast areas of Australia's landscape contain low and high-grade iron oxide and its rich red colour is visible in the aptly named Red Centre of Australia which attracts many tourists. Throughout Australia towns such as Newcastle, Port Kembla and Whyalla have been synonymous with steel, just as Iron Knob and the Pilbara region are linked to current iron ore mining. Consequently it is a natural development that Australia has used steel extensively for building national infrastructure and domestic and commercial buildings. However Australia is recently importing most of its steel from China, as it is a cheaper, but not necessarily better, product.

Corrugated steel sheeting, known as corrugated iron, is an iconic material used throughout Australia, from backyard 'chook' sheds and water tanks to bridges and high-end beach houses. As a widely used structural material steel is strong and durable, and because it is flexible and light it is used extensively by contemporary architects and engineers. The exhibitors in this *STEEL: art design architecture* touring exhibition explore these same qualities in a variety of creative ways and showcase the versatility of contemporary steel.



Camel train in the Far North of South Australia, 1911. Photo: Courtesy of State Library of South Australia

### 1.3 WHY I LIKE STEEL: EXTRACTS FROM THE CATALOGUE ESSAYS

Reflections on steel in extracts from the Exhibition Catalogue for *STEEL: art design architecture*. These contributing writers for the *STEEL: art design architecture* Exhibition Catalogue explore the impacts of steel on them personally and professionally, and on social and industrial history. Their observations below offer the audience a range of insights about steel as material for creativity.

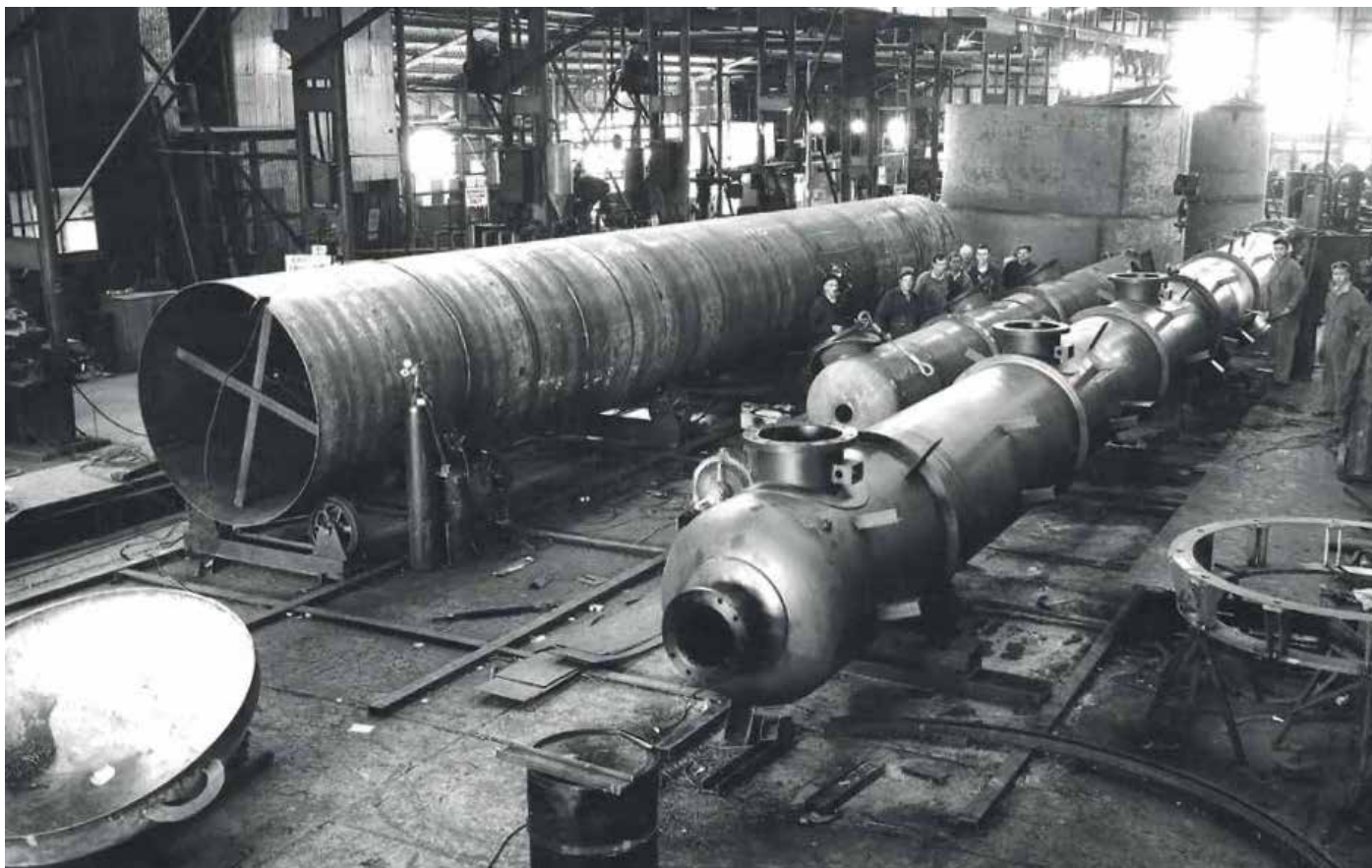
Margaret Hancock Davis, curator and writer, is Senior Curator at JamFactory. In addition to her curatorial practice, Margaret writes texts for exhibition catalogues and magazines. Her qualifications include a Graduate Diploma of Art History, Graduate Diploma of Art Administration and a Bachelor of Visual Arts and Applied Design.

*Bringing together art, design and architecture in this publication and the exhibition it accompanies allows us to think upon the links and similarities between the creative processes, problem solving and design thinking undertaken in these various disciplines. It reveals that many of the concerns that drive these innovative uses of steel engage the themes of identity, locality, materiality and sustainability. A material of such great potential, steel influences nearly all aspects of our lives, rendering the ingenuity, craftsmanship and skill of those working with it practically invisible. Through the selected 29 examples, STEEL: art design architecture unearths just some of these possibilities.*



STEEL: art design architecture exhibition, JamFactory, Adelaide, 2017. Photo: Grant Hancock





Large pressure vessel under construction inside the main shop at Hume Steel, Derwent park, mid 1950s.  
Photo: courtesy of Stephen Goddard.

**STEPHEN GODDARD**, catalogue and exhibition designer, essay writer, is a multi-disciplinary designer, design lecturer, and Creative Director of Project Two. He has worked with many of Australia's largest cultural institutions and galleries on projects spanning publication, interpretation and exhibition design, for which he has won many awards.

Goddard teaches design at UNSW Australia Art & Design and Raffles Institute, and is currently undertaking a Master of Design (Research) at UNSW Australia. *STEEL: art design architecture* is the third in a series of exhibitions all of which which he has designed for JamFactory.

*My grandfather, George, was a mechanic and a very funny man. Trained as a fitter and turner, he eventually ran a local garage in Ross, a classic main-street-with-a-church-on-the-hill town in the midlands of Tasmania. More distinctly I remember him as highly skilled in the art of manipulating metal. He paired this with the inventiveness you needed to solve problems – pragmatic issues, often of repair. A mechanic. An inventor. Possibly a designer-maker, if he were alive today.*

*Like my great grandfather Ted, I've always understood timber. I know how you can shape it and finish it. I have a sense of the tolerance and of the possibility. For George, metal was as malleable as soft King Billy Pine, the material of much of my own childhood craft. Small handles for thread taps; devices for jacking small jobs; set squares manufactured and stamped with his initials; or the product of his ground-up craft – a petrol cap or replacement lever for his pre-war BSA motorcycle.*



*Mx3d Bridge*, Joris Laarman Lab, 2016. Photo: Adriaan de Groot

**PENNY CRASWELL**, catalogue essay writer, is a professional writer and editor specialising in design and architecture. She is also a communications consultant working with a range of design studios, including Koichi Takada Architects, M Moser, Bijl Architecture and Frost Collective. A former editor of *Artichoke* magazine, she is Contributing Editor of *AR* and *Mezzanine* magazines, writes for *Frame*, *Mark* and *Azure* magazines internationally and is the founder of The Design Writer blog. She is currently working on a Master of Design (Research) at UNSW Australia.

*Modernism in architecture in Australia was closely tied to functionalism – an approach that used rational planning to design buildings that were specific to Australia’s climate. Here, steel was seen as an efficient material – Architect and Interior Designer Raymond McGrath claimed in a 1936 issue of Australian Home Beautiful magazine that: ‘Efficiency is the keynote. The day of concrete, stainless steel and glass is at hand, together with planning based on scientific, as apart from social, considerations.’<sup>5</sup>*

*Even before Modernism, steel had an essential role in traditional Australian architecture in the form of corrugated iron, which was used heavily in rural buildings from sheds to housing. In contemporary practice, this Australian vernacular architecture, has been reinterpreted and is now most often built with steel – although it is still most often referred to as corrugated iron. Architecture critic Philip Drew describes the re-emergence of corrugated iron in contemporary Australian architecture as tied to Modern functionalism, a movement that prioritises the utilitarian over the aesthetic. He writes: ‘In using identifiably Australian methods and materials, the corrugated iron house was the logical result of Modern Functionalism, which has a further virtue that it can also be seen as indelibly Australian.’<sup>6</sup> Drew in particular notes the use of corrugated iron by Australian Pritzker Prizewinning architect Glenn Murcutt in his buildings, largely residential. Murcutt, interested in using the least amount of steel possible for the frame of his houses according to the principles of Mies van der Rohe, made his architecture uniquely Australian by using corrugated iron and other Australian materials. ‘What Murcutt has remarkably achieved is to elevate corrugated iron and make it look elegant and noble in a way that was inconceivable before then.’<sup>7</sup>*



Bernd and Hilla Becher, *Water Towers: New York City: Broadway/Spring St.*, 1979. Photo: courtesy of Sonnabend Gallery, New York; Inari Kiuru, Earrings. Photo: courtesy of the artist

**KATE RHODES** (essay writer) is Curator at RMIT Design Hub. Kate has worked on art, craft and design exhibitions, workshops and creative activities both in Australia and internationally. Kate was Creative Director of the State of Design Festival and has held the position of Curator at Object: Australian Design Centre, Craft Victoria and the National Design Centre. She was Assistant Curator of Photography and Contemporary Art at the National Gallery of Victoria for five years and Editor of Artichoke magazine. Kate is a founding member of the Office for Good Design.

*Steel's industrialised production drives its fascination, selection and interpretation for many jewellers. For makers, steel is inexpensive, malleable and easily built into forms. It is strong but also light, meaning that very fine sheets of mild steel can be tamed to perform complex moves that other materials with less tensile strength would fail to hold.*

*At the time the Bechers (world famous photographers of industrialization) began photographing industrial plants in decline, contemporary jewellers began to respond to Modernism's design aesthetic – described by the jeweller Susan Cohn as 'the use of industrial materials, clean simple lines, [and] an absence of decorative detailing apart from elements like rivets or screws'<sup>2</sup>. It was a period of emotionally detached jewellery objects<sup>3</sup> and a swathe of makers keen to bring ideas to the fore and who eschewed the seductiveness of gold, silver and costly gemstones or pearls associated with jewellery as a luxury item. It was the second turn against the use of jewellery's traditional family of materials since the revolutionary avant-gardists of the Art Deco, Bauhaus and Constructivist period experimented with stainless steel, glass, eggshells, ivory and other unusual materials in the 1920s.<sup>4</sup>*

*These makers were fascinated with the achievements of technology and championed jewellery reflecting their Futurist-inspired view that 'the salient characteristic of modern life is speed'.<sup>5</sup>*





*Blast Furnace in Action Arrium Steelworks Whyalla, South Australia. Photo: Sean A. Kelley.*

**MARK THOMSON** (essay writer) is a writer, designer and maker, working in the field of resourceful problem-solving cultures, championing the meaning and benefits that flow from those activities. He is the author of a number of books including *Blokes & Sheds*; *Makers, Breakers & Fixers*; *RareTrades* and *The Lost Tools of Henry Hoke*. He is the founder and research director of the slightly prestigious Institute of Backyard Studies.

*Despite the hubbub around digitally-based technologies such as 3D printing, steel, in large quantities, is still at the core of our human-made world and will be for many years to come. As a world-transforming enterprise, nothing comes close to the impact of iron and steel over the last couple of centuries. That transformation is not universally good: the heating of our atmosphere and oceans from burning the immense quantities of coal required by our grand dreams of industrial production is now challenging our certainties.*

*There is now a price to pay, first for the Industrial Revolution and then the subsequent deluge of low-cost consumer goods that it triggered. Our ability to fashion some rusty red rock into steel gave us great capacity and convenience, but in getting there we may have sown the seeds of our destruction. In our pursuit of the wondrous possibilities steel offers us, we may have inadvertently cooked the planet.*

*Thus paradoxes abound with steel. Its lustre and polish are undeniably beautiful yet carry a sinister freight: historically its production methods were honed in the making of swords, gun barrels and weapons. It seems both ancient and permanent, yet it emerges from the dust and eventually reverts to its rusty origins. The making of steel objects is a human craft that outgrew itself and became the universal industrial and technological material: the ultimate symbol of the Anthropocene era.*

## **PENNY CRASWELL SOURCES**

5 McGrath, F., as quoted in Aitken R., *The Garden of Ideas: Four Centuries of Australian Style*, The MieGunyah Press, 2010, p.165.

6 Drew, P., 2006, 'Inspiration from Below: Australian Vernacular in Contemporary Architecture' in *Architectural Theory Review* Vol. 11, Iss. 1, 2006, pp. 31-32.

7 Drew, P., 2006, 'Inspiration from Below: Australian Vernacular in Contemporary Architecture' in *Architectural Theory Review* Vol. 11, Iss. 1, 2006, p. 32.

Kate Rhodes

2 Cohn, S., 'A Brief Contemporary Jewellery History', in Susan Cohn (ed.) *Unexpected Pleasures: The Art and Design of Contemporary Jewellery*, Rizzoli, New York, 2012, p. 226.

3 den Besten, L., 'The Trouble with Beauty' in Susan Cohn (ed.) *Unexpected Pleasures: The Art and Design of Contemporary Jewellery*, Rizzoli, New York, 2012, p. 102

4 Ludwig, R., *Schmuck-Design der Moderne / Modern Jewellery Design*, Arnoldsche, Germany, 2008, p. 18.

5 Ludwig, R., *Schmuck-Design der Moderne / Modern Jewellery Design*, 2008, p. 18.





# STEEL

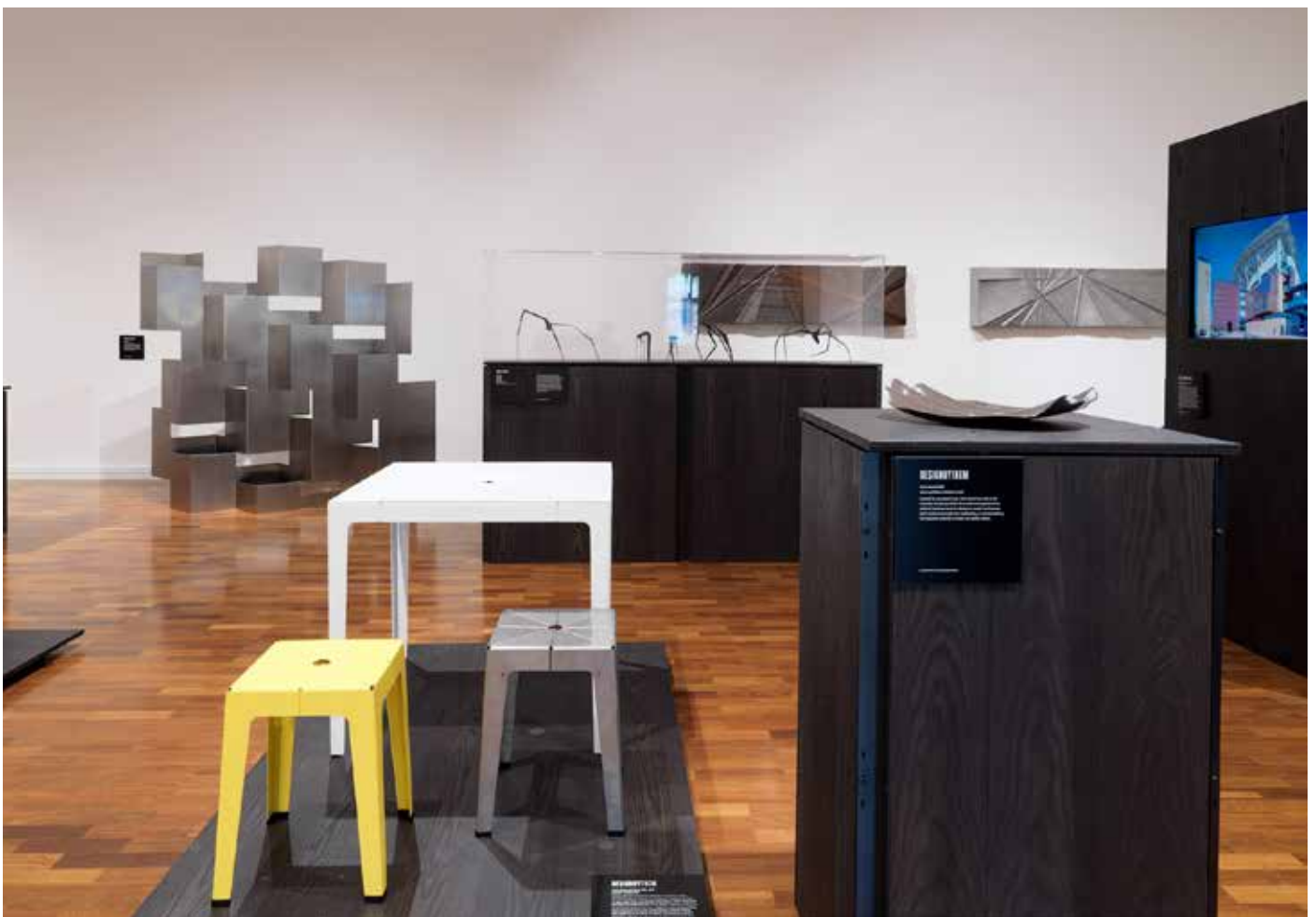
**2 FOR TEACHERS**

## 2.1 ABOUT THIS EDUCATION RESOURCE

### INCREASE AUDIENCE UNDERSTANDING OF STEEL BY PROVIDING:

- activities for preparation for during and after student visits to the exhibition
- focus on twelve selected works grouped into four themes
- statements by the twelve selected contributors
- perspectives by other writers: a range of ideas and information about these works
- connections to Curriculum Frameworks, through back at school research tasks. Called Questions and Research these tasks follow themes 1 to 4.

See Extended Research:Design resources in section 5, Considering Design.



*STEEL: art design architecture exhibition, JamFactory Adelaide, 2017. Photo: Grant Hancock*

## 2.2 VISITING THE EXHIBITION WITH STUDENTS

### FOR A SUCCESSFUL GROUP VISIT TO STEEL: ART DESIGN ARCHITECTURE TEACHERS ARE ADVISED TO:

- inquire if bookings are required to guarantee scheduled entry to the exhibition
- book now if you are planning to bring a school group to this exhibition
- to book: Telephone number here or on-line? All bookings will be confirmed by email with the supervising teacher.

### PRE-VISIT: BEFORE VISITING THE EXHIBITION

- Background Briefing (below) informs students about the exhibition origins and content
- Visit the JamFactory website
- Download this Education Resource for *STEEL: art design architecture* at JamFactory website
- Visit websites of selected *STEEL: art design architecture* contributors.

On arrival for a guided session with a gallery guide, your group will be met and welcomed by a member of the venue staff.

### VISITING THE EXHIBITION WITH A CLASS GROUP ON A SELF GUIDED TOUR

- Smaller viewing groups are advised. Identify manageable groups before entering the exhibition space.
- Focus and task your class groups on arrival while still outside the exhibition space. This is the best time to distribute prepared activity sheets or the Get Started exhibition activities included in this Education Resource.
- Before groups disperse remind your students of gallery protocols ie; avoid touching any work, support stands or cabinets  
be aware of other visitors in the space, by speaking quietly with each other and moving calmly (walking not running)
- Encourage students to consider how individual works sit within curriculum frameworks. Students will need to spend appropriate time to immerse themselves in selected design works, with a viewing time of at least 10 minutes per chosen piece.
- Involve students in responding, both as individuals and in group analysis and discussion. Scribing is optional and will be useful for on-site reporting and post visit research.
- Students will benefit from seeing this *STEEL: art design architecture* Education Resource before visiting the exhibition, to assist their understanding.
- Follow up activities: refer to Guiding Questions and Research that follow each of our four themes. Back at school follow up activities can include sharing information and analyses from responses that were
  - o gathered on-site
  - o recorded individually for sharing responses with others
  - o discovered through research tasks



# STEEL

**3 FOR STUDENTS**

### **3 GETTING STARTED: THE WHOLE EXHIBITION**

#### **ACTIVITIES FOR STUDENT CONSIDERATION OF THE EXHIBITION AS A WHOLE**

These tasks encourage and support student engagement with the exhibition and can be undertaken in any order and are suitable for individual or small group work.

Some tasks are designed to report findings and discuss works with others. Although scribing is not necessary for these activities, it could assist any on-going post exhibition work back at school.

#### **TASK 1: CONSIDER**

- You will prefer particular works. Consider if you are interested in their appearance or their subject matter, or perhaps the technique or the way the subject is interpreted?
- Find particular works in this exhibition that make some kind of social or political comment and discuss the issues explored.
- Which works raise more questions than other works? What kinds of questions does your selected work raise? Compare and discuss your findings with others.

#### **TASK 2: FIRST & LAST IMPRESSIONS**

- How did you react when you first entered the exhibition and looked around?
- Which particular work are you most curious about for another look? Describe what attracted you to the work?
- Which work will you find hard to forget? Describe why you are drawn to it.
- Which work challenges you most, or that you find hard to understand? Look at it again before you leave and consider why this is so.
- Before leaving check the exhibition one more time to see if there is an idea in a work that you would like to extend or explore when you get back to school.

#### **TASK 3: EASY OR DIFFICULT?**

- Explain why you consider some works would be easier or the hardest to make.
- Describe why you think some works depend on complex team work more than others.

#### **TASK 4: RESPONSE TO THE EXHIBITION AS A WHOLE**

- Make notes for writing a review of the exhibition from your own perspective. Find links or relationships that you see between the works.
- Choose one theme suggested in this Education Resource and suggest more works from this perspective.
- Are there other themes you would apply to groups of works in this exhibition?
- Compare two or more works which appear to be exploring similar ideas in different ways?

#### **TASK 5: ANALYSIS AND RESPONSE TO INDIVIDUAL WORKS**

- Choose a work that you are attracted to and consider the following questions
- Can you describe to someone else your reasons for your choice. Identify the works visual qualities that appeal to you.
- How could the idea or concept have been expressed in a different way?
- What might this work be saying about steel, or about design, art or architecture?
- Has this work given you an idea for something you could make as part of your art studies?





# STEEL

## 4 EXPLORING INDIVIDUAL STEEL WORKS

# STEEL

A JAMFACTORY TOURING EXHIBITION

## **THEME 1** **STEEL FOR DOMESTIC SPACES**

*Brodie Neill, Christian Hall, Gunybi Ganambarr*

This theme is exploring the use of steel for the creation of larger scale functional and decorative objects for the domestic environment.



Brodie Neill, *Reverb Wire Chair*, 2010. Photo: Marzorati Ronchetti Collection of Patrick Brillet Fine Art Ltd.

## **BRODIE NEILL**

*Work: Reverb Wire Chair.*

### **WHAT WE SEE**

Brodie Neill's conical shaped *Reverb Wire Chair* has been hand crafted from highly polished stainless steel rods, based on a digital linear design reminiscent of the drawings made by a Spirograph Art set. The only difference is Neill's chair is in three dimensions not two. The chair's construction of fine steel rods intermeshed to form rhombic spaces of different sizes, makes the chair appear quite delicate and fragile. Appearances can be quite deceiving as the flexible yet robust qualities of steel makes this light and airy chair more than capable of supporting the weight of a grown man, as tested by Neill himself. The conical shaped seat reduces in size to the centre, creating a vortex or column like shape which terminates on the floor and provides the stabilising structure for the chair.

### **THE DESIGNER MAKER**

Born in Tasmania in 1979 Brodie Neill cannot remember a time when he was not making 'things' in the shed at home. He was encouraged at all times by his artistic mother, Heather Neill, who took him to art exhibitions and nurtured his love of art.

He grew up in Sandy Bay, a coastal suburb of Hobart, where his childhood wanderings along local beaches for 'washed up' treasures are still a favourite pastime of Neill's. His home state of Tasmania has been a strong influence on his work, as Neill's proximity to its pristine maritime and wilderness environment provided the foundation for his love of nature, and its inspiration now so evident in his furniture designs.

Neill's early efforts at the age of thirteen making sculptures and furniture in the back shed led him to pursue his 'hands on' making approach at the University of Tasmania's art school where students not only designed, but were also expected to make their creations.

On completion of his Fine arts degree in Furniture Design, in 2004 he was accepted to do a Masters Degree at the Rhode Island school of Design in New York where he was introduced to CAD (computer-aided design) and how digital technology can be applied to the designing process.

Neill exhibited the following year in Italy, at Milan's Salone del Mobile and won acclaim for his design work which led to commissions by well known Italian lighting company, Kundalini. That same year, 2005, he set up his own Design Studio in London where he produced designs for production pieces as well as commissions for penthouses in Dubai.

Neill's skilful combination of advanced digital technologies with his expansive knowledge of materials and their capabilities have become the hallmarks of his designs. He pushes his creations to their limits but still maintains the personal 'hands on' finish of a craftsman.

## **CONTEXT FOR THE WORK**

Neill unites both his love of natural forms and the complex scientific and mathematical principles discovered in their structures, with evolving digital technologies which have allowed him to create his biomorphic furniture pieces. Two of Neill's early designs for Kundalini are Clover lighting and the E-Turn bench, but he always felt some personal loss in passing over his 'children' to someone else to make. 'I wanted to see a product from conception through to completion'\*

\*Quoted by Mandi Keighan, Editor at Large for Indesign, Issue 58, 2014

Neill's desire to be the maker and designer led to the establishment of his own manufacturing company Made in Ratio in 2011. He wanted to produce his designs in larger volumes at more affordable prices in contrast to his limited edition work.

Recycling material is another important driver in Neill's company philosophy, as in his Remix chaise lounge created in 2008 which made using scraps of materials left over in the workshop from previous projects. Offcuts of plywood, plastic and chipboard were laminated together, cut using a computer-controlled cutting machine into its organic form, then hand-polished to a silken finish.

Like every piece designed by Neill the *Reverb Wire Chair* goes the next step to embrace new ideas, new materials and new technologies.

"Every time you have an opportunity to design something, you have an opportunity to do something new, to surprise yourself, give yourself that learning curve but also offer a wider audience something new — that's the role of a designer." \*

\* Sally Glaetzer, Mercury, March 14, 2015 1:30

## **MAKING THE WORK**

Brodie Neill has always challenged himself and the materials he uses when designing and producing his creations. In 2009 he made the solid Reverb Chair, which was inspired by the reverberation of sound where the form of the chair flows outwards then turns back on itself. This chair was hand-formed and mirror polished from sheet aluminium, which was then nickel plated.

The chair is a balance of functional seating with a spherical sculptural form, stabilised by a column-like structure which sits on the floor. In 2010 parametric modelling, a new digital technique, was made available to the design world, which Neill immediately adopted to take his Reverb Chair to the next step. He re-invented his solid chair into a stainless steel seat made from rods that recreated the linear form of his digital drawing into a light yet strong evolution of his original 2009 chair, to become his Reverb Wire Chair.

## **DESIGNER MAKER STATEMENT**

"It was a time when I had a great deal of creative freedom to test and explore ideas. I was interested in three-dimensional modelling and, as they didn't have digital design resources, I did an animation course, instead, and from that I learnt skills I still use today," says Brodie.

The move to London followed a desire to be at the centre of a city with a strong design dynamic.

"London suits me. I always have my eyes open. I am like a sponge for architecture, fashion and popular culture. I like to challenge myself and I like to work at a fast pace," he says.\*

\*Interview with Karen McCartney, [www.insideout.com.au/products/designers-insiders/brodie-neill](http://www.insideout.com.au/products/designers-insiders/brodie-neill)

## **OTHER PERSPECTIVES**

Merging advanced digital design technologies with a profound respect for material and the handmade, is a skill that has come to define the oeuvre of this furniture designer. Digital techniques afford Neill the ability to use complex mathematics to map the surface and create startlingly beautiful forms. From this, he then extracts how the hand can best be used to enhance the design. It is a delicate dance, with the digital and handmade each performing a crucial role in the creative process.

Danielle Robson, 'Brodie Neill', Exhibition Catalogue STEEL; art design architecture, 2016 JamFactory

Brodie's work is so much about the materials but also about the methods he invests in to produce the work. He doesn't follow routine processes; he looks at how he can intervene in those processes to get a different result with the materials."

The complexity of Neill's designs and the extraordinary manufacturing techniques he devises result in works that are as intriguing as they are useful. Every new design is an exercise in "what if", Neill says.\*

\*Sally Glaetzer, Mercury, March 14, 2015





Christian Hall, *TELL HENRY / RODEO Mesh Space Divider*, 2015. Photo: Tom Roschi; Christian Hall, *Neckpiece in Black*, 2016. Photo: Tom Roschi

## CHRISTIAN HALL

*Works: Mesh Room Divider, Neckpiece in Black.*

### WHAT WE SEE

Christian Hall's two exhibition pieces *Mesh Room Divider* and *Neckpiece in Black* are linked not only by their geometry, construction and visual appeal but also by his material choice of steel. Hall plays with the audience's perspective of his furniture and jewellery which appears to change form as one moves around the pieces. In Hall's two exhibition pieces the most obvious points of separation are their scale, their function and finally their crafting.

*Mesh Room Divider* is a free standing powder coated mild steel construction made up of precisely placed geometric triangles and diamond, in fine steel rods. The room divider's delicacy is deceptive as the mild steel used to construct it is extremely strong. However the fineness of its structure makes it well suited for domestic use in a private house or small office. It's open mesh construction still provides the barrier required and allows for light penetration and a sense of space in the room.

Christian Hall's second piece in the show is titled *Neckpiece in Black* and its visual link with his furniture is immediate. The delicate proportions of his jewellery indicate how Hall's skills in crafting with steel wire have been pushed to their limit.

Each unit is made of two precise linear diamond shapes which have been micro welded together at an angle that gives volume to the form. These two-piece units have been joined giving the necklace both a sense of line and volume on the wearers neck.

The matt black finish makes the necklace appear heavy, but in fact, if the same necklace had been made of gold or silver it would have weighed heavier but would have lacked the strength and durability of the selected high quality steel.

## THE DESIGNER MAKER

Christian Hall trained at Sydney College of the Arts, University of Sydney, where he focussed on object and jewellery design. He graduated in 1998 with a Bachelor of Visual Arts and in 2003 he completed a Master of Visual Arts at the same institution. Hall's multi disciplinary career spans furniture and industrial design commissions and sculpture and on a smaller scale, jewellery.

Since 2009 he has been the Creative Director of the JamFactory Jewellery & Metal Design Studios where he oversees both the designing and manufacturing of beautiful functional objects for Jamfactory's product range. Hall's other important role at JamFactory is as an educator whereby he is responsible for the development of emerging designers in the team of the Jewellery & Metal Design Studio. He contributes to training the young artists and designers during their demanding two-year program. Hall has his own independent design practice which complement his role as Creative Director at JamFactory. His work encapsulates the successful merging of art and design.

## CONTEXT FOR THE WORK

Christian Hall has had a life long fascination with all forms of transport, movement and industry. Planes, motor vehicles, satellites and rockets have all been the subject of his previous and current design output, but on a much reduced scale from the original.

Aided by computer programs Hall can create and manipulate his designs to give him the flexibility to view his ideas from many angles before manufacturing the final object. Steel's strength gives Hall the opportunity to make small but strong functional objects like mobile lights, table lamps and delicate brooches in the form of planes, satellites and rockets.

The two pieces in this STEEL exhibition show Hall's departure from specific identifiable objects like aeroplanes to simple geometric forms like triangles and diamonds. He explores repetitive patterns possible with these shapes, through the use of computer aided programs. He morphs his patterns into functional shapes and objects like these room dividers, lights and jewellery.

## MAKING THE WORK

Hall is fascinated with the microscopic structure of nature's hardest material the diamond. Industry has contributed to Hall's new direction by providing the steel which has allowed him to build larger sculptural works and by providing the knowledge of the Warren truss pattern, a structural design pattern which allows steel to have greater weight bearing strength. This triangular pattern, was initially devised to be used in mainly bridge building, allowing steel girders to support larger amounts of weight. Hall has adopted the diamond and triangle shapes for the creation of his latest designs exhibited in this show. Repetitive patterning allows Hall to explore another challenging aspect of making solid objects, the ability to capture movement which he achieves by creating visual changes as the viewer walks around the divider.

## ARTIST'S STATEMENT

"My aim in design is to combine well-crafted process with the efficiency and good sense of available industry to produce work that makes a contribution to contemporary craft and design in Australia. I want objects to be able to capture a sense of delight in people. I believe a thing can do this in very pure and simple ways; through its physicality, its texture and weight, its spatial relationship, through its form and function, or via a covert narrative that can be referred to in its physical presence and yet remain elusive. I am driven by the collective energy of makers and designers everywhere."\*

\*<http://www.christianhall.com.au/contact/>

## OTHER PERSPECTIVES

Recently branching into larger sculptural works, these pieces extend his focus on playing with volume and flatness, design and pure art. They reflect his latest investigation into movement, specifically how people interacting with his work can change it by simply shifting their perspective. .... His emphasis on material, not as incidental but integral to the end result, means that Hall looks closely at the unique properties of steel, not just its inherent strength but how, with the right design, it can be both lightweight and strong, and it's these, often industrial examples, which Hall draws from. In this crossover between mass-produced and handcrafted design, Hall's work is an example of the interplay of craft and industry, not as binaries, but as complimentary practices. \*

\*Serena Wong, 'Christian Hall', Exhibition Catalogue STEEL; art architecture design, 2016 JamFactory



Gunybi Ganambarr, *Ngalkan*, 2013. Photo: Tom Roschi Collection of Ross Bonthorne; Gunybi Ganambarr, *Ngaymil*, 2012. Photo: Tom Roschi Collection of Ross Bonthorne.

## GUNYBI GANAMBARR

*Works: Ngaymil and Ngalkan.*

### WHAT WE SEE

Gunybi Ganambarr started his early career as an artist using the more traditional media of bark and natural pigments from Northern Australia, seeking his inspiration from his Yolngu heritage recording stories; of their ancestral beings, the cycle of the seasons and the law, in a new and innovative way. His later works in this exhibition, *Ngaymil* and *Ngalkan* are still true to the law and heritage of a Yolngu man. It is Ganambarr's choice of materials that distinguish him as a contemporary innovator amongst other Aboriginal artists.

At a site on Ngaymil land and sea, between two rivers that flow into Arnhem Bay, there is a sacred freshwater Milngurr(spring), where many sacred animals to the Yolngu can be found, including Djanda (the sacred goannas), who is the subject of one of Ganambarr's steel artworks.

*Ngaymil* is a large scale carved steel work made from recycled sheet steel, found discarded at old mining sites, on Yolngu land. The artist has cut out patterns in the steel to show the swirling movement made in water by Djanda as they swim through Darra (waterweed). The herringbone pattern represents the waterweed and the circular motion suggests the movement of the waters.

*Ngalkan* is the second piece in the exhibition by Ganambarr, and again this innovative artist has shown his respect for Yolngu law by his choice of cultural subjects and found materials, a normal practice.

'The medium itself is integral to the message: caring for country is just as important as caring for culture, they are but one and the same.'\*

\*Kimberley Moulton, 'Gunybi Ganambarr', Exhibition Catalogue STEEL; art architecture design, 2016 JamFactory

Galvanised iron from an old water tank salvaged from Gangan, where Ganambarr lives, has been heavily incised with clan markings. The diamond shaped pattern is reminiscent of the fine and delicate painted designs on the Larrakitj (memorial poles). Ganambarr, is a natural innovator who has taken the traditional into the future by using recycled materials, modern techniques and tools while still honouring the past.

## THE ARTIST

Gunybi Ganambarr is a Yolngu artist, born in 1973 into the Ngaymil clan in Yirrkala in north-east Arnhem Land. He now lives mostly in his mother's community at Gangan, north-west of Blue Crab Bay in eastern Arnhem Land. Although since 2002, he has worked mainly at the Buku-Larrnggay Mulka Art Centre in Yirrkala, which is close by.

Early in his life his clan elders recognised Ganambarr's creative qualities. After training him to become a highly skilled yidaki player, he has become a sought after musical performer, a role that requires deep spirituality, focus and endurance. The name yidaki is the Yolngu (of Eastern Arnhem Land) Aboriginal name for didgeridoo.

Prior to the emergence of his artistic career Ganambarr spent twelve years as a builder of houses in a variety of homeland centres with the Laynhapuy Homelands Association. He acquired knowledge of materials and skills with electrical tools, which have been invaluable for his artistic career.

Ganambarr acknowledges many important mentors in his cultural and artistic life. His father-in-law Djambawa Marawill, an artist, cultural activist and ceremonial leader, has been an important influence on Gunybi as have Gawrrin Gumana and Yumutjin Wunungmurra, both artists from his mother's Dhalwangu clan. Since 2002, when he exhibited his first carved and painted ironwood sculpture of a cormorant (Wurran, a totemic species of his mother's clan), he has become known for his radical new ideas and innovative use of recycled materials while still remaining respectful of his Aboriginal heritage.

## CONTEXT FOR THE WORK

Gunybi Ganambarr started his art career working with traditional ochre pigment paint on stringbark and wood poles. His 'light bulb' moment happened when he realised that traditional imagery did not necessarily have to be recorded with traditional materials, and re-visited an age old principles demanded by his elders, "if you paint the land you must use the land."\*

\*<https://www.artlink.com.au/articles/4490/gunybi-ganambarr-giving-the-trees-a-rest/>

Ganambarr decided that discarded materials found on Yolngu land could be re-purposed for his artworks. He has built his reputation as an innovative contemporary artist through his use of these salvaged materials such as heavy galvanised iron, corrugated Colorbond and dense black industrial conveyor belt rubber.

## MAKING THE WORK

Both artworks created by Ganambarr are made from recycled steel salvaged from old water tanks. The metal has been cut to shape and beaten flat to create a smooth surface on which the artist for , Ngalkan, used an angle grinder to incise patterns into the surface. Another innovative technique used on, Ngaymil, is the hand cutting and removal of sections of the steel to create patterns which traditionally would have been painted on a bark surface.

## ARTIST'S STATEMENT

My thought is different from what they were thinking when the old people were painting. I try and bring the Yolngu law (madayin) into reality. That is what is in my mind. To show what is already there.

My arts are according to the songs. It is what they are singing.

What is in the land and the law. It matches the songs. Right up to Gangan, Baraltja and Mungurru. It is painting on the songline.\*

\*<http://nga.gov.au/Exhibition/unDisclosed/Default.cfm?>

## OTHER PERSPECTIVES

In 2011 Gunybi Ganambarr won the West Australian Indigenous Art Award. At this time The Australian wrote; "When Ganambarr was a young man, senior Yolngu artists recognized his ability and ensured he had the skills and knowledge to create the extraordinary bark paintings on show. These wonderfully complex and technically brilliant barks sit alongside new works that exploit the potential of materials found around mining sites. Using the layered webs of lines fundamental to traditional Yolngu painting and the incising of lines that characterizes Yolngu carving, he has reclaimed the insulation panels and rubber belts discarded by miners and transformed them into panels that combine traditional image-making with an enhanced sense of visual depth and tangible space. Ganambarr's work epitomizes the innovative and exploratory nature of contemporary Aboriginal arts practice "

*\*About the artist, Gunybi Ganambarr, Annandale Galleries, Sydney Australia*

## **QUESTIONS AND RESEARCH**

### **THEME 1 STEEL FOR DOMESTIC SPACES**

#### **1 CULTURAL**

Choose an artist from this theme and describe how his culture has influenced his art.

#### **2 PERSONAL/SUBJECTIVE**

Select one artist/designer and describe which aspects of his personal life has influenced his current creations/works.

#### **3 FORMAL/STRUCTURAL**

Using examples from Theme1 explain why the 3 artists used steel to create their art/design pieces. On researching the 3 artists/ designers in Theme 1 select and discuss the artist who you think has made the most dramatic changes in his choice of media and techniques.

#### **4 CONTEMPORARY/POST MODERN**

Describe which contemporary technological developments have influenced a designer from Theme 1 and discuss how they impacted on his design pieces.

Select some examples where the artists/designers have made sustainability an important part of their creative beliefs and describe how it impacted on their works.

### **LINKS TO BEGIN YOUR RESEARCH**

#### *BRODIE NEILL*

[www.themercury.com.au/news/tasmania/hobartborn-brodie-neill-wows-london](http://www.themercury.com.au/news/tasmania/hobartborn-brodie-neill-wows-london)  
[www.com/lifestyle/home-design/designer-furniture/brodie-neill-rivets-design](http://www.com/lifestyle/home-design/designer-furniture/brodie-neill-rivets-design)  
[www.insideout.com.au/products/designers-insiders/brodie-neill](http://www.insideout.com.au/products/designers-insiders/brodie-neill)  
INDESIGNLIVE.COM Issue 58, 2014, Mandy Keighran, Editor at large for Indesign.

#### *CHRISTIAN HALL*

[www.christianhall.com.au/contact/](http://www.christianhall.com.au/contact/)  
[www.worthgallery.com/a-hall.htm](http://www.worthgallery.com/a-hall.htm)  
[www.christianhall.com.au/words/](http://www.christianhall.com.au/words/)

#### *GUNYBI GANAMBARR*

[www.artlink.com.au/articles/4490/gunybi-ganambarr-giving-the-trees-a-rest](http://www.artlink.com.au/articles/4490/gunybi-ganambarr-giving-the-trees-a-rest)  
[tv.qagoma.qld.gov.au/2016/01/05/apt8-in-conversation-gunybi-ganambarr/](http://tv.qagoma.qld.gov.au/2016/01/05/apt8-in-conversation-gunybi-ganambarr/)  
[www.nga.gov.au/Exhibition/unDisclosed/Default.cfm?MnuID=ARTISTS&GALID=3](http://www.nga.gov.au/Exhibition/unDisclosed/Default.cfm?MnuID=ARTISTS&GALID=3)  
[www.smh.com.au/entertainment/art-and-design/the-gentle-revolutionary-20120](http://www.smh.com.au/entertainment/art-and-design/the-gentle-revolutionary-20120)



# STEEL

A JAMFACTORY TOURING EXHIBITION

## **THEME 2** **STEEL FOR YOUR KITCHEN**

*Alison Jackson, Barry Gardner, DesignByThem*

Steel objects for kitchen and table use.



Alison Jackson, *Slowly Slowly Pouring Pots*, 2015. Photo: Angela Bakker

## **ALISON JACKSON**

*Works: Slowly Slowly Pouring Pots*

Alison Jackson makes kitchen containers of polished steel that are functional, sculptural and decorative. The forms of her vessel result from their table-ware purpose, and her polished reflective surfaces and cheeky irregular silhouettes set their contemporary style.

### **WHAT WE SEE**

Jackson's *Slowly Slowly Pouring Pots* are the opposite of angular. They are rounded, irregular jugs with bulbous forms hinting at their role of holding liquids, perhaps cream or custard, gravy or sauces. *Pouring Pots* are 'decorated' with polished reflections that follow their rounded shape and echoed in their long elegant handles.

### **THE DESIGNER MAKER**

As a child Alison Jackson began creating metal objects in her father's shed, which was full of interesting metal bits and stuff, it was where she developed early skills and familiarity with metal working tools. Following her passion she studied jewellery at secondary school before undertaking Gold and Silversmithing at the Canberra School of Art.

After graduating Jackson developed her early practice as a jeweller and tableware designer, mostly working in the traditional technique of hammer-beaten silver. During this time she earned a living working in various design studios round Canberra.

Now an experienced designer and a problem solver, Jackson has worked from her Queanbeyan workshop, called Pocket Studio, since 2008. Although her practice grew around making domestic objects in silver, after exploring other metals Jackson realised that steel would be a better and cheaper material. She has now developed new works in steel, a metal which does not have the problems of fragility and high maintenance of silver.

## **CONTEXT FOR THE WORK**

Jackson's background in the disciplines of jewellery and design has recently focussed her attention on making highly crafted design pieces, which have both a practical purpose and contemporary sculptural qualities. Before refining her sculptural forms and high quality finishes, Jackson considers the successful practicality (functionality) of her objects. Jackson 'believes her creations are truly appreciated when people use them as part of their everyday rituals'

As Jackson's Wobbly Pots and Slowly Slowly Pouring Pots are her first one-off pieces made especially for an exhibition, they are a departure from her more usual production of multiple pieces, made in greater numbers for retail sale.

\*Serena Wong, 'Alison Jackson' Exhibition Catalogue STEEL; art design architecture, 2016 JamFactory

## **MAKING THE WORKS**

In developing her designs Alison Jackson initially sketches ideas on paper before making prototypes out of cardboard. Working this way is cheaper and quicker for her creative thinking, rather than wastefully experimenting with expensive metals.

Working closely with her partner Dan Lorrimer, also showing in this exhibition, Jackson controls the appearance of her sculptures by conceiving and designing their form and style, while Lorrimer constructs (fabricates) them following her designs.

## **DESIGNER MAKER'S STATEMENT**

'I have always had a need to make functional things' Alison says. 'The idea that someone might fall in love with one of my pieces and let it become a part of their every day ritual is really exciting to me.'

'<http://thedesignfiles.net/2015/09/alison-jackson-2/> Alison Jackson, The Design Files

## **ANOTHER PERSPECTIVE**

Alison Jackson has done the impossible. She has created a self-sufficient, full-time practice for herself as a silversmith in Australia .... In co-operation with her partner Dan, Alison self produces her range of handcrafted jewellery and tableware that is retailed round the country. The range includes Cheese Tools, Tea Scoops, Planter Pots, Copper Vessels, Little Spoon Big Spoons and Butter Knives and of course jewellery.

These objects are designed with an idiosyncratic minimalism. While ultimately hand -made Alison employs the use of locally available industry. ... Alison's work is regularly selected for inclusion in natural and international exhibitions.

Christian Hall, LOST IN THOUGHT exhibition opening speech, November, 27, 2016, [www.christianhall.com.au/words](http://www.christianhall.com.au/words)



Barry Gardiner, *Kitchen Knife*, 2016; *Persian Fighting Knife*, 2016. Photo: Craig Arnold

## BARRY GARDNER

*Works: Kitchen Knife and Persian Fighting Knife*

Barry Gardner is a professional knife maker famous for employing a number of steel working techniques for making hand-forged knives. He successfully combines a mix of materials in each piece, preferring recycled steel for his blades, with other metals and organic materials for handles.

### WHAT WE SEE

Barry Gardner's knives are known for their dramatic appearance of patterned blades and richly coloured handles. The distinctive wavy patterning in his blades results from the technique Gardner uses to forge his steel, called the Damascus Process.

Persian Fighting Knife is lethal and decorative, and its elegantly curved shape comes from a historic style of Persian fighting knife. By combining light and dark materials the handle compliments the light and dark patterns of the blade.

Kitchen knife has a straight and deep Damascus blade, shaped for chopping food, and a beautiful handle of rich brown York Gum, reclaimed for Western Australia, and naturally patterned in decorative wood knot details. The end cap is stainless steel.

### THE DESIGNER MAKER

Barry Gardner is a hard working and physical person as evident in his tough work choices. Now a steel worker his days are spent in a hot and noisy workshop like a blacksmith's forgery with heavy rough materials, firing kilns and high levels of heat. His work demands physical strength and patience for the painstaking layering of steel in the Damascus process he is now famous for.

Working as a cutler is a second career for Gardner. After eighteen years in road construction he discovered steel forging and knife-making in a life-changing meeting with a cutler running a stall at a Gun Show in Adelaide. This auspicious event began a new life for Gardner as he explored historic traditions of

knife making and techniques for forging steel. Mastering skills and expertise through experimentation and research he is often inspired by traditional Japanese knife styles, in particular the Deba, the Gyutou, the Nakiri and Usuba knives.

Gardner's reputation for recycling materials means he now has no need to buy new supplies. He exclusively uses the metals, timbers, horn and bone and semi precious stones brought in by the public or scrounged by friends. He reworks discarded steel objects including old saw blades, ball bearings and old tools, and much of his workshop machinery is made from re-purposed engine parts.

Barry Gardner is one of a few people making a living as a cutler in South Australia. A real enthusiast for sharing stories and techniques he runs public workshops in his forgery in the Barossa Valley, helping others interested in reworking their old steel objects into new pieces.

### **CONTEXT FOR THE WORK**

Relying on found materials is a personal discipline for many designer makers in this exhibition. Gardner is one of them and, like pre-industrial tool-makers from traditional cultures who once relied on local materials for their manufacture of implements for hunting farming and fighting, he echoes that historic resourcefulness by using locally found materials.

His admiration for historic and regional traditions of making knives gave rise to his expertise in a range of forging techniques. The Damascus technique of layering different steels together is highly appropriate for Gardner to make use of the variety of found metals he chooses to work with.

### **MAKING THE WORKS**

Barry Gardner's skills in several steel forging traditions, particularly Damascus, Wootz and Mokume, make him the biggest producer of Damascus steel in the Southern Hemisphere. This process enables the combining of different alloys or types of steel together, by layered and beating them together under heat. Some of Gardner's blades have 400 layers, achieved after repeated layering, cutting, twisting and re-layering which gives the distinctive wavy patterning of Damascus steel.

Gardner used Japanese Mokume technique for the handle spacer of Persian Fighting Knife. Two metals, often copper and nickel are fused together in alternating layers, making finely striped or banded blocks in which both metals remain equally visible. For the handle of Persian Fighting Knife Gardner used dark Buffalo horn and a Mokume spacer for the grip, with a polished stainless steel hand guard to separate the handle and blade.

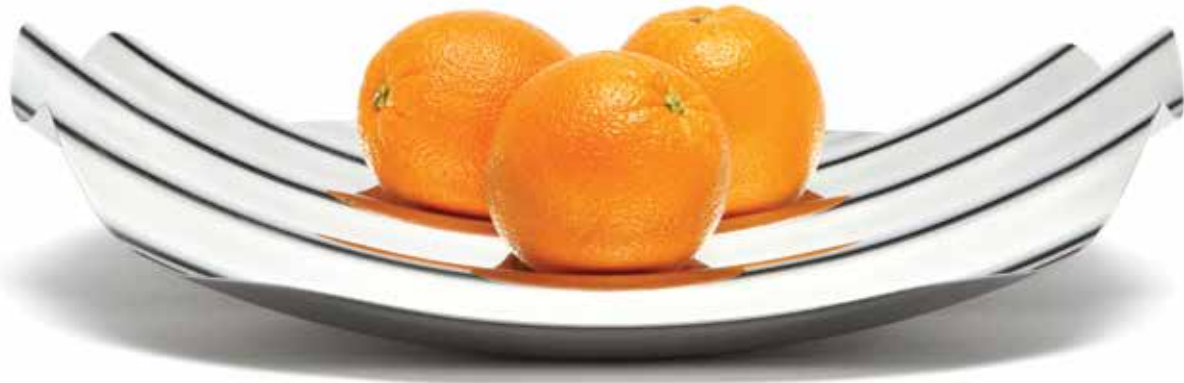
### **DESIGNER MAKER'S STATEMENT**

... So I approached one of the guys I met at the knife show, who was more than willing to show me how he made knives ... I hounded and pestered this poor guy for a couple of years, asking all sorts of questions like "what steel do you use? Why that steel? Why do you do that? What's that for? How do you harden the steel? What do you use for handles?" and just discovering through reading and research as much as I could about the art of knife making until eventually I got to the point where I felt confident enough to actually go out on my own to produce a knife that people would be able to use, appreciate and enjoy...  
<http://www.gardnerknives.com>

### **ANOTHER PERSPECTIVE**

Gardner is interested in recycling metal, for which he has gained somewhat of a reputation. Often he will find steel left outside his studio, like old saws from farms in the area, which means he need never buy anything new for his craft. This suits Gardner right down to the ground. And it is not just steel that Gardner recycles, having a keen eye for reusable parts, a number of the machines in his workshop have been built through ingenious sourcing of unusual spare parts from locals.

Serena Wong, Exhibition Catalogue, STEEL art architecture design, pub JamFactory 2016



Design by Them, *Corro Bowl*, 2009. Photo: Pete Daly

## DESIGN BY THEM

*Work: Corro Bowl*

Design innovators DesignByThem use steel creatively as an art and design material, applying it to fine quality sculptural furniture and domestic objects.

## WHAT WE SEE

*Corro Bowl* is a highly polished corrugated steel sculpture bowl for holding fruit or vegetables. Its title suggests corrugated metal and rippled elements in our landscape. Although quite substantial, *Corro Bowl* takes on an unexpected lightness as its broad sweep touches down on the point of its curve. *Corro Bowls* undulations give it a sculptural surface with dramatic reflections. Seen from some angles the edge is irregular and organic, suggesting natural corrugations seen on rippled sea shells.

## THE DESIGNER MAKERS

DesignByThem is a design innovation business in Sydney, with two designer makers, Sarah Gibson and Nicholas Karlovasitis, at its core. Trained as industrial designers they formed DesignByThem in 2007 and now work collaboratively with other designers as a furniture and object design house.

DesignByThem work to a core of design values. One of these values, that environmental sensitivities must be addressed, has them preferring materials like solid wood (not veneers or composite), locally sourced metals, recycled plastic and long-lasting powder coated metal. Their collection of useful domestic pieces demonstrate other design values including that form follows function; that solutions will be innovative and made with character and humour ... and are designed to last a long time.

DesignByThem are committed to keeping their business in an Australian context. They support and work with other Australian designers and prefer Australian manufacturers to produce their pieces in Australia for an Australian market. DesignByThem make products for retail and also design commissioned pieces for individual clients. Gibson and Karlovasitis work together to refine their house style and aesthetic, reducing details for more minimalist results.

‘We love nothing more than taking out a detail. It’s about minimalism, and personality, and reducing the form to a point where it satisfies both.’

Sarah Gibson, DesignByThem, Exhibition catalogue, STEEL art design architecture, JamFactory 2016

### **CONTEXT FOR THE WORK**

*Corro Bowl* was directly inspired by corrugated steel roofing, highly visible in our built environment. Although steel is strong and rigid as an industrial and construction material, Gibson and Karlovasitis explored its malleable qualities by curving and manipulating it for *Corro Bowl*. As a strong lightweight building material, corrugated sheet steel is soft enough for bending and rolling into curved forms like water tanks, bull-nosed verandah roofs and arched shelters.

### **MAKING THE WORK**

Gibson and Karlovasitis wanted to use manufacturing processes available in Australia to make *Corro Bowl*. They embarked on a complex manufacturing process, working with specialists in corrugated roofing and rain water tanks, who roll and corrugate steel sheeting into large arcs or curves.

‘The final design is the product of six processes: sourcing material not normally used for roofing, corrugating, and then rolling the sheet metal by the roofing manufacturer, being cut to shape by a robotic laser cutter, handpolishing the steel to achieve the mirror finish and finally, etching the DesignByThem brand onto the underside of the bowl. The result is a celebration of material and Australian aesthetics, with a dollop of humour for good measure.’

Danielle Robson, DesignByThem, exhibition catalogue, STEEL; art design architecture, JamFactory 2016

### **DESIGNER MAKERS STATEMENT**

‘We value what people love to buy and own in their home. If someone with no preconceived notion of design sees our products and loves them, then we’re happy and we know we’ve nailed something intuitive.’

Sarah Gibson, Exhibition catalogue, STEEL art architecture design, pub JamFactory 2016

‘We definitely aim for a sense of fun and for pieces to be intuitively likeable’

Sarah Gibson, DesignByThem, Home Beautiful, June 2016, p20

‘We carefully select materials and finishes that maximize durability whilst minimizing the overall environmental impact. By working with a wide range of materials, we are able to choose the material that is best suited to the application.’

DesignByThem, Design Values, Trade Newsletter 2016

NB See the TUCK furniture in this exhibition, also by DesignByThem.



## **QUESTIONS AND RESEARCH**

### **THEME 2 STEEL FOR YOUR KITCHEN**

#### **1. CULTURAL**

How is culture revealed in handcrafted steel objects?

After researching some cultural influences on these three designer makers, prepare an evaluation of how successfully their pieces reflect the place and times they were made in. Research their works beyond this exhibition to increase your understanding.

DesignByThem work to a code of eight Design Values to ensure their product qualities. Research these and compare them with what you understand to be design values used by two other designers in this exhibition.

#### **2. PERSONAL/SUBJECTIVE**

How personal values influence two designer makers?

Referring to two of these designer makers, describe how some aspects of their personal background and values have affected their work.

#### **3. FORMAL /STRUCTURAL**

How have individuals adapted industrial materials ?

Referring to all three designer makers, explain how their adaption of old and new steel manufacturing and working techniques have contributed to the style and appearance of their design pieces. To assist your understanding, research additional information from beyond this exhibition.

#### **4. CONTEMPORARY/ POST MODERN**

How is an ancient material also contemporary?

Evaluate and describe how particular qualities (of style, purpose and form) make these objects contemporary. Research historic domestic or personal objects made of steel for comparison.

### **LINKS TO BEGIN YOUR RESEARCH**

*ALISON JACKSON*

[www.allisonjackson.com.au](http://www.allisonjackson.com.au)

[www.studiopocket.com.au](http://www.studiopocket.com.au)

[www.christianhall.com.au](http://www.christianhall.com.au)

*BARRY GARDNER*

[www.gardnerknives.com](http://www.gardnerknives.com)

[www.instructables.com](http://www.instructables.com)

Wootz steel

Toledo steel

*DESIGNBYTHEM*

[www.designbythem.com/blogs/press/](http://www.designbythem.com/blogs/press/)

[www.thedesignfiles.net](http://www.thedesignfiles.net)

[www.architectureau.com](http://www.architectureau.com)

[www.urbanwalkabout.com](http://www.urbanwalkabout.com)

[www.yellowtrace.com.au](http://www.yellowtrace.com.au)

# STEEL

A JAMFACTORY TOURING EXHIBITION

## **THEME 3** **STEEL SHELTERS**

*BVN Donovan Hill, Collins and Turner, Toby Hobba Architects (THA)*

Innovative steel buildings for plants, young people and beachgoers



BVN, *Australian PlantBank*, 2014. Photo: John Gollings

## **BVN Donovan Hill**

*Work: Australian Plantbank, 2014, Australian Botanic Gardens, Mt Annan, 60 kms SW of Sydney NSW.*

*The Australian Plantbank* is a scientific building for horticultural research and conservation of Australian plant heritage. It nestles on a slope and sits between a remnant forest of natural bushland on one side and nursery gardens on another.

## **WHAT WE SEE**

*Australian Plantbank* has a modest appearance that conceals a number of visual surprises. Away from the low key entrance, optical dramas dominate some outdoor spaces, particularly in a mirrored tunnel walk that goes beneath the junction of two office wings. The ceiling has mirror like surfaces making reflections that alter the perspective of outdoor views. Reflecting sunlight, stone and natural materials nearby they bounce off highly polished glass and steel panelling.

*Australian PlantBank's* interiors are in timber and glass, detailed with steel fittings. Long walls of floor to ceiling glass louvres along its corridors bring light into laboratories and offices, and create delightful striped patterns of sunlight and shadows on their wooden floors.

## **THE ARCHITECTS**

BVN is a Sydney based International architectural design company with a 90 year history. It specialises in planning and urban design, in sustainable and public architecture, civic and institutional projects, offices and residential buildings, as well as tourism centres and industrial developments. Now one of Australia's largest architectural practices it has offices and design studios in New York and Bangkok as well as in Canberra, Melbourne, Brisbane and Sydney. The name BVN reflects the original company directors Bligh Voller and Nield. For the Plantbank project BVN had merged with another firm called Donovan Hill, but is now called BVN again.

## **CONTEXT FOR THE WORK**

The core idea behind plant and seed banks is that Earth's plant life is in danger from climate change, making it important to record and store as much plant diversity as possible. The English seed bank in

Wakehurst UK, called the Wakehurst Millenium Seedbank, is hoping that by 2020 it will have stored 75,000 species, thought to be 25 percent of the Earth's plant species.

*Australian Plantbank* is one of a global network of plant repositories called the Millenium Seed Bank Partnership. It was established in recognition of, and in response to, the impacts of climate change on the Earth's vegetation. The network is overseen and coordinated by the famous Kew Gardens (the Royal Botanical Gardens in Kew near London) in the United Kingdom and its name reflects the timing of its establishment, in the new millenium, the 2000s.

Rare Australian plants are propagated in the nurseries at *Australian Plantbank*. A major project was the Wollemi Pine, a now famous prehistoric tree discovered recently in a hidden Blue Mountains gorge in NSW. As a strategy to protect the secret location it was immediately propagated by *Australian Plantbank*, so that all botanical gardens and the public could obtain specimens without raiding the rare and protected site.

### **DESIGNING /MAKING THE WORK**

As the *Australian Plantbank* is in a high fire risk area, considerations for fire resistance were essential. Polished surfaces of steel and glass interspersed with bushfire resistant steel mesh, make up most of the exterior, while timber is used more as an interior finish.

The design brief required that the Plantbank's important ecological work in the research section was visible to the public, throughout the building. BVN addressed this by producing an open plan design, allowing visitors to see into research areas. The brief reflects Australian cultural openness and transparency in the use of public funding, and promotes the Plantbank's educational values and connection to community. In this way it is unlike other seed banks, which are mostly underground in the concrete bunker model, as is the seed bank project funded by Bill Gates, the Svalbard Global Seed Vault in Norway.

### **ARCHITECT'S STATEMENT**

`The plan form allows views into the working sections of the building: from the entry through to the lobby, visitors can see researchers working within the laboratories. Beyond this they can view the incubators, cold storage facilities and the vault. The vault is the conceptual focus of the research, being the repository of seeds. The visitor heart of the building is the narrow lobby form at the junction of the research, workplace and information zones of the building. The facility has a strong educational interest and includes conference facilities for use by staff, visiting academics and the public`. BVN, <http://architectureau.com/articles/>  
also: (the australian plantbank garden)



Collins Turner, *Waterloo Youth Centre*, 2013. Photo: Richard Glover

## **COLLINS AND TURNER**

*Work: Waterloo Youth Centre, 2013, Waterloo Park, Sydney, NSW*

Beneath a roof like a crazy plant cage the new *Waterloo Youth Centre* is breathing new life into its local area. The Centre is providing spaces for meaningful community connections, active fun and vital social services to the people around Waterloo Park, in south Sydney.

## **WHAT WE SEE**

The design of *Waterloo Youth Centre* shouts drama and imagination. Crowning the Centre is a cantilevered mesh roof, like an exploding cap of angular shapes packed with creepers from its roof-top garden. This wild cage protects offices and clinics below and spaces for art and games rooms.

The Centre is surrounded by landscaped mounds shaped to connect to its setting in the Waterloo Park.

## **THE ARCHITECTS**

Collins and Turner is a multidisciplinary design studio working in Sydney, and set up by two architects, Australian Penny Collins and Welshman Huw Turner in 2002. They met in Germany when both were working for an international architectural company, Fosters and Partners.

## **CONTEXT FOR THE WORK**

Surprisingly for fifteen years a dedicated Waterloo Park community group called WEAVE (Working to Educate, Advocate and Empower) had worked in an old park amenities block, often vandalized.

WEAVE provided services and support to its diverse and vulnerable disadvantaged community.

To improve community services in Waterloo Park, the City of Sydney held a design competition in 2008 to replenish the old building used by WEAVE.

As the winners Collins and Turner took on the challenging brief to provide appropriate accommodation for WEAVE and community spaces. This brief required the new building to connect with its surroundings, including a skate park next to it. The Centre had to keep the footprint of the old amenities block, be vandal proof, and incorporate a green roof to shield people in the centre from neighbouring tower blocks. Parts of the original amenities block were repurposed (reused) for a central courtyard below the roof garden.

Collins and Turner drew inspirations from modern and historic constructions overseas, including the revolutionary Snowden Aviary in London, designed by Cedric Price. Ideas for setting the centre on the site refer to historic Celtic iron-age forts, which are semi underground and now covered in grass. The rooftop garden provides extra space for recreation and active gardening by the community.

### **DESIGNING/MAKING THE WORK**

Collins and Turner hollowed out the centre of the existing amenities building for a central courtyard. The building's pinwheel formation (plan) removed the need for corridors, allowing daylight and fresh air to passively refresh the building. Walls were pierced to make small expansions in available space whilst the whole building was encased in the trellis mesh.<sup>1</sup>

<sup>1</sup>Margaret Hancock Davis, Collins and Turner, Exhibition catalogue, pub JamFactory 2016

The spectacular trellis enclosing the rooftop garden is made of galvanized steel, and is structurally separate from the rooms and courtyard below. This trellis and roof top garden add a level to the building volume without increasing its footprint on the ground. Strong steel mesh stretched between angular steel beams, 'like four Hills Hoist-like structures,'<sup>2</sup> prevents people climbing into the centre and is ideal for climbing plants. A selection of flowering vines that flower at different times provide colourful blossoms all year round.

<sup>2</sup> Margaret Hancock Davis, Collins and Turner, Exhibition Catalogue, pub JamFactory 2016

### **ARCHITECTS STATEMENT**

... the refurbishment of the Waterloo Oval Youth Facility is a groundbreaking piece of community architecture. ... The existing structure is revitalised by new internal planning focused around a central courtyard, and the addition of a landscaped roof garden veiled by a tensile structure supporting native climbing plants. ... Internally, comfort conditions are passively controlled using natural ventilation, exposed thermal mass and a building envelope shaded by the canopy structure and climbing plants. The new courtyard will bring daylight into the depths of the building, minimising reliance on artificial lighting. The building also incorporates recycled materials including a wooden block floor utilising timber from reclaimed power poles, recycled stone and reclaimed hardwood.

The project is the 2013 winner of the Sir John Sulman award for public architecture, and an AIA award for sustainability, and national awards for public architecture, sustainability and steel architecture.

<http://www.collinsandturner.com/>

### **ANOTHER PERSPECTIVE**

Collins and Turner submitted several pages of sketches (with their competition submission) covering design options they had explored during the competition process. One of these described a spiky trellis reaching outward and upward from the existing building like a crown. While this had been a favourite within the studio, it had been dropped due to concerns that it might appear extravagant. However, the City of Sydney gave the firm a couple of days to provide more details. Over the weekend, a model was made using sewing needles, thread and sanding blocks. Collins and Turner won the project.

Olivia Hyde, <http://architectureau.com/articles/a-total-180/>





Tony Hobba, *Third Wave Kiosk*, 2012. Photo: Rory Gardiner

### **TOBY HOBBA ARCHITECTS (THA)**

*Work: Third wave Kiosk 2012, The Esplanade, Torquay, Victoria*

Torquay's *Third Wave Kiosk* is an exciting and inviting beach cafe and comfort depot for beachgoers serving a coastal holiday area of Victoria. This controversial and popular project by Tony Hobba Architects has become a well-known landmark for its industrially sculptural appearance of rusty steel.

### **WHAT WE SEE**

Dominating the appearance of the kiosk is its rugged exterior of huge rusty brown steel piles, set vertically into the site's sandy ground. The piles make a tough surface texture of weathered vertical slabs, reminiscent of a giant paling fence. Like an iron hill or the remnants of a wrecked hull, *Third Wave Kiosk* is interesting from every angle with each side offering a different view. Its lively beach entrance is visible from the sea and features tilted roofs in opposing slopes, one above a walkway and another covering the kiosk itself.

### **THE ARCHITECTS**

Established in Bells Beach in 1993, THA is a small local practice of four designers with a wide range of skills for all sorts of projects. These include private houses, urban designs and master plans, and consultations with local shire councils on coastal development issues. Hobba prefers working collaboratively with a local network of artists, environmentalists, contractors and the council.

Inspired by the lush and dramatic Otway ranges nearby, Hobba has prepared proposals for controlled development of this beautiful coastal region, which he is keen to protect from the impact of continual building along the coast. He is involved with State and Local Planning Authorities, the Surf Coast Planning Committee and other local planning and environmental groups.

### **CONTEXT FOR THE WORK**

The brief required provide a robust landmark with toilets and change rooms and a canteen, set in a tourist area vulnerable to environmental damage through overuse. Reflecting his concerns for environmental sustainability Tony Hobba Architects wanted the building to respect the soft beachy environment that was wearing out with popularity, while being a focus for swimmers and visitors.



## **DESIGNING/MAKING THE WORK**

Hobba's adaption of sheet steel piles for the Kiosk's encircling shell is a good example of recycling or repurposing pre-used steel. Normally made for sea walls, or lining excavations where water needs to be excluded, as their self-locking edges make them impervious to water, steel piles are ideal for protecting the Kiosk from wild storms and sea dampness. Hobba also used them for the retaining wall of the canteen terrace and lookout, and as the tough shell protecting the interior amenity spaces.

Hobba obtained the steel piles from flood protection works along the River Murray after the 2011 floods, where they had been set in place by heavy pile driving equipment to hold water back. Hobba's choice of pre-used materials is typical of his resourcefulness and networking. Steel piles are made to be sturdy and rigid for pile driving into the ground, which was also a cost effective construction method for THA. Hobba deliberately retained the rusty weathered surfaces to complement warm ochres and orange reds of the surrounding sand banks.

## **ARCHITECT'S STATEMENT**

This project was inspired by the eroding forces of the ocean. The skin of rusting steel piles driven into the dunes provides a canvas for the expression of these natural forces. The oxidising patina nestles into the coastal scape, suggesting a piece of washed up furniture, maybe cobbled together with found materials. The brief was to design a new public facility at Torquay Surf Beach that contained a new kiosk, toilets and change rooms that would be open year round, service an assortment of recreation users and provide an important beachside destination. The height and profile of the building has been designed to respond to the prevailing coastline undulations and windswept vegetation, and uses these natural inflections to inform its final folded appearance. The form therefore takes on a sculptural quality which blends in with the surrounding environment and shrouds the utilitarian function of the working core. For more information see <http://www.archdaily.com>

## **ANOTHER PERSPECTIVE**

Faced with tight space and budget constraints, the architects proposed recycled sheet piles, often used as formwork for seawalls, to create a sculptural envelope around a standard concrete block building that can be glimpsed only through the screen wall at the back of the site. The sheets double as retaining walls against the sand dunes on which the kiosk sits. These particular sheet piles were originally used during the 2010 floods in Victoria as temporary formwork for sandbanking overflowing rivers. Their use allowed the project to be built within its budget.

<http://architectureau.com/>

## QUESTIONS AND RESEARCH

### THEME 3 STEEL SHELTERS

#### 1 CULTURAL

How are cultural ideas evident in buildings? Describe if these buildings demonstrate Australian qualities. Consider their core concept and briefs, their appearance, materials and construction. Include several cultural qualities that contribute to the contemporary styles of these three buildings. An example is the Australian beach culture of Hobba's Kiosk.

#### 2 PERSONAL/ SUBJECTIVE

How do architects include their personal values in their buildings? Research and describe some professional and personal values held by these three architectural designers, that are demonstrated and visible in their buildings.

#### 3 FORMAL/STRUCTURAL

How are industrial steel products being adapted to steel shelters? Explore the work of Glen Murcutt, another Australian architect who uses steel in a particularly Australian style. Compare (find similarities) and contrast (find differences) between the use of steel structures in his works, with a steel shelter you particularly like in this exhibition.

#### 4 CONTEMPORARY/ POST-MODERN

How are historical building forms suitable for contemporary buildings? After investigating the Celtic burial mounds that inspired Collins and Turner, explain why and how elements from this historic tradition were incorporated by landscapers into the contemporary Waterloo Park design.

### LINKS TO BEGIN YOUR RESEARCH

#### *BVN*

[www.bvn.com.au/projects/plantbank/](http://www.bvn.com.au/projects/plantbank/)  
[www.architectureau.com/articles/for the Australian Plantbank Garden](http://www.architectureau.com/articles/for%20the%20Australian%20Plantbank%20Garden)

#### *COLLINS AND TURNER*

[www.collinsandturner.com](http://www.collinsandturner.com)

#### *TONY HOBBA AND THA*

[www.tonyhobba.com.au](http://www.tonyhobba.com.au)  
[www.architectureau.com](http://www.architectureau.com)

#### *AUSTRALIAN ARCHITECTURE, GENERAL*

[www.architectureau.com](http://www.architectureau.com) Architecture Australia  
[www.architecturemedia.com](http://www.architecturemedia.com) the national magazine of the AIA  
[www.australia.gov.au](http://www.australia.gov.au)  
[WWW.OZETECTURE.ORG/GLENN-MURCUTT-PROJECTS](http://WWW.OZETECTURE.ORG/GLENN-MURCUTT-PROJECTS)  
[www.archdaily.com](http://www.archdaily.com)

# STEEL

A JAMFACTORY TOURING EXHIBITION

## **THEME 4** **LARGE OR SMALL?**

*Lorraine Connelly-Northey, Mari Funaki, Geoff Nees*

This theme explores the diversity of steel from its pristine and highly polished state to a corroded and recycled condition. In the hands of a creative individual it can become a tiny brooch or a decorative panel on a large building.



Lorraine Connelly-Northey, *Narrbong (fibre bags), Koolimans (coolamon/bush bowl) and Digging stick*, 2016.

Photo: Tom Roschi

## LORRAINE CONNELLY- NORTHEY

*Works: Possum-skin cloak: Blackfella road, 2011-13, Narrbong (fibre bags), Koolimans (coolamon/bush bowl) and digging stick, 2016*

### WHAT WE SEE

Lorraine Connelly-Northey has created *Possum-skin cloak: Blackfella road* from discarded materials, mostly metals, found in old rubbish heaps around the area where she now lives. Connelly-Northey creates her objects and selects her materials with much thought and care as they resonate with cultural and political meaning. The artwork has been beautifully crafted from rusted iron and tin, fencing and barbed wires and tells the story of an unsealed road near Swan Hill which was carved through a significant local Aboriginal burial site. The desecration of this culturally important land has been commemorated by Connelly-Northey in her art work. The possum skin was worn in ceremonies and used to wrap the dead for burial. The artist has used the possum skin to represent the tract of land and the circles, cleverly formed by rings of wire, to symbolise wheels of the vehicles driving over this sacred ground. Around the edge of the central rectangle is a fringe cut from flattened and corrugated tin, portraying hands of the deceased reaching for social justice.

*Narrbong (fibre bags)* have been made by Connelly-Northey with a variety of recycled materials from a wire base of an old style bed, rusted iron sheets and a selection of different wires. However there is a strong cultural link that bonds all these works together. That is the matriarchal knowledge passed onto Connelly-Northey by her Waradgerie ancestors, for making objects for the collection of food and water, carrying a baby, or winnowing seeds. Traditional items such as koolimans (coolamon), narrbongs and digging sticks in this exhibition are like those used by Connelly-Northey's ancestors with the exception of materials from which they are made.

### THE ARTIST MAKER

Lorraine Connelly-Northey was born in Swan Hill, Victoria in 1962, her mother, of Waradgerie descent, married a local farmer of Irish heritage. She acknowledges the contribution both parents made to her love of Country and her concern for its waterways and cultural sites. In 1990 Connelly-Northey learned

traditional basket weaving techniques using locally collected grasses and from then never felt comfortable about using materials that were not sourced from her Country. Moving to live and work in Culcairn, NSW, which is north of Swan Hill, she exhibited her work for the first time at a local art exhibition in 2001.

“Dad would take me out bush and teach me what he had learnt about Mum’s culture and about the bush. He taught me about the river, it’s tributaries, lake systems, Aboriginal sites and artefacts, nature, animals and plants, how to read rain clouds.”\*

\*Connelly-Northey,L.In Munro,K essay. UnDisclosed 2nd Indigenous Art Triennial, NGA.

In 2002 Connelly-Northey made the transition from traditional weaving fibres, like reeds, hair, grasses to using foraged scrap metal to make her first intricate wire narrbong. She continues to honour her cultural heritage through her artworks, acknowledging its resilience by using found materials that also record the demise of objects from our colonial past.

## **CONTEXT FOR THE WORK**

Lorraine Connelly- Northey started her artistic journey recreating cultural objects used by her ancestors. Amongst these are baskets, koolimans (coolamon/bush bowl) and narrbongs (fibre bags)made in traditional weaving techniques. It was a ‘light bulb’ moment when she realised she could use metal waste found scattered throughout the landscape, to create her artworks. She and her father had been collecting this ‘waste’ since her childhood and Connelly-Northey began taking discarded materials and giving them new life with cultural and political messages.

## **MAKING THE WORK**

When working with discarded metals, whether it be a piece of sheet metal or twisted industrial gauge wire, a good deal of care is needed to manipulate and shape the material. Lorraine Connelly-Northey is very particular about the metal scrap she selects to make a narrbong, as the metal’s shape, colour and textural surface has to suggest to her the same visual qualities and proportions as the traditional woven object. These same principles apply when creating Koolimans or a possum cloak as she must be respectful of her cultural traditions.

## **ARTIST’S STATEMENT**

“But the other beautiful thing about out in the bush exploring with someone like Dad, we’d always come across old rubbish dumps. And Dad can’t help himself, but he was a scavenger. Certainly where I’ve got it from. So we’d rummage through and look at these old tips for pieces of interest. So a couple of days later, Dad had rocked up with an old axe head-- a rusty old axe head. I’d decided that I would use this as a quite a heavy weight to bang around and reshape the tin. I realized that I’d actually made the shape of what could be a gatherer’s bowl, known as a coolamon. And so I actually asked Mum, who was visiting at the time, you know, what did she think that shape was? And she said, oh, a coolamon, of course. I realized I was suddenly a sculptor. I could sculpt all sorts of things to do with all those shapes, to do all that knowledge I had been acquiring. It was certainly unique. No one else was doing it. So I thought, this is great stuff. And so I thought, well, I could afford to experiment, and I’d leave that weaving perhaps of up my sleeve. So this is pretty exciting having or being able to develop an art practice with found materials. And so now I’ve had to work out how do I go about that, and how do I get that closest to what I’d set out to do with weaving? And so I’ve done a lot of thinking, and a lot of experimenting and collecting and working out, what kind of found materials best match or come closest to a finished product of something that I would have woven.” \*

\*<http://www.cv.vic.gov.au/stories/creative-life/lorraine-northey-connelly/>

## **ANOTHER PERSPECTIVE**

The sculptural works of Lorraine Connelly-Northey entwine a poetry that speaks to the land, our colonial settler history and of a culture that is ever-present. The twisted wire and found objects – including iron and scrap metal – form cultural vessels that carry the duality of the many generations of her Waradgerie (Wiradjuri) and Irish ancestry, and her innovative approach to telling culture through this media has cemented her as one of Australia’s most acclaimed Indigenous artists. The works have a gracefulness to their presence whilst embodying the harshness of a colonial legacy so heavily current in the landscape – wire and steel used to both fence First Peoples out and also to keep them in.\*

\*Kimberley Moulton, ‘Lorraine Connelly-Northey’, Exhibition Catalogue STEEL;art architecture design, 2016  
JamFactory





Mari Funaki, *Object*, 2009. Photo: Jeremy Dillon, courtesy of the National Gallery of Victoria and the Estate of Mari Funaki

## **MARI FUNAKI**

Works: *Object*, 2009; *Object*, 2009; *Object*, 2009; *Object*, 2009; *Object*, 2009.

### **WHAT WE SEE**

Mari Funaki's Japanese heritage is embodied in her works which is based on the Japanese love of packaging. Funaki created small containers or boxes, not of the formal proportions we would expect of traditional Japanese packaging, but which are irregular in breadth and depth. With fine crafting skills she has welded together four boxes to form objects. The mild steel used to construct her works of art allowed her to create the sharp, clean edges required to present objects that are simple and sombre due to their matt black finish.

Funaki's collection of five small sculptural forms, all have the same title *Object* and their inspiration has been from a personal source. She at times called these small sculptural forms 'containers' as they are made up of a varying collection of irregular boxes. They appear to be inspired by creatures from Nature's insect world.

### **THE DESIGNER MAKER**

Mari Funaki was born in Matsue, Japan in 1950. At the age of 29 she moved to Melbourne where she graduated from RMIT (Royal Melbourne Institute of Technology) in 1992 on completion of the Gold and Silversmithing course.

She opened Gallery Funaki in central Melbourne in 1995, a small gallery that was to become an important centre for the exhibition of innovative jewellery by Australian and overseas artists.

Cultural influences of two countries provided Mari Funaki initially with the inspiration, then the personal freedom, to create her artworks. She is renowned for her angular, brutally black rings, brooches, cuffs and containers. In the last decade of her life the scale of her works increased dramatically to large sculptural forms, reminiscent of her minuscule creations.

Mari Funaki passed away in 2010 after a 25 year career as a jeweller and sculptor of public art works.

## **CONTEXT FOR THE WORK**

While walking with her nephew in a park in Japan he picked up a beetle and showed it to his aunt. The beauty of this little creature's construction inspired Funaki to direct her create skills along a new path. Her earlier functional and wearable jewellery made way for her delicately balanced, gravity defying miniature sculptures, which appeared ready to scurry away at the slightest sound.

The scale of her sculptures evolved into much larger public works. Funaki was fascinated by the interaction between positive and negative shapes and wanted to created her 'Objects' with some degree of mystery. She wanted to challenge the viewer to use their imagination and personal experience to identity her 'Objects'

## **MAKING THE WORK**

Mari Funaki started her work with a sketches, adding details as she refined her drawings. However it is in the making process that her final form became apparent. The ongoing construction of each piece, whether delicately posed figure-like forms for display in a cabinet, or a public works sculpture, like Twilight, 2010, in the gardens of the National Gallery of Australia, Canberra, Funaki's signature forms still retain the culturally inspired 'containers' of her Japanese heritage.

## **ARTIST'S STATEMENT**

"People often find my work very Japanese in aesthetic. If I had remained in Japan, I would never have been doing what I am doing now. In Australia I learnt freedom to express myself and to build my own identity."<sup>1</sup>

<sup>1</sup> Mari Funaki's artist statements, Gallery Funaki, Melbourne; 2005

## **ANOTHER PERSPECTIVE**

Funaki's decisive choices speak to a distinctive vision, forged from Japanese culture and upbringing, and unleashed by Australian education and life in Melbourne. Profoundly intelligent and self-aware, Funaki understood that in every sense – as a woman, as an artist, as a cultural force in her adopted country – coming to Australia in 1979 made her.<sup>2</sup>

<sup>2</sup> Mari Funaki's artist statements, Gallery Funaki, Melbourne; 2005.



Geoffrey Nees, *Royal Domain Tower St Kilda Road, Melbourne*, 2006. Photo: Dirk Zimmermann

## **GEOFF NEES**

Works: *Untitled*, 2016; *Untitled*, 2016; *Untitled*, 2016; *Untitled*, 2016.

## **WHAT WE SEE**

Geoff Nees has established himself primarily as a paper artist and his skills in this medium are demonstrated by four intricacy cut paper art works in the exhibition. His technique of cutting and folding paper without further embellishments creates very subtle variations of tone on the paper surface. The shadow patterning varies with the intensity of light playing across the surface of the paper and the viewer's position.

Although Nees's preferred medium is paper he produces both small and large scale works in other materials, like steel.

## **THE ARTIST MAKER**

Geoff Nees was born in Melbourne in 1970 and completed his Fine Arts Degree (Sculpture) at RMIT (Royal Melbourne Institute of Technology) in 1995. In the late 90s Nees was a performer and programmer with electronic /technology based music group, 'Bongmist', and he is still involved in the local music scene as a DJ. With an impressive list of group and solo exhibitions to his name, it is Nees's large scale architectural steel facades that are driving a new direction for his career and gaining him international attention. In his curatorial role Nees recently gave a lecture at Melbourne University on Japanese influenced pavilions in Melbourne. He is just finishing a collaborative project with world renown Japanese architect Kengo Kuma to build a pavilion for the Asian Performing Arts Festival in February this year.

## **CONTEXT FOR THE WORK**

Geoff Nees is inspired by Japanese aesthetics, particularly Japanese paper arts, in his own paper and steel sheet creations. For generations in Japan paper has been folded into three dimensional forms we know as Origami. Another paper craft called Kirigami allows for the paper to be cut and folded to create symmetrical designs. Contemporary Japanese and Western artists, like Nees, keep evolving both these traditional paper art and crafts to create artworks that appeal to more contemporary tastes.

## **MAKING THE WORK**

Nees bases his designs on complex isometric grids, which allow for near perfect repetition of patterns which can be cut into any flat plane medium. He cuts his linear patterns into paper with a blade or into steel sheets with a laser, whatever media he is working with his next step is the same, he hand folds every cut shape. When Nees created the Royal Domain Tower Art Facade in Melbourne in 2006, with stainless steel sheets, he made a special device to hand fold the 25,000 laser cut corners in the panels. For Nees hand folding is an essential part of all his artwork for it gives his work a human touch and character, which would not exist in a machine made work.

## **ARTIST'S STATEMENT**

'Paper is a wonder; one of life's inexpensive, commonplace and simple objects with a knack for transformation. Cutting, folding, adding nothing, or taking anything to paper's pure surface introduces light, shadow and consequently time. It's endlessly compelling to explore paper's relationship with light, discover new ideas and share what I find.' Email from artist to writer.

## **ANOTHER PERSPECTIVE**

The opportunity to upscale his work has also meant that Nees can create pieces that are not just art for art's sake. Getting it out of institutions where audiences are limited or self-selecting, and putting his works in the public sphere, has meant that his practice becomes part of people's everyday encounters and language, changing the way they interact with his work. Though riskier, and a more drawn-out and abstracted process, being able to see his work in this new light has led Nees to ongoing architectural collaborations that emphasise sustainability and economy married with good design. While the gamble is much greater on this scale, so are the rewards, and for downtime, Nees still has his studio.\*

\*Serena Wong, 'Geoff Nees', Exhibition Catalogue STEEL;art architecture design, 2016 JamFactory

## QUESTIONS AND RESEARCH

### THEME 4 STEEL LARGE OR SMALL ?

#### 1 CULTURAL

Cultural heritage often plays an important role influencing an artists work.

Do you agree with this statement ? Support your answer presenting some examples of cultural influence in artworks of the 3 artists listed above.

Identify and describe examples of cross-cultural influences in works from Theme 4.

#### 2 PERSONAL/SUBJECTIVE

How do personal experiences impact on designers ?

Describe how personal events in these artists' lives influenced the development of their artistic careers.

#### 3 FORMAL/STRUCTURAL

What characteristics of steel have attracted these artists ?

Using several examples demonstrate how these artists have adapted this industrial material.

#### 4 CONTEMPORARY/POST MODERN

How are these artworks and designs contemporary ?

Consider scale, flexibility of surface finish and construction methods that could have

influenced artists in Theme 4 and describe how they responded to these issues in their artworks ?

Describe how these three artists have a contemporary outlook and approach to working with steel.

### LINKS TO BEGIN YOUR RESEARCH

*LORRAINE CONNELLY-NORTHEY*

[www.ngv.vic.gov.au/explore/collection/work/108726/](http://www.ngv.vic.gov.au/explore/collection/work/108726/)

[www.daa0.org.au/bio/lorraine-connelly-northey-1/biography/](http://www.daa0.org.au/bio/lorraine-connelly-northey-1/biography/)

[www.cv.vic.gov.au/stories/creative-life/lorraine-northey-connelly/](http://www.cv.vic.gov.au/stories/creative-life/lorraine-northey-connelly/)

*MARI FUNAKI*

[www.theage.com.au/news/arts-reviews/mari-funaki-space-between/2006/04/11/](http://www.theage.com.au/news/arts-reviews/mari-funaki-space-between/2006/04/11/)

[www.artgallery.wa.gov.au/about\\_us/Mari-Funaki.asp](http://www.artgallery.wa.gov.au/about_us/Mari-Funaki.asp)

[www.broadsheet.com.au/melbourne/event/mari-funaki](http://www.broadsheet.com.au/melbourne/event/mari-funaki)

*GEOFF NEES*

[www.mpavilion.org/collaborator/geoffrey-nees/](http://www.mpavilion.org/collaborator/geoffrey-nees/)

[www.geoffneesartist.com/biography/](http://www.geoffneesartist.com/biography/)

[www.kallirofcontemporaryart.com/artists/geoff-nees/architectural-commission](http://www.kallirofcontemporaryart.com/artists/geoff-nees/architectural-commission)

### MORE GUIDING QUESTIONS

Sustainable practices. From your understanding of how these designer makers work, explain which is a sustainable practice in your opinion. Suggest how you might include sustainable practices into your own creative work.

Considering what you have learnt about steel, design a new version of an existing product you are familiar with. Apply the principles of `Good Design` outlined in the article *Design: making a mark* to prepare drawings and a mock up of how it might look, should you be able to make it in steel.





# STEEL

**5 CONSIDERING DESIGN**

## 5.1 JAMFACTORY: WHAT IS IT?

Adelaide`s present JamFactory was designed to rehouse the original JamFactory workshops that were established by the State Government in the 1970s, in an old jam factory in Payneham, Adelaide in South Australia.

Now established in purpose built accommodation in the city, JamFactory has matured into a nationally admired centre for excellence in design and workshop manufacture, as envisioned by South Australian Premier, Don Dunstan, over forty years ago.

JamFactory now comprises four major training workshops, plus rentable studio spaces for tenants and sophisticated retail and gallery spaces. Each workshop focuses on exploring its core material, either clay (ceramics), glass, metal or wood. Workshops design and manufacture individually commissioned works and products for retail sale. Supervised by a Consultant Designer each workshop trains several associates who are graduate trainees of tertiary courses. Encouraged to develop their own practices, their individual works are often sold in the JamFactory retail outlet.



JamFactoty original building Payneham Road St Peters, 1976. Photo: courtesy of Jamfactory; Ceramics Associate Ashlee Hopkins, 2017. Photo: Andre Castellucci; JamFactory Retail Shop, Adelaide, 2017. Photo: Andre Castellucci.

## THE CONTEXT: HOW THE JAMFACTORY WORKSHOPS STARTED

Over sixty years ago, during the 1950s and 1960s, a perception emerged in Australia that craft and design had an important role to play in the cultural and economic life of the Australian nation.

By 1971 a Federal Government initiative, called the National Committee of Enquiry into the Crafts, published findings that led to the creation of The Australia Council in 1973. The Australia Council, through its various boards, began developing policies that created and supported opportunities for craftspeople. This development coincided with trends within South Australia in the late 1960s and the early 1970s, for establishing design and craft education to support artisan industries emerging around the state.

Locally several factors led to the growth of craft and design, including an increasing number of Adelaide galleries exhibiting fine craft and design, the influence of South Australian School of Art lecturers such as Alex Leckie, Margaret Douglas, Helen Macintosh and Milton Moon and the professional development opportunities created by the newly formed Australia Council Crafts Board. By the beginning of the 1970s increasing support was growing within the South Australian art/craft/design community, and in government, for a programme or organization that would become the focus and key support agency for craft/design education and industry.

In 1972, the South Australian Premier Don Dunstan, through the Premier's Department, commissioned a comprehensive study of 'design and craft industries in South Australia'. The reporting committee recommended (amongst other initiatives) that a government initiated 'Craft Authority' be created to establish a craft and design training workshop in Adelaide.

The Craft Authority opened the JamFactory retail shop and factory in 1974 in the old Mumzone Factory on Payenham Road, St Peters. The site was originally a food processing and distribution facility for the South Australian Fruitgrowers Cooperative Society Ltd, trading as Mumzone Products Ltd. The first four workshops focused on glass, leather, jewellery and textiles. They were run by leading international and national craftspeople who designed products and trained apprentices who made work for sale. The current JamFactory workshops work in glass, metal, wood and clay.



This Page (left to right): Tim Strachan, JamFactory Ceramics Studio, 1980. Photo: courtesy JamFactory; Glass Associates Renato Perez and Cole Johnson, JamFactory Glass Studio, 2017. Photo: Andre Castellucci.



Opposite Page: JamFactory Ceramics Studio, 2017. Photo: Andre Castellucci



## 5. 2 DESIGN: MAKING A MARK BY JOHN NEYLON

Contemporary design. Where to start or finish? Web, computer game, software, graphic, architectural, urban or landscape design? Or design as aligned with the arts such as theatre, fashion, interior, furniture or ceramics? And is this 'design' the noun (a designed something) or the verb (designing something)? The modern era has found multiple uses for this one simple word. But its origins still hold the key to its essential meaning. The Latin word 'designare' described the act of 'marking out'. Signifying something. Making a sign. In the modern era this idea of design as something distinctive, as the product of creative thought, which impacts on the way we 'use' the world, persists. It's a privileged word in our society. So it should be. It has important work to do.

The modern design era of the first part of the 20th century thought it held all the answers with its enthusiasm for the machine aesthetic and the Utopian promises of mass production. But the second half of the century saw design subsumed into the wider contexts of pop culture and mass consumerism. This was a context in which fashion and popular taste, driven by advertising, 'celebrity designers' and iconic labels overran the idea that 'good design' was something made only by product 'designers' for people who could afford it. Enter the world of 'designer-clothing', designer-furniture' and 'designer-food'. With the 'designer-store' IKEA signifying membership of a global club, the democratization of design-for-living, looks complete. With the aid of on-line catalogues and computer graphics simulations you too can be an interior designer.

So where does that leave young artists who work hard to qualify and practice as designers and the agencies like universities, TAFE colleges and craft and design centres who support them? The answer lies in the market place and in community and individual life. The world, communities and individuals want 'designare'. They want that sign, that signature object and the experience that goes with it because it spells 'special'. Mass production has gone part of the way to satisfying that need. An easily affordable retro-light fitting can brighten up that corner in your life. But market place demand continues to demonstrate a different level of need; for designed-mediated experiences that significantly enhance daily life. This enhancement may take the form of offering beauty, compelling thought, confirming values, triggering emotions, exciting imagination, amusing, making a distinctive statement, carrying a message or simply offering brilliant functionality. Enter the artist/designer.

Anyone who has attempted to mend a piece of furniture let alone design and construct one from the bench top up; or wrestled with a lump of clay trying to turn it into a bowl appreciates the level of skill involved in making well-crafted objects that people will pay good money for. And if the market place also wants a high level of creativity to go with the fine crafting then the bar is that much higher. Creative, skilled designers deliver on this. But where do they come from and how do they develop skills in not only crafting materials but also being innovative and being successful professionals?

These are questions that JamFactory, through its diverse programs and Associates Program in particular, continues to address.'

Extract from John Neylon, catalogue essay 'Making a mark', for Design Now, a Country Arts SA touring exhibition 2008 - 2009.



## DESIGN: FRAMING QUESTIONS

1. It is often claimed that good design will 'enhance daily life'. What do you think this expression means? Do you know of any examples?
2. Reality TV shows promote the idea that anyone can be a designer and that the only thing that matters is catching the judges' eyes. Do you believe that 'you too can be a designer' - without any formal training?



Knifemaker Barry Gardiner in his studio at JamFactory at Seppeltsfield; Tools, JamFactory Furniture Studio.  
Photos: Andre Castellucci.

### 5.3 EXTENDED RESEARCH: DESIGN RESOURCES

The following sites have been selected on the basis of offering research strategies, theoretical frameworks, wider context and current information about contemporary design and craft.

[www.craftaustralia.org.au/research/about\\_the\\_research\\_centre](http://www.craftaustralia.org.au/research/about_the_research_centre)

*Craft Australia's Research Centre has an e-journal craft + design enquiry. This is an excellent resource for researching current issues and theoretical frameworks.*

[www.dhub.org](http://www.dhub.org)

*This Powerhouse Museum site incorporates news, articles and events covering a wide spectrum of design: fashion, interior and furniture, craft, graphic design and digital media, architecture and landscape.*

[www.powerhousemuseum.com](http://www.powerhousemuseum.com)

*Powerhouse Museum, Sydney*

*Recommend sections: Education: SCAMPER Design Activity (activity-based strategies for generating design solutions)*

[www.vam.ac.uk/content/articles/p/powerofmaking/](http://www.vam.ac.uk/content/articles/p/powerofmaking/)

*This Victoria and Albert Museum link gives access to video interviews and texts related to an exhibition Power of Making (2011). Within the videos artists and designers give insights into their practices and the nature of the design process. A highly recommended resource*

[www.jump.designer.com/directory/7244](http://www.jump.designer.com/directory/7244)

*The Design Museum, London, is the world's leading museum of 20th and 21st century design, architecture and fashion. This site offers extensive education (interactive and pdf research downloads for teachers and students)*

[www.jump.designer.com/directory/7248](http://www.jump.designer.com/directory/7248)

*Smithsonian Cooper-Hewitt, National Design Museum*

*Recommend sections: Explore Design. Learn*

[www.vam.ac.uk/page/e/education-centre/](http://www.vam.ac.uk/page/e/education-centre/)

*Victoria and Albert Museum, London*

*Recommend sections: Learning, Architecture*

[www.jump.designer.com/directory/8815](http://www.jump.designer.com/directory/8815)

*The Design Exchange (DX) is Canada's design centre and museum with a mission to promote the value of design.*

*Recommend sections: Education: Resources*

[www.design-museum.de/de/informationen.html](http://www.design-museum.de/de/informationen.html)

*Vitra Design Museum, Weil am Rhein, Germany*

*Recommend sections: 100 Masterpieces (history of modern design as seen through 100 chairs)*

[www.jump.designer.com/directory/7893](http://www.jump.designer.com/directory/7893)

*Museum of Arts and Design, New York*

*Recommend sections: Learn/Teacher Resource Materials. Within this section is a module 'What is Design' which introduces key terminology and concepts related to exploring aspects of contemporary design.*

[www.jump.designer.com/directory/18860](http://www.jump.designer.com/directory/18860)

*Bauhaus Museum, Berlin.*

*This site gives an introduction to the history, philosophy and collections of the Bauhaus*

[www.designthinkingforeducators.com](http://www.designthinkingforeducators.com)

*A 'tool kit' style site with video clips of educators talking about their understanding of design and design processes. Useful as PD resource.*



[www.designcouncil.org.uk/about-design/What-design-is-and-why-it-matters/](http://www.designcouncil.org.uk/about-design/What-design-is-and-why-it-matters/)

*What is design? This feature on the UK Design Council website offers some useful perspectives. This site is also a good directory to sites which addresses ideas linked to sustainable design, meeting social needs through design and innovation.*

[www.vimeo.com/5820010](https://www.vimeo.com/5820010)

*'What is design?' An UK Design Council animation introducing concepts and terminology linked to an understanding of contemporary design.*

[www.startupsthisishowdesignworks.com](http://www.startupsthisishowdesignworks.com)

*This site explores the turbo-charged environment of international corporate design while asking straightforward questions about the nature and purpose of design in a modern world.*

[www.britishmuseum.org/whats\\_on/exhibitions/grayson\\_perry/introduction.aspx](http://www.britishmuseum.org/whats_on/exhibitions/grayson_perry/introduction.aspx)

*This link introduces an exhibition *The Tomb of the Unknown Craftsman* curated by the artist Grayson Perry. Perry's new (ceramics) works are exhibited alongside objects made by unknown men and women throughout history, drawn from the British Museum's collection. Perry comments that 'The craftsman's anonymity I find especially resonant in an age of the celebrity artist'.*

## **CONTRIBUTORS**

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