

Fred Ward

Australian pioneer designer

1900–1990



c. 1932

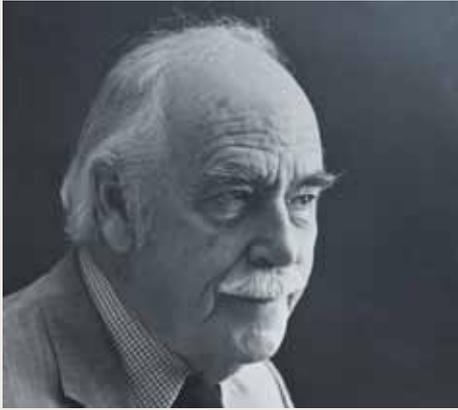


c. 1947



c. 1965

Derek F. Wrigley



This fascinating biographical narrative describes how Fred Ward, a pioneer Australian furniture designer, tried to show from the 1930s onwards how good design was the missing factor in industry, commerce, the bureaucracy, education and the diplomatic corps. He believed that apathy, ignorance, misunderstanding, and possibly our geography, eventually undermined design's potential benefits to everyone. There are lessons for the future in this story as he clearly explains how a man with vision proved through a lifetime of example that science and art can enhance our lives through the useful art of furniture.



The author, Fred's colleague and friend, Derek Wrigley, architect and industrial designer joined Fred in the Design Unit at the Australian National University in 1957 and inherited his role in 1961 to build up a unique unit practicing integrated design embracing site planning, architecture, furniture and interior design, landscape and graphic design.

Invited to design some of the furniture and coordinate the internal sculptural coats of arms for the High Court of Australia in 1977 he launched into private practice; initiated a voluntary group Technical Aid to the Disabled ACT; then engaged in retrofitted solar research to overcome the lack of sunlight in southern domestic rooms.

In his spare time from 1948 to 1991 he designed and built five experimental solar houses for himself in Sydney and Canberra and is currently awaiting the completion of a prototype EcoSolar house in Canberra which embodies most of what he has learned.

He has authored three books on solar domestic architecture since 2000 and developed a very successful solar reflector system to heat and psychologically uplift southern domestic rooms.



Derek F Wrigley © 2013
2/72 Shackleton Circuit
Mawson ACT 2607
Tel 61 2 6286 6134
Email dwrigley@internode.on.net

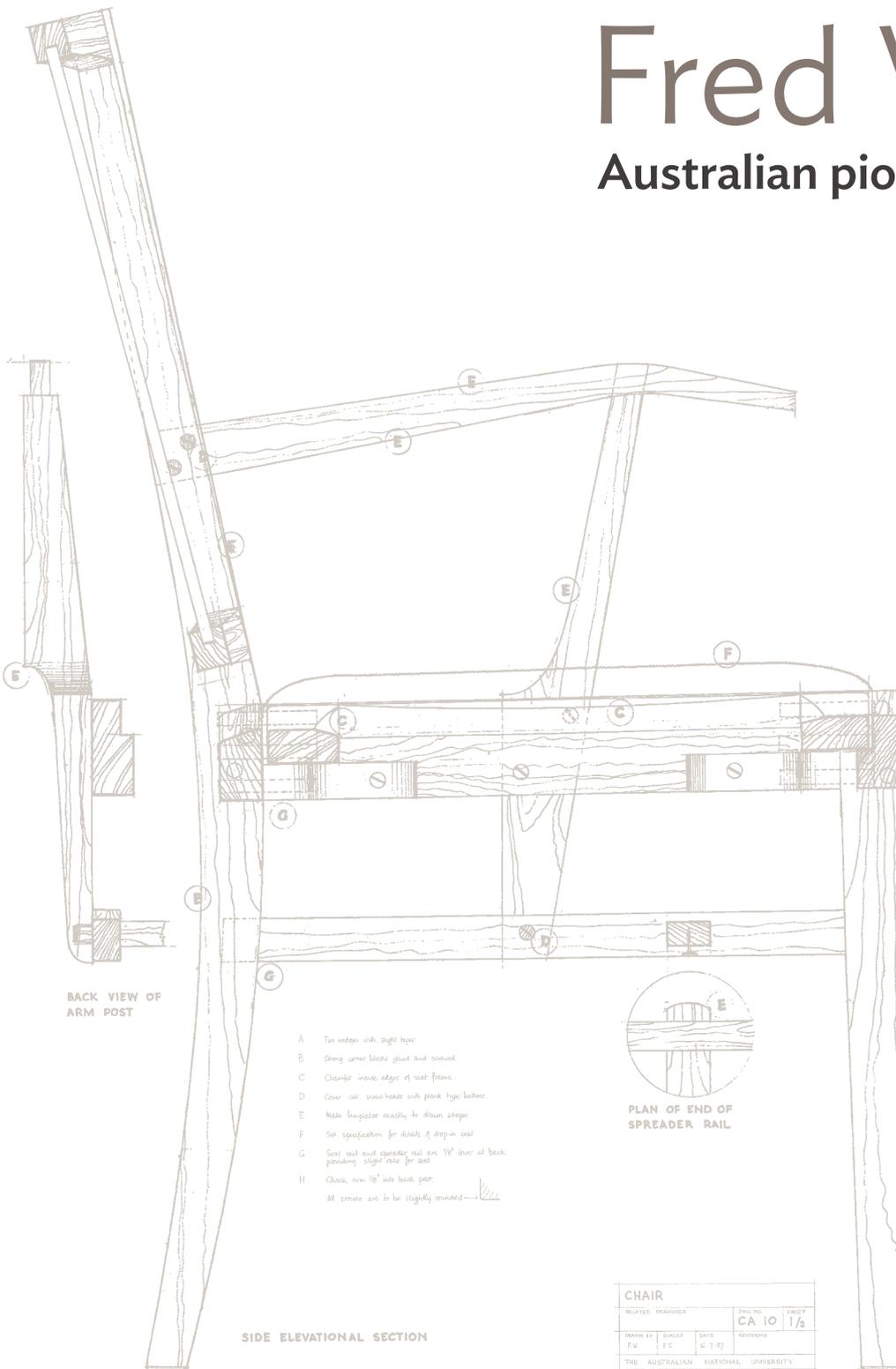
AUS \$50.00 RRP



Fred Ward

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BACK VIEW OF
ARM POST

SIDE ELEVATIONAL SECTION

- A Tenon wedge with slight taper
 - B Strong corner blocks glued and secured
 - C Chamfer inside edge of seat frame
 - D Cover oak panel heads with plank type buttons
 - E Make legs parallel exactly to obtain shape
 - F Set specification for diameter of drop-in seat
 - G Seat and oval spreader rail are 1/8" lower at back providing slight rake for seat
 - H Check over 1/8" into back post.
- All curves are to be slightly rounded—



PLAN OF END OF
SPREADER RAIL

CHAIR			
RELATED DRAWINGS	DWG NO.	ERECT	
	CA 10	1/2	
DRAWN BY	SCALE	REVISIONS	
FM	1:5	NO. T. 87	
THE AUSTRALIAN NATIONAL UNIVERSITY			

Design by Indurik West AND Co. (Australia)

Derek F. Wrigley

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designed by Hoefler & Frere-Jones reflecting humanist,
handmade values: <www.typography.com>*

Printed in Canberra by ??? on ?? paper which has ??% recycled
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Environmental production logos could go here
(from paperhouse/printer)

1st printing, 2013

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Foreword

HIS EXCELLENCY MR MICHAEL BRYCE AM AE

Frederick Ward, MBE (1900–1990) was a pioneer of the modern industrial design movement in Australia, and for those who follow design, but may not be familiar with Fred Ward's work, this illustrated biography will be a revelation for historians, designers and architects.

To call his work modern or simple, however, denies the subtlety of the influence he made to society. His work, largely in design of timber furniture, is a 50 year essay on pragmatism, as he teaches us how art becomes design and design of furniture enriches architecture.

It surprises me that it has taken until now to uncover a career so influential and complete.

Wrigley is a distinguished architect and designer whose own career seems to be an extension of Fred Ward's, a protégé and later colleague of Ward's, and eventually Head of the Australian National University Design Unit. It has become Wrigley's role and passion to reveal the history of his mentor. No one else can have the insight spanning 50 years, nor I suspect, would many people have the tenacity to unpick the threads of Ward's legacy.

The respect that Wrigley develops stays with him into his own retirement, when he is finally able to apply his unique perspective to a book on Fred Ward, and in so doing express his own philosophy on the role of design in society.

We first find Fred Ward as a young artist in the 20s and 30s, perhaps influenced by the work of architects like Charles Rennie Mackintosh, Walter Burley Griffin and Gerrit Rietveld, the Dutch furniture futurist. Ward, however, was not to follow their stylistic path, and began to find his own way ahead.

He is then to be found in the thirties and forties in the company of the Melbourne Modernists, artists and architects, the Boyds, the Lindsays and Will Dyson, and is much admired by them for his philosophy on design. He seeks a new way to bring design to the interiors of average Australian homes.

During the Second World War, Ward was employed by the Department of Aircraft Production in the airframe construction of the famous Mosquito fighter bomber, and other famous aircraft. This essential work would have contributed to his exquisite understanding of form and structure.

Soon after, Ward established his own practice as a furniture designer and around 1948, was commissioned to design an entire range of furniture and furnishings for the new University House on the campus of the Australian National University. This was the beginning of a period of modest fame as he became the champion of the special relevance of good design. Ultimately his furniture is to be found in the Prime Minister's residence, Admiralty House, Government House, and Old Parliament House.

Fred Ward was one of the first to form the Society of Designers for Industry, later to become the Design Institute of Australia. Along with Derek Wrigley they saw the need for a professional charter for designers and support for design in the factories and emporiums of corporate Australia. This led to the creation of the Industrial Design Council which survives today as Good Design Australia.

Thus these two lives are intertwined and it is to the benefit of students of industrial design, craftspeople and interior designers that we now know how to spot a Wardian product. We must thank the author for a worthy contribution to the history of design in Australia and for his tribute to a furniture designer of significance.

A handwritten signature in black ink, reading "Arthur Bayce". The signature is written in a cursive, flowing style with a large initial 'A'.

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Note to reader

Throughout the book, references to publications, websites and so on are indicated using superscript acronyms in the text (for example, 'Puss's diary^{PD}'). These are outlined in full in the *References* section, p. 241. Similarly, cross-references to illustrations appear in this manner (for example, 'the Myer sketch^{4F}').

Thank you

The writing of a book of this kind is, with hindsight, not a project to be taken on lightly. It involves many people supporting the writer for several years, almost to the point of becoming a family project.

Commercial publishers were not keen to take a risk on a book with a limited audience so, with several skills in and around the family, we self-published. This ensured the design of the book could be emotionally closer to Fred's philosophy of simplicity and hopefully with the right words which Puss herself might have chosen as a sort of sequel to her descriptive diary.

'Puss' Fred's wife, Elinor, whose fascinating diary was a constant source of information and has the honour of being Fred's first real biographer (see p. 255 for more details).

His Excellency Mr Michael Bryce AM AE A long-standing colleague of the early days of the Design Institute, who kindly responded to a request to write a Foreword in honour of Fred.

Maxine All of a sudden words sound trite or almost meaningless when it comes to adequately appreciating Maxine's enormous devotion and moral support given in countless ways—the countless cups of coffee that appeared without request, the meals announced just at my point of exhaustion, not to mention the removal of financial worries and constraints, devotedly done.

Ben Heartfelt thanks to my son Ben, now a sought-after architectural photographer, who made many trips from Melbourne to Sydney and Canberra to apply his visual skills to this book and in the process created an invaluable record of Fred's work, only a fraction of which are shown in this book. His skill has been almost magical and has made an outstanding contribution in giving life to my words.

Shirley A sisterly design crusader with much experience of selling my previous books rallied yet again to making a self-published book possible and whose enthusiasm led to the launch and exhibition at the Gallery of Australian Design in 2013.

Lance Fellows A collector of Fred's work who encouraged me to write this story as an important fragment of Australian history and unearthed some of Fred's best work that otherwise might have been forgotten.

Beryl, Anna and Peter Wife, daughter-in-law and son of Ron Rosenfeldt, long-standing friends who made available a large set of papers relating to the early days of the Myer Studio, SDI, IDIA and the IDCA.

Gillian A good friend of the family making a graphic name for herself, has applied her perceptive eye to putting my words and Ben's photographs into a form that Fred would, I feel sure, warmly appreciate.

Jill The finder of annoying repetitions and spelling mistakes, who massaged my words into a shape more worthy of Fred and Puss.

Martin and Robin Fred's son and daughter in law, who filled in many gaps in my knowledge of Fred and who now may see him a little more from the views of others and the outstanding contribution he made to Australia.

Adam (A) and Linda, Simon and Jonna, Sarah (H), Genevieve, David, Nico, Sarah (W), Marita, Inge and Adam (K) Who helped by just being there and who will, I hope, gain some deeper understanding of what drives a designer.

Luke, Kira, Sean, Zara and Michael My local grandchildren who regularly appeared at just the right time to relieve my many frustrations.

Finnian, Freya, Jakob and Sarah (W) My other grandchildren who couldn't pop in so easily.

The many people in Melbourne who willingly added to this story through their early recollections of Fred and Puss, making the cold trail of pre-war Melbourne just that little bit warmer and more personal.

Lastly, to the few craftsmen who should be first in a list of this kind—those who complemented Fred's skill so wonderfully with their own, and without whom this book could never have been written. Those who, in their quiet, unpublicised yet positive way contributed to Australia's development with the skills they brought with them—a heartfelt thank you from the growing number who have come to really appreciate your work.

No doubt I have inadvertently missed someone who made a useful contribution, so I can only make my ailing, overloaded memory accountable—if such a reader has reached this point I can only say sorry.

Fred and Puss's jigsaw will never really be complete and I should leave room for others to fill in some of the gaps.

A handwritten signature in black ink that reads "Derek J. Wrigley". The signature is written in a cursive, flowing style with a large initial 'D' and 'W'.

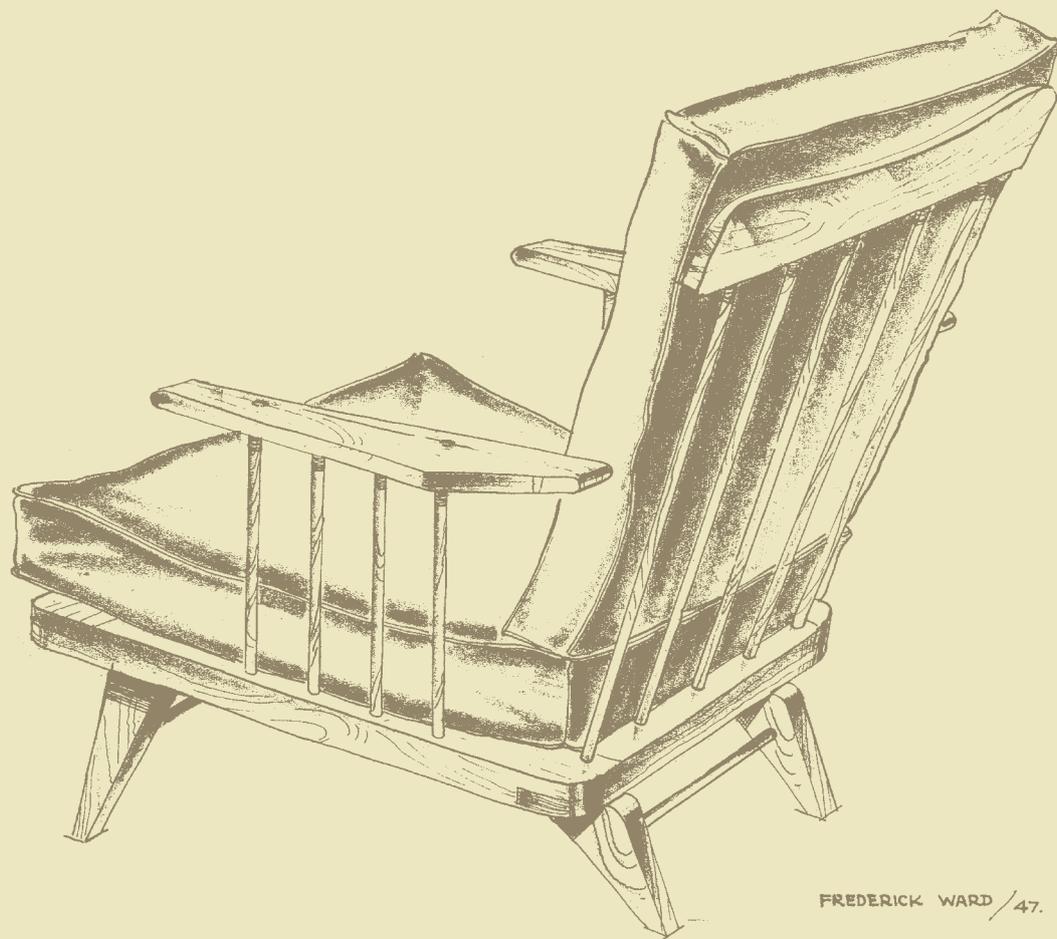
List of acronyms

ANU	Australian National University, Canberra
B&D	Black and Decker (Corporation)
CAC	Canberra Art Club
CCAЕ	Canberra College of Advanced Education (now University of Canberra)
CUC	Canberra University College
DAP	Department of Aircraft Production
DECA	Design in Education Council Australia
FLER	Fred Lowen and Ernest Rodeck, Melbourne
ICI	Imperial Chemical Industries
IDCA	Industrial Design Council of Australia (later became Australian Design Council, now known as Good Design Australia)
IDIA	Industrial Design Institute of Australia, now Design Institute of Australia, Melbourne
NCDC	National Capital Development Commission, Canberra
NGA	National Gallery of Australia, Canberra
NGV	National Gallery of Victoria, Melbourne
NLA	National Library of Australia, Canberra
OED	Oxford English Dictionary
RAAF	Royal Australian Air Force
RAF	Royal Air Force
RBA	Reserve Bank of Australia, Sydney
SDI	Society of Designers for Industry (became IDIA 1956), Melbourne, now Design Institute of Australia
UC	University of Canberra (previously CCAE)
UH	University House, ANU, Canberra
USAF	United States Air Force

Good design is always
the optimal result of the sum
of the true needs in a particular
set of circumstances

**TED MATCHETT
DESIGN ENGINEER
BRISTOL 1965**

[See analysis of this statement on p. 197.]



The Melbourne Years
1900-52

Have nothing in your houses
that you do not know to be useful,
or believe to be beautiful.

WILLIAM MORRIS

1 William Morris and Fred Ward

In basing this book on Fred's life in design (1900–90) I have become fascinated by the similarities which seem to exist between his consistent *design philosophy* and the published statements of William Morris (1834–96), so elegantly assembled in Clare Gibson's book *The Earthly Paradise of William Morris*.^{EP} A number of his relevant statements are interposed throughout this book.

Morris believed that the quality of life for everyone would be improved if only integrity could be restored to the everyday objects in daily use.^{EP}

It is intriguing to realise that Morris and Fred were both social critics of their relative times, each trying to point out in their separate ways that the current direction of satisfying human needs could produce better results. Yet different circumstances led them to resolve their problems in different ways and both men produced interesting paradoxes.

Morris commented on the soullessness of the Industrial Revolution in the mid to late 19th century in England, finding his answers in romantic design and socialism. Fred found his in an opposite approach—practical simplicity, completely devoid of any romantic decoration, letting the fundamental need suggest the ultimate structural form—without a breath of politics.

It is not my aim in this book to compare the design outputs of these two men but merely to show the relevance of their thinking in similar fields of endeavour, coming from almost continuous periods in history—Fred being born only six years after Morris died.

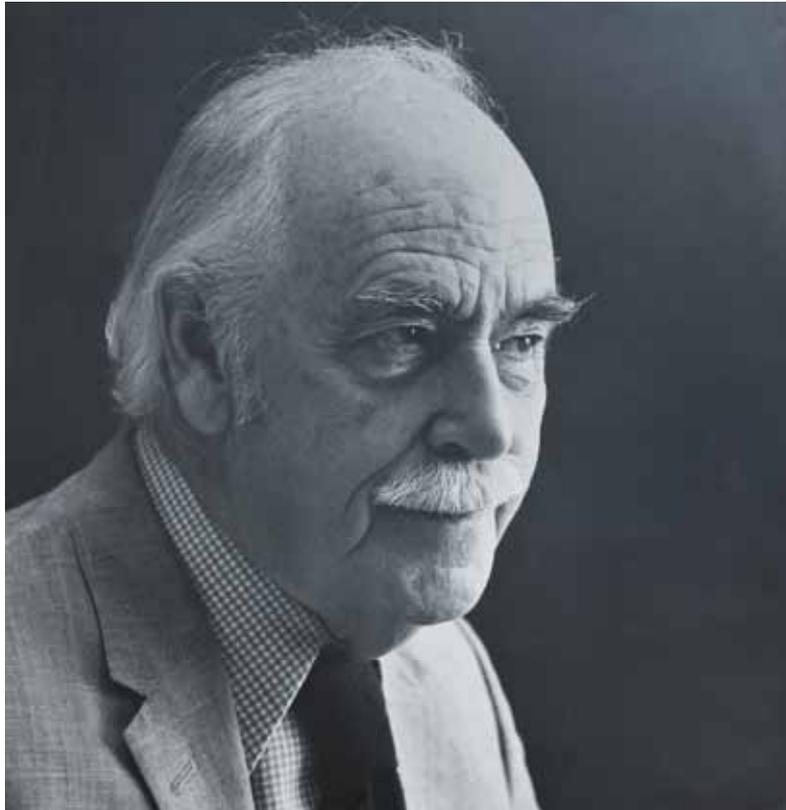
Scholars of design history will, I hope, find this analysis of Fred's work interesting, especially as Fred, an Australian, developed his design style half a world away from the engines of industry and the design concepts they stimulated—and at a time when global graphic communication was in its infancy.

Throughout the book our prime subject will be simply known as 'Fred', in keeping with the characteristic philosophy which imbued his life style and his creations. As his son, Martin said to me when I started to write, 'He was Fred to everybody'.

Both men had their successes and failures, which leaders at the cutting edge can expect, but these can only really be weighed up after the passage of time and, as my reader will appreciate, it is only then that we can assess if they contained inherent failures in detail or were they the result of being too far ahead of the crowd?

This book aims to give some insights into Fred's approach to design *and* society and I hope it will encourage the interested reader to read Pamela Todd's book *William Morris and the Arts and Crafts home*.^{WM} They are very different books which should throw a little more light on the root causes of some of today's social failures.

2 Author's overview



2A Fred Ward as remembered by most people during his Canberra years, probably around 1970.

Since becoming aware of Fred Ward in 1956 I have become increasingly intrigued by his life as a designer, firstly by learning from him and secondly by my later researches when writing this book—especially the way in which it imbued his life with an essence of simplicity. Despite living through two wars and a depression in Australia he pursued this inner drive to create furniture which had a consistency of design elegance that must now be regarded as unique in this country.

Little did I know how our two lives were to become so entwined in the cause of design and that eventually I was to write an account of his life which demonstrates that design for him had a deeper significance than most of us realise and went well beyond his furniture designs.

This account tries to document some of his achievements in his major interest—the area of good quality bespoke furniture design and to explain some of the nuances he was able to introduce over about half a century of active designing.

History has remembered
the kings and warriors,
because they destroyed;
Art has remembered the people,
because they created.

WILLIAM MORRIS
THE ART OF THE PEOPLE LECTURE
1879

Just as analysing an ice core in the Arctic shows us what the weather was like a long time ago, Fred's unique core enables us to glimpse half a century of design achievement in a period which has witnessed some of the greatest social and technological changes.

This book is structured around Fred's life and his furniture, especially his chairs, for reasons which will emerge later. It does, however take a much wider brief in which design in Australia can be seen as a *basic process* which Fred believed could affect people and their lifestyles for the better—linking architecture, furniture, arts and sciences, and latterly, the environment in a more meaningful way.

From 1956 our two lives and talents were involved in the rapid growth and design needs of the Australian National University (ANU) in Canberra, but we did find extra-mural time for the *social* aspects of design, mainly centred around design education and, significantly, design *in* education. Toward the end of Fred's life in his eighties we had a little more time to discuss design philosophy, in particular the effect of environmental changes on design and, even more importantly—how the *process* of design itself *should* be changing to minimise environmental problems.

In the period before 1950 design was not really a topic of conversation for many Australians; it was a misinterpreted word, especially in the educational sphere, and Fred believed it needed to be better understood so that the lives of all Australians could be that much richer.

I found Fred to be a little reticent in talking about himself and his many achievements. This was a pity because in the writing of this narrative I have wished many times that I had coaxed him to talk about his life during the time I knew him. Luckily for us, his designs and his embodied philosophy have lived on, showing a remarkable and unusual consistency of thinking about the goal of 'good design'—the buzzword of the mid-20th century that became somewhat worn-out through overuse.

In any design project, a designer's first enthusiastic intentions tend to become modified by time and circumstances, needing to be continually brought back on course to the *real* needs, the *real* values and the project parameters of the moment. The peripheral digressions beyond Fred's daily pragmatism, described later, should not be seen as idealistic interruptions but as revealing his wider vision that sprang from *social* needs as he saw them. Implicit in his thinking was that design is not just a

useful and beautiful *object* but a *process* that can be a power for the common good.

The profession of industrial design was unknown in Australia in the 1920 and 1930s when Fred began to realise his true vocation, but seemed to gain some currency during WW2 as Australia had to mobilise its industries for war. See section 8, The war years, p. 27.

It is for these reasons that Fred, as a home-grown Australian designer deserves to be much better understood as a pioneer in the professional field of design—especially by a society that tended to think that the good things of life usually came from overseas—a persistent way of thinking which I suspect came from our colonial days—and has returned since the turn of the century.

In some ways it is unfortunate that many of Fred’s design contributions are invisible to most people, partly because of their bespoke nature, but also because society in general did not understand the value of ‘good’ design. Also, furniture is so ubiquitous—it is taken for granted, part of the scenery but would certainly be missed if it was absent, preventing our day-to-day activities—so perhaps it is not surprising that furniture designers are too. Living and working in that functional area teaches designers to recognise the irony of that reality.

Fred was a master at designing and coordinating everyday ‘things’ within internal spaces, without any egotistical delusions of grandeur—furniture, fabrics, light fittings, curtains, carpets, rugs, cutlery, glassware, signs, linen baskets, waste paper bins—the *art* of finding, coordinating, selecting and, more usually, *designing*, so that, however humble each item might seem, it all fitted together to create a totality bigger than the sum of its parts. It was the very difficult *art of concealing the process of achieving art*.

In a similar way, this book would not exist without collaborative design input at every step along the way, so let me give you a bit of background on how design has been essential to the telling of this story.

Fred Ward | *This book is about an Australian designer...*

Derek Wrigley | *The book has been written by a designer, who, having learned some of the art of architecture—manipulating internal and external spaces with walls, floors and ceilings, then learned a very fundamental and humbling truth from Fred—that the resultant bare spaces would serve very little purpose without the ‘things’ that enable us all to function in a comfortable, effective and graceful manner.*

Also, it is more than appropriate that the Foreword to this book has been written by a designer, who has paid his own tribute to Fred. Himself a well known architect, graphic and industrial designer, he was inaugural President of the Queensland chapter of the Industrial Design Institute of Australia and Federal Past President of the Design Institute of Australia, 1979–83.

| *His Excellency Mr Michael Bryce AM AE*

A very perceptive photographer with a keen designer's eye has contributed most of the photographs of Fred's furniture, making visible the many nuances of Fred's design talent which contribute so much to this story.

| *Ben Wrigley, Photohub*

A sensitive graphic designer designed this book, transposing and integrating these words and images into a delight to the eye and mind which Fred would, I feel sure, have enjoyed.

| *Gillian Cosgrove*

The editing, printing, publicity and distribution of this book are also design arts in themselves and will make their creative contributions to the book in time for the Centenary of the founding of Canberra to be celebrated in 2013, an event in history which owes its origin to two creative designers. As I write, the design process of organising an exhibition of Fred's story, based on this book, has started to unfold and will be held at the Gallery of Australian Design in Canberra in 2013...so a designer will be needed to tell that story in a different context.

| *Jill Miller*
| *[Printer name]*
| *Shirley Kral*

| *Meredith Hinchcliffe*

So much then, for the design skills that are making this book possible. *But*, as with coins, a reverse side is essential for complete effectiveness:

Awareness and appreciation, involving the physical and aesthetic enjoyment of the designed product—Fred's furniture and this book—requires perception and discernment on the part of those who use them and enable such arts to even exist—to facilitate and complement their existence—such as those who have financially supported the writing of this book.

Stories are also products and if they are to be fully effective, require receptive listeners and readers—and even further along the road—those who understand the significance of the story and can relate it to their own lives, learn and take action to remedy current inadequacies.

Design then, as a creative force, is a prime link behind people like Fred, this city of Canberra and this book.

In a world of globalisation, where everything seems to come from everywhere else other than here, it is almost a rare event to realise that we do have some home grown, world class design to celebrate.

This is an unusual Australian design story about a man who was not afraid to be different for most of his working life; not for the sake of just being different or as an ostentatious leader with startling, avant garde designs grabbing the headlines; quite the opposite—he was a quiet performer who understood the potential of design as a power for good in the community—and was enabled to put it into practice. It was however, recognised by only a small proportion of our population.

Fred was a reserved gentle-man when I first met him in 1956; a man who had the capacity to conceive simple furniture and interiors, free from the commercialism of the market place and *who could demonstrate persuasively by example.*

I developed great respect for the man, his work and philosophy well before I started this story around 2005 and the respect has grown like an unfolding flower, with each petal revealing even more elegance and grace beneath, having a recognisable, consistent structure and finesse in detail which stands out on the world scene as good Australian design.

Writing and finding the illustrations for the book has proved to be a very demanding and, in some ways, a disappointing detective story with numerous loose ends resulting from a ‘cold’ trail of several years. Many of the salient characters died before they could be interviewed, collective memories dissipated and historic files had been sent to the tip. Drawings embodying hours of skilled perception but seen as of no relevance to history and beautiful, still useful furniture have been found lying in dark basements, unrecognised as significant elements of history, partially in the wake of the ‘ergonomic’ computer furniture tsunami of around the 1990s.

This tsunami of ‘computer’ furniture should be recognized for what it really was—a triumph of fashionable pseudo-science by an industry grasping at a ‘new’ idea which flooded remorselessly over the office market, resulting in a back-wash of still good furniture to the secondhand markets. Certainly there was a lot of poorly designed furniture which should have been dumped anyway, but unfortunately much well designed furniture was also swept away by managers who did not wish to appear ignorant about ergonomics.

My searches have revealed an immense gap in our collective education—something that Fred must have intuitively felt and I belatedly came to realise—that *good design (in its most holistic sense) is as essential to a quality lifestyle as much as healthy blood is to the effective functioning of our bodies.* The lack of recognition and misunderstandings about design in society caused Fred (and others) to initiate the Industrial Design Council of Australia (IDCA) in 1956 and voluntarily give it his counsel for about 25 years. Ironically, similar factors caused its demise in the 1980s, but it has continued in another form (see section 15, *Design Council*, p. 135).

Having now almost finished this book it has only reinforced my view that Fred was a natural, intuitive designer; he lived design and he worked in a design area that was unusual, if not unique in Australia, for most of his working life. His early design activities in Melbourne in the 1920s and 1930s do not seem to be well known in Canberra or Sydney and his more mature work, being largely bespoke institutional and governmental, has not been commercially advertised.

His proselytising about design started when he was in his late twenties, and continued throughout his working life, complementing for industrial design what the writing of his colleague and friend Robin Boyd did for architecture. It deserves to be told as a unique Australian story and I have tried to record it as best I can in this book—if only because, to the best of my knowledge, I am probably the last person alive who worked with Fred, followed his later career and absorbed some of his philosophy.

In doing this it became clear from some of the discussions I had that some explanation was needed as to *why* his design output should be regarded as in any way exceptional. ‘*Why?*’ is a valid question, as a common response might be ‘*It’s just furniture*’, which only emphasises the root of the problem. There are many answers, most of which should go much deeper than a simple analysis of the objects themselves. I hope this book may be able to throw a little light on this.

Fred’s life conveniently fits into two neat, consecutive, periods—his formative years of 1900–52 in Melbourne, finding his true vocation, and his later years from 1952–90 in Canberra, in which his inherent design skills inspired growing respect.

It proved difficult to discover the story of his Melbourne years as most of the people who knew him professionally have died and archival material was sparse or non-existent. Fortunately, Puss wrote a wonderful (unpublished) diary^{PD} about their early years together that has provided many enlightening and often humorous glimpses into why Fred became such a modest and remarkable designer. Puss receives several mentions in this book, but first and foremost she must be remembered not only as Fred’s guardian angel through thick and thin but also as his first biographer. She wrote several published articles supportive of Fred’s design activities in their Melbourne days that have provided many clues. Fortunately, there have been one or two sensitive souls still around who perceived the value of Fred’s work and have been able to provide some of the missing bits of the Melbourne jigsaw.

| See References, p. 241.

Fred's life changed dramatically around his fiftieth birthday when several doors were opened to him.

From our first meeting in 1956 right up to Fred's death in 1990, as a working colleague and friend I had a first-hand introduction to the man and his design philosophy—a philosophy that was not only integral to his professional work, but to his attitude to life. Most of my recollections about Fred have been drawn from working with him at the ANU and from his statements during the formation of the design organisations we were involved in.

In several areas the reader may realise that in trying to understand and explain Fred's way of thinking and designing I have had to discuss it in my own way. However, our philosophical views were remarkably similar, despite our 24 years' age difference.

I know Fred would agree wholeheartedly when I say that his designs would have been stillborn were it not for the vital complementary skills of all those who, with an enormous amount of skill, breathed life and solidity into his nascent concepts. These usually unpublicised, industrialised craft makers had a deep empathy for Fred's favourite material, Australian timber and were able to apply their European skills from a background of well-honed traditional techniques. They faithfully transformed Fred's creative pencil lines into three dimensions which not only satisfied physical needs but did so with effective elegance.

It is to these people (a few of whom are still resident in the Canberra region) that Fred, in all humility, would have wished me to give a profound and grateful thank you.

The names Alfons, Con, Hans, Heinz, Kees, Klaus and Oswald speak volumes as to their origin and I hope that most are able to read these words. (See section 23, *Designing and making*, p. 209, for further reading on this serendipitous historical confluence of talents.)

3 Fred's life summary: 1900–1990

FORMATIVE YEARS

1900

Frederick Charles Cecil Ward, born 26 July 1900 at Black Rock, East Melbourne, son of Frederick William Ward, cutlery manufacturer and retailer (Ward Bros. family business, Swanston Street, Melbourne) and Lily Wilhelmina, nee Breeze. Siblings Mabel, Violet, Olive, Dorothy, Lilian preceded Frederick, followed by Gilbert who subsequently managed the cutlery shop up until the 1960s.

1918–20

Trained as an artist at National Gallery of Victoria. Occasional work as freelance illustrator/cartoonist for magazines such as *The Bulletin*, *Friths* and *Table Talk*.

1920?

Met Elinor Roper Martin ('Puss' to her friends). On a visit to Puss's brother Bill in the Mallee, at Anuello, near Robinvale, Victoria Fred made two chairs out of mallee branches and wheat sacks, thought to be his first venture into the design and making of furniture.

1925

Married Elinor Roper Martin at St John's Church, Toorak, 2 April.

1925–6

Lived in a flat in South Yarra and later in a series of flats. Fred worked at Yencken's stained glass workshop, also Charles Marshall structural iron works in Fitzroy, constructing lift cages in multi-storey city buildings, the spire of St Paul's Anglican Cathedral in Swanston Street and the hanging of the bells in St John's Church, Toorak.

1926?

Contributed caricatures of theatre players to *Table Talk*, *Graphic* and other *Herald* papers.

1927–31

Developed an interest in furniture of the English Arts and Crafts movement. Self taught but took technical drawing classes at night.

Although every attempt has been made to be accurate, a certain degree of inaccuracy may have occurred in some of the early dating as sources have had some differences. DFW

DEPRESSION YEARS

1929

Employed full time at *Herald and Weekly Times* and *The Bulletin*. Fred and Puss bought a house in Glenard Drive, Eaglemont, (Heidelberg) Victoria, a suburb designed by Walter Burley Griffin. He began designing furniture at home, started manufacturing with Albert and another craftsman in a converted studio attached to the house.

He made furniture essentially for his home, but requests from friends to purchase his work led Fred to think about creating them for sale. Bought a bull-nosed Morris Cowley. Showed his furniture in an Arts and Crafts Society December exhibition and had photos taken which helped in getting a job at Myers later.

1930?

Met young Irish artist Michael O'Connell at his Atheneum exhibition which sold out. Fred opened a shop and design consultancy in 52a Collins Street and established an interior design consultancy, displaying his furniture, Scandinavian glassware and hand woven rugs, including Michael and Ella O'Connell's screen printed linens, paintings by Ian Fairweather and furniture by Sam Atyeo. Employed Cynthia Reed as assistant.

1931-2

Designed a chair and bedside table using modern basic geometry, regarded as 'Modernist' using Australian timber, waxed finish. Sold designs to Mr Roberts and Mr Watt of Myer Emporium who invited Fred to establish his own design studio at Myer for furniture design and manufacturing in North Melbourne. Employed Ron Rosenfeldt and Lester Bunbury as designers. Frequently exhibited at Victorian Arts and Crafts Society exhibitions and his furniture selected by Alleyne Zander for display at the exhibition of British Contemporary Art Society 1933.

1933

Moved the shop to 367 Little Collins Street and transferred it to Cynthia Reed.^{JR} Continued with interior design commissions in collaboration with Reed who later became Cynthia Nolan.

1933-4

Furniture featured in *Modern Furnishings*.

1934-5

Designed the 'Unit Range' of furniture for Myers as an austere, affordable range and launched it at the Building Industry Congress Ideal Homes Exhibition, promoting it throughout 1935. This range consolidated Ward's reputation as Australia's leading Modernist designer. Had illustrations in magazines.

1937

Australian Commercial and Industrial Artists' Association formed.^{DIA}

1938

Martin Ward, only son, born.

SECOND WORLD WAR SEPTEMBER 1939 – JUNE 1945

1940?

Seconded to the Department of Aircraft Production for the manufacture of the timber framed Mosquito fighter-bomber and later for the Beaufighter and Beaufort at Fisherman's Bend, Melbourne. Responsible for the continuous

modifications sent from Britain. Appointed Liaison Officer between the Commonwealth government, the RAF, the RAAF and the USAF handling drawings and manufacturing data.

POST-WAR YEARS

1945

In post-war reconstruction period, Ward designed electric and gas cooking ranges, and an egg incubator for the egg industry, made by Martin and King's—the *Empress*.

Commissioned by the Victorian Railways to design the interior and external livery of a diesel train, but little confirmation.

Tried to restart the Myer design office, but most of his team wanted to set up their own design offices—Ron Rosenfeldt (left 1952), Scorgie Anderson, Lester Bunbury were also employed. Established the 'Heritage' range of furniture at Myer but appeared to have retained his freelance furniture design practice. Established *Patterncraft* in association with *Australian Home Beautiful* which enabled the home handyman, many of whom were returned servicemen,

1945 *continued*

to make their own furniture simply and cheaply with very basic tools. Puss wrote articles on interior design for the popular magazine.

1946

Designed the extremely popular DC 1 chair to be produced by FLER (Fritz Lowen and Ernst Rodeck) who then received their first substantial order for 500 from Myer Emporium. They became a leading manufacturer of well designed, quality furniture in later years.

1948

Australian Home Beautiful embraced modernism.^{DIA} Fred, Rosenfeldt, Anderson and others established the Society of Designers for Industry in Melbourne—the first public recognition of industrial design as a profession.

1948–52

Ward commissioned to design furniture and furnishings for University House at the Australian National University, Canberra at the instigation of Prof. Brian Lewis, architect for University House. Possibly the first commission in Australia to design furniture specifically for a public building—a landmark decision?

1948–52 *continued*

Taught interior design as a part-time lecturer under Professor Brian Lewis in the School of Architecture at the University of Melbourne, alongside architects Robin Boyd and Roy Grounds, around time Brian Lewis was designing University House.

1952

Author read an article in the *Sydney Morning Herald* about the Society of Designers for Industry in Victoria and then initiated the establishment of the NSW Chapter after discussion with Alistair Morrison and Arthur Baldwinson.

Fred moved to Canberra to supervise the furnishing of University House which was opened by the Duke of Edinburgh on 16 February 1954.

POST-WAR YEARS *continued*

1954

ANU Vice-Chancellor Sir Leslie Melville invited Fred to stay on as University Designer to ANU.

1955

Commissioned to design furniture for the Commonwealth Club in Old Canberra House and later in new premises built in Yarralumla (designed by Fowell, Mansfield and Maclurcan—author's first employer as an architect in 1948, Sydney).

1956

Dr H.C. Coombs, Governor of the Reserve Bank of Australia, spoke publicly about the need for Australian industries to include design as an integral aspect of manufacture if success was to be achieved in selling overseas at suggestion of Fred through Ross Hohnen.

Wrigley and Hunt from NSW Society of Designers for Industry sent letter of support to Coombs that passed on to Fred who contacted them. Inaugural meeting inquiry was set up in Canberra. Wrigley and Rosenfeldt prepared reports on the NSW and Victorian design situations and committee subsequently agreed on need for such an organisation.

1956 *continued*

Visited Wrigley at his second owner-built house in Dee Why, Sydney to see his home made furniture and fibreglass experimental shell chair and invite him to join the ANU Design Unit in Canberra.

1957

Fred designed furniture for Ainslie Goodwin Homes Retirement Village. Designed desk as a gift from Australian government to the new Malaysian government.

Author joined Fred in the ANU Design Unit in January and moved into an ANU house.

Author assisted Fred with the formation of the IDCA from the office of the ANU Design Unit with support from the Registrar, Ross Hohnen. Inaugural Chairman was Mr Essington Lewis. First Council meeting held in ANU Council Room, author appointed Secretary.

1958

Beth Chalmers appointed as first administrator of the IDCA, temporarily establishing its office in the ANU Design Unit for several months.

Colin Barrie later appointed as first Director of the IDCA, temporarily operating from the ANU Design Unit office. Later, both moved to the IDCA's first permanent office in Degraeves Street, Melbourne. Ward designed the IDCA office furniture made by Kees Westra, Canberra.

Fred and author seconded by ANU to design furniture for the Australian Academy of Science, Canberra at the suggestion of Sir Mark Oliphant and Sir John Eccles as an ANU gesture to the Australian Academy of Science. Author designed and organised an exhibition for the opening on 6 May 1959 by HRH Prince of Wales.

THE LATER YEARS

1960

Received the inaugural Essington Lewis Award from the Industrial Design Council of Australia for his services in establishing the IDCA and to design in Australia.

1961

Retired from the ANU Design Unit to travel to Switzerland, Italy, Denmark, Holland, France and England with a commission from NCDC to investigate furniture suitable for libraries and museums. Prepared report on galleries, museums for NCDC (available in NLA Archives). Visited Venice in early September as an Australian delegate from IDCA/IDIA and then London and Churchill College Cambridge as guest of Sir John Cockcroft, Master of Churchill College and to discuss the dining table design for the new college. Prime Minister suggested that Australia should make a gift of Australian Queensland walnut for the purpose.

1962

Commissioned to design furniture and furnishings for the new Reserve Bank in Martin Place, Sydney, initiated by Coombs.

1963

Commissioned to design furniture for the P & O Building in Sydney.

1964

Wrote script *Design in Australia* for ABC Radio University of the Air program hosted by Robin Boyd describing his experiences as a furniture designer. (See script in full in section 22, p. 205.)

1964?

Commissioned to design furniture for the NLA building in Canberra. Joined by Arthur Robinson from the Design Unit. Building opened 1968.

1965

Author (accompanied by his wife Hilary) given study leave to visit overseas universities to discuss the operations of other university design units but found there were none. Visited UK, Sweden, Denmark, Holland, Germany, France, Italy, US, Hawaii, Japan, Formosa. Met Michael O'Connell in Oxford and bought two of his large wall hangings for the ANU—held by Drill Hall. Prepared report for ANU on the future of design management within the ANU. Pigeonholed.

1966

Author initiated case for a School of Environmental Design at CCAE assisted by Fred, Arthur Robinson, David Walker, Charles Bastable and John Stevens. Submitted report to Dr Sam Richardson, Principal and Dr Waterhouse, Chairman of CCAE Board. Board agreed and school opened 1974. Author designed logo for CCAE, retained by University of Canberra.

Commissioned by Robin Boyd, architect of the Australian Pavilion at the 1967 Montreal Exposition, to design furniture.

1967

Commissioned by Lady Maie Casey to design furniture for Aide's quarters, Admiralty House in Sydney and a dining suite for 'Yarralumla', Government House in Canberra.

1969

Appointed as furniture consultant to CCAE, assisted by Wrigley.

1970

Received MBE for his services to design in Australia on 1 January 1970.

1971

Commissioned to design furniture for Australian Industry Development Commission, Churchill Building, Canberra and Government House, Canberra.

1980

Retired to house in Mawson, ACT. Failing health and confined to wheelchair due to iatrogenic illness.

1988

Puss died.

1990

Died in Queanbeyan Nursing Home.

2010

Fred and author both inducted into the Hall of Fame of the Design Institute of Australia. Martin Ward attended the ceremony in Sydney Town Hall to receive his father's award. Ron Rosenfeldt was inducted the following year.

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FROM HIS FOOLISH PAST.

CANBERRA KATE: "Hullo, dearie! You haven't forgotten me!"
BUSY AUSTRALIA: "YOU again! And just as I want to settle down to a sensible, industrious life!"

4A Norman Lindsay's critical cartoon on the cover of this 1920 Bulletin shows the public's frustration at the delays in the implementation of the Griffin/O'Mahony plans for Canberra. It would seem that the Government was more interested in getting industry moving after WW1 than with developing Canberra. It would have been appropriate to reprint it following WW2 as the same delays occurred.

Small text in cartoon:

FROM HIS FOOLISH PAST.

CANBERRA KATE: 'Hullo, dearie! You haven't forgotten me!'

BUSY AUSTRALIA: 'YOU again! And just as I want to settle down to a sensible, industrious life!'

4 The formative years: 1910–1930

Fred’s early, formative years from 1900 onwards were spent at Black Rock, a few kilometres south of the city of Melbourne, in an isolated continent half a world away from the European centres of furniture design. It is possible that, at a later age this may have directed his thinking toward a strong fundamental approach to furniture design which became a characteristic of his designs throughout his career.

In his youth Fred studied art at the National Gallery School shortly after WW1, which brought him into contact with the aesthetically gifted Boyds—Robin, Merric, Lucy, Arthur, Guy, David, Mary—a well-known creative family in the Melbourne area.

While at the school Fred befriended Daryl Lindsay, another Melbourne artist, who eventually became best man at his wedding in 1925 to Elinor Roper Martin (‘Puss’ to her friends). Joan Lindsay acted as matron of honour for Puss and in her 1962 book *Time Without Clocks*^{TWC} described Fred in this way:

Freddie, a friend of my student days, a slim, eager young man foaming at the mouth with original ideas on every subject under the sun which later sorted themselves out when Frederick Ward became a vital force in Australian industrial design...

Daryl, an accomplished artist, (see his elegant pastel sketch of Pierrot, from the de Basil ballet around 1937),^{4b} later became Director of the National Gallery of Victoria (NGV). Daryl and Joan remained lifelong friends of Fred and Puss. It seems likely that Fred was instrumental in Daryl becoming the first Art Advisor to the growing ANU in the 1950s. Joan later became famous for her novel *Picnic at Hanging Rock*, published in 1967 and translated into a dramatic film by Peter Weir, made at Hanging Rock near Melbourne.

Fred’s inner ‘aesthetic’ sensibilities seem to have been stimulated by his gallery school training in art, finding its outlet in linocutting, cartooning, and illustrations, enabling him to

Daryl was also part of an artistic family, his other brothers Lionel, Percy and Norman having established themselves as artists in differing media. Norman became a famous cartoonist for The Bulletin and was well known to Fred in the early Melbourne days. He drew a caustic cartoon in The Bulletin of 19 August 1920,^{4a} eloquently reminding the federal government that it had forgotten about the planning of Canberra in the aftermath of WW1. This situation was even repeated after WW2, and it was ironic that his friend Fred was destined to play a role in the development of Canberra from 1952 onward.



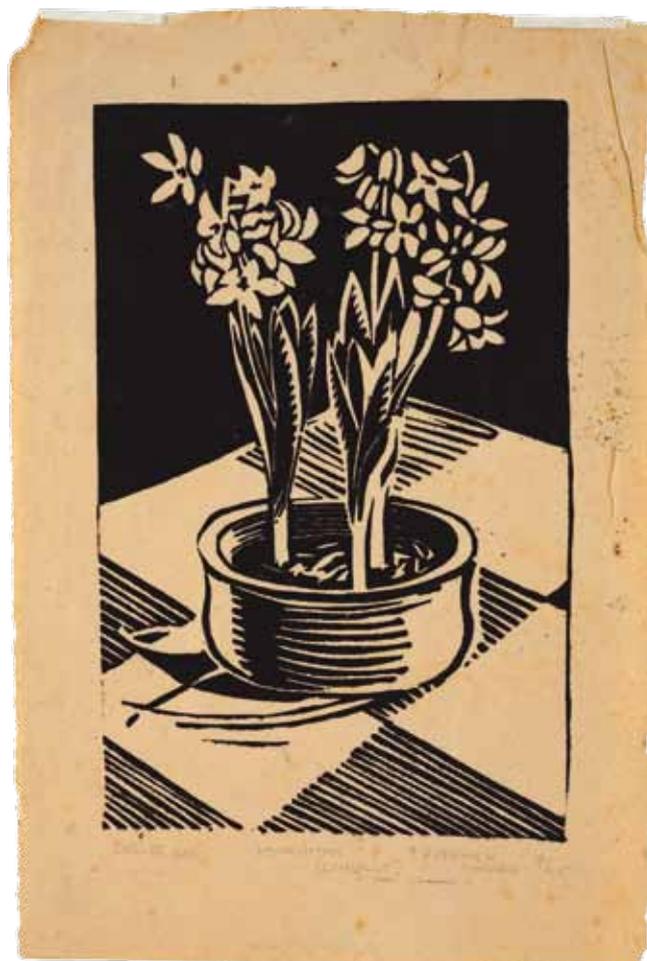
4B Pastel sketch of Pierrot, from the Ballets Russes Carnaval, c. 1938—possibly Melbourne or even in London, 1937. Dancer unknown.

(Sir) Daryl Lindsay was a lifelong friend of Fred and Puss, from their early days (c. 1919) as art students in the NGV Art School, which continued on to their professional collaboration in the early days of the ANU around the mid-1950s.

The subject and the graphic expression of this sketch by Sir Daryl is so elegant it reminds me of Fred and his works every time I see it. View it again when you read section 7, *The lively 'thirties*, p. 47, and Fred's description of the Ballets Russes in Melbourne.

Three of Fred's linocuts which illustrate his leanings toward simplicity and minimalism, reducing the image to its bare essentials, requiring no element of unnecessary decoration—so characteristic of his later furniture designs.

4c *Hyacinths*, linocut by Fred Ward, 1929.

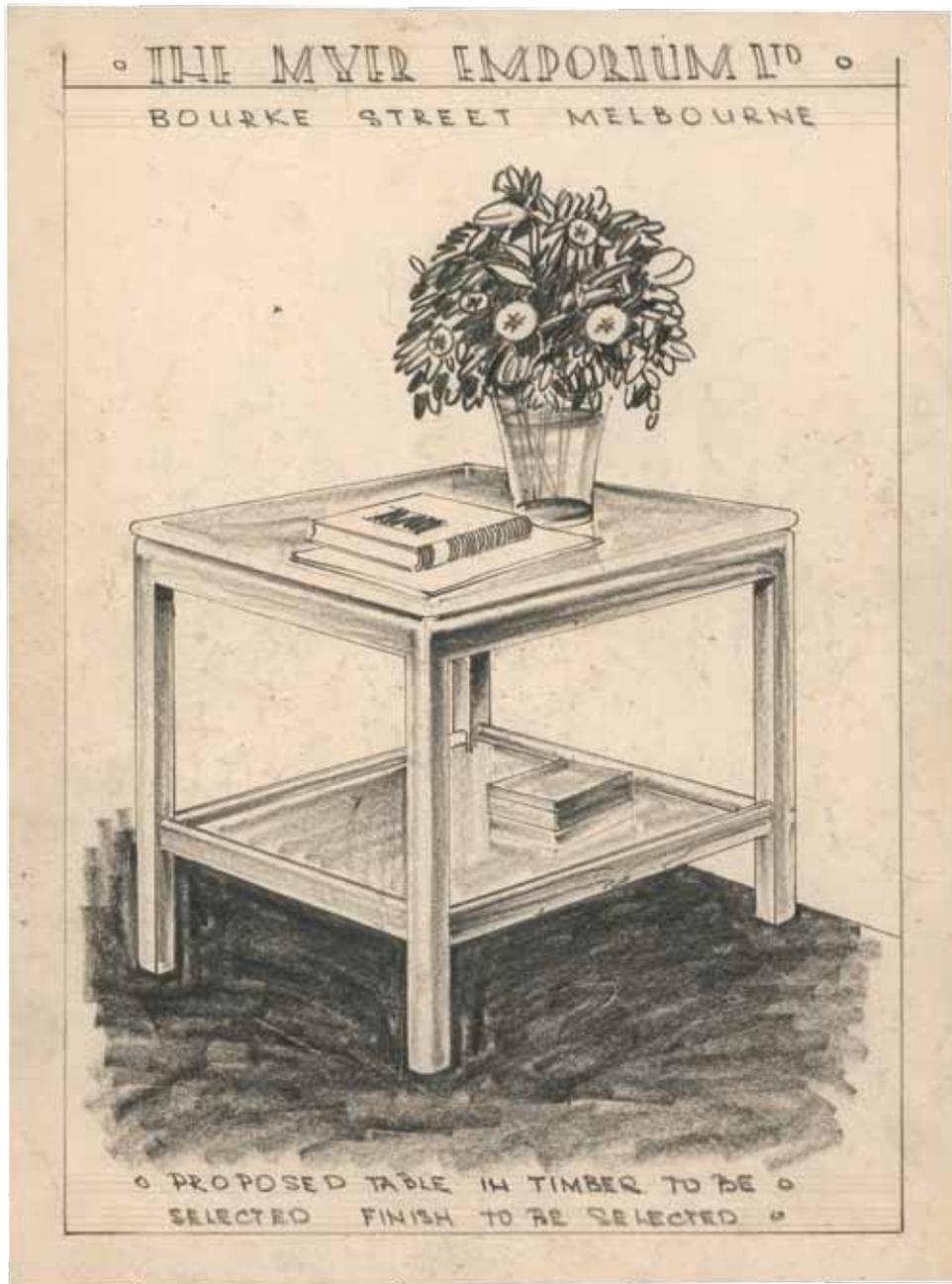


4d *The hut in the trees*, linocut by Fred Ward, undated but probably late 1920s.



4e *Against the light*, linocut by Fred Ward, undated but probably late 1920s.





4F An early 1930s sketch by Fred for a Myer advertisement combining his pictorial skill with a pencil and an ability to relate the furniture to everyday life and common objects. His furniture style is obvious even at this early stage—simple, direct and devoid of unnecessary decorative elements—a bold move in the days of eclecticism common in furniture of the time.

earn some income in his bachelor days. According to Puss's diary,^{PD} he earned a fairly decent living by providing illustrations for papers such as the *Herald and Weekly Times*, *Frith's Weekly*, *The Bulletin* and *Table Talk*.

Little evidence of these published illustrations has been found, but some linocuts by Fred from around the late 1920s^{4C,D,E} give us some indication of his early interest in simple design. He showed an eye for detail, reduced to its minimal essence, that became so typical of his future furniture. His skill with the pencil is often apparent in his sketches for new designs where the useful and decorative possessions of life are often included, reminding us that (for example) tables are not just tables as functional art, but are convenient, horizontal surfaces which we use unthinkingly for a multitude of purposes (compare the hyacinths linocut^{4C} with the Myer sketch,^{4F} a few years later). This was a skill he used to great effect for presentations to clients for most of his professional life, and it placed his creations within daily life. It was most likely around this period that Fred took a course in woodworking to supplement his latent interest in furniture design. This added skill was to prove useful in giving life to his ideas and gaining him employment.

Puss's diary^{PD} records that in Fred's bachelor days around 1920–25 he shared a house in South Yarra with John Reed, a well-connected solicitor from Tasmania. He also knew Will Dyson, an established cartoonist in the Melbourne papers, who, according to Puss,^{PD} 'was earning more than the Prime Minister'.

Joan Lindsay writes^{TWC} that 'Will Dyson was doubly related to the Lindsays in that Lionel Lindsay's wife Jean was Dyson's sister and Dyson married the artist Ruby Lindsay'.

John Reed later married Sunday Baillieu, daughter of Arthur Baillieu and niece of William Baillieu, two of the wealthiest men in Melbourne society. Reed abandoned the legal profession for art to help Sunday establish the Heide gallery at Templestowe, outside Melbourne. Heide became an influential centre of the Modernist movement in Australia with Sunday and John often supporting promising young painters such as Sidney Nolan, Joy Hester, Albert Tucker, Arthur Boyd and fabric designers such as Michael O'Connell and Frances Burke, Sam Atyeo, artist, architect and furniture designer.

In Janine Burke's book *The Heart Garden*,^{HG} about the relationships formed at Heide 1 and Heide 2, Fred and Puss are mentioned several times and described as 'uninhibited, unconventional and ready to talk about anything'. Melbourne was an exciting cultural centre in the mid-1920s and Fred and Puss were involved.

Looking back over the years of knowing Fred and Puss (1956–1990), their very quiet, restrained lifestyle in Canberra seems at odds with the comments of Janine Burke and Puss on Fred's Bohemianism in the 1920s.

In her diary,^{PD} Puss quotes John Reed as saying that ‘Ward was always coming up with what seemed to me fresh thoughts about the world, about art, about our daily activities... and there was always a good deal of laughter’. And quoting Fred about commercial furniture, ‘... the serious issue of furniture needed a complete overhaul ... being shoddy, heavy, ornate and often stained to imitate imported timber’. Staining beautiful Australian timbers and coating them with high gloss French polish (a common procedure of the time) was always anathema to Fred as he wanted the grain of the timber to speak for itself—a practice he followed all his working life (see section 21, *Fred’s design philosophy*, p.191).

Through Reed’s friendship, Fred was to rub shoulders with many well-known painters,^{6A, p.42} and these contacts probably helped to mature his feelings for the visual arts, although such influences are impossible to determine, particularly with different genres far apart in materials, formative techniques and innovative impulses. Furniture requires a fundamental ‘need’ or ‘physical demand’ that is not evident in formal visual arts. It would be very hard to identify any artistic influences between his furniture designs for the Myer Emporium and any of the ‘Modernist’ artists of his time. Fred’s furniture design is too honest, too functionally derived and too unconnected with any other current art form to ‘belong’ to any specific styles of that time. Some of Fred’s contemporaries, such as Griffin, Reitveldt and Mackintosh relied very much on Modernist stylisms as the *principal generators of functional form*—an approach totally foreign to Fred’s way of thinking. While Fred’s ‘new ideas’ must have placed his work in the ‘Modernist’ camp in the public mind, with hindsight there is a world of difference in the various approaches to form.

Puss again quotes John Reed, recalling that Fred was ‘critical of the stylistic moods of his day’, stating that there was ‘so much unoriginal, poverty-stricken design that it amounted to lack of national style’.^{PD}

Fred wrote four pages of notes about this 1920s period with John Reed⁴⁶ (in a very confused order, seemingly rewritten), which make very interesting reading about their time together. Fred believed his own varied experiences in manufacturing industries were ‘the right ones for a new and very efficient kind of designer who would disregard the almost endless copying of the styles of the past (and overseas) and create something fresh and exciting’. This must have been one of the earliest of Fred’s statements about design and the training of designers. He was to produce more during his teaching of interior design at Brian Lewis’s School of Architecture at the University of Melbourne around 1948–52 and from 1956 onward in the formation of the Design Council in the ANU Design Unit office in Canberra.

Page 1

Wards & Reeds

our friendship began when I first met John Reed in 1923. He had just come back from Cambridge and planned to settle in Melbourne.

At this time I was living in a large house close to the Toorak village. The owner, a friend, proposed I should remain, find a couple of suitable friends & keep the housekeeper and the gardener on #1. I arranged this with John R and a mutual friend, Geoffrey Thomas who moved in and we all lived in great comfort.

Both Geoffrey and John were conservative at this time were bowlers, I did not utter at breakfast except to chide me for wearing my pyjamas top for a shirt. They both read the Times and often turned out for rugger practice on Sat mornings. When I got married in 25 he took a small flat in Domain Rd opposite Tristan Buesst and near to Alan Henderson. Tristan had been at Oxford when John was at Cambridge and we had a good deal of each other. This was the core of a group which, for a while included Charles Gardner.

Page 1
as substitute from *

Wards and Reeds.

our friendship began when I met John in 1923. He had just come back from Cambridge.

Before this I had been living in a studio in Toorak. ^{a mutual friend} Joan Lindsay suggested to Gerald Joske, then living alone in a large house in Mathura Rd that it might suit him to share his house. I moved in, lived in great comfort, until Joske had to move to London. He proposed that I stay on, find a couple of suitable friends to share the basic costs housekeeper gardener sales etc.

4g These four casual notes^{FN} were written by Fred in his bachelor days around 1924 when living in a large house near Toorak Village with his friends John Reed, and Geoffrey Thomas. These separate pages written in pencil give us a small, if slightly confused insight into his life in those days. Fred wrote these before he met and married Elinor Roper Martin ('Puss') in 1925 at St John's church in Toorak. Puss' diary overlaps these notes by Fred and give a descriptive account of their courting days and subsequent adventures together. They jointly provide much of the background which helps to give this story about Fred some cohesion, but Puss' diary is recommended reading for anyone interested in design and life in Melbourne around the 1920s-30s.^{PD}

John Reed was subsequently to marry Sunday Baillieu, from a well known Melbourne family and together they established the Modernist art gallery at Heide in Templestowe, Victoria. Fred mentions a friend, Tristan Buesst, barrister and solicitor who lived opposite him in Domain Road who went on to establish the Friends of the La Trobe Library, also Alan Henderson, Alleyne Zander, Joan Lindsay, Gerald Joske, George Nicholas and (Russell?) Grimwade and Robert Menzies.

Dinner and debate at the Mitre Tavern seemed to be part of their Bohemian lifestyle leading to a comment by 'C' (Cynthia?) about Sid (Nolan?) and Fred becoming members of the establishment after their radical Bohemian youth! (Cynthia Reed subsequently married Sid Nolan.)

Those interested in the establishment of Heide will obtain very detailed descriptions of life at this stimulating centre of art and artists around the 1930s from *The Heart Garden*,^{HG} by Janine Burke.

Purpose - (light on) show conservative upbringing

2 / At this time I was ^{in a near by stream} ~~position in~~ Blake & Regull
 In 27 John invited us to go
 over to Farmacia and stay with him
 at his home in Lancaster
 made possible by commission lay
 Geo. Nicholas' ex libris (old house)
 ex. Ceinwade large library - by shelf yard -
 G had own library in small room 'fishing'
 and book plates his hobbies after chemistry -
 he kindly insisted on paying me ~~£10~~ ten ~~pounds~~
 not the 3 guinea I asked then enabled us
 to afford the trip the basic wage was then
 less than £4 pounds a week
 Ask John? if include ref to Royals
 visit - pressure on his father to submit
 list of house guests to council who also
 wanted some rededication to their class
 How much about visit? house
 style of living then as contrast
 English country house state as
 against later away going informal

→ John and Sunday Reed

* notes captured Verbal Karate John begins to rebel how Finances

Wards - Leeds
 much later

* C said to Fred - is it all about
 Ed and Fred becoming 'members of
 the establishment' after their radical
 bohemian youth.

Page 3

Western Ps in his 20s days had
 been President of the Oxford Union
 and at this time was a member of
 the bohemian club ~~and debating club~~
 founded by Bob Menzies then ^{Commons} ~~community~~
 barometer. The club met at the Mitre
 Tavern for beer dinner & debate in
 that order. However as John pointed out
 soon after we would have to 'sing for
 our supper' and join in the fray after
 dinner. We both got out while there
 was time we did * - we were what
 then was called bohemian not radical in
 our attitude → not then willing to
 embrace the National Party faith

46 CONTINUED. Four casual notes written by Fred. FN

Puss recalls^{PD} that after their marriage in 1925, Fred got a job at Charles Marshall's Structural Iron Works in Fitzroy,

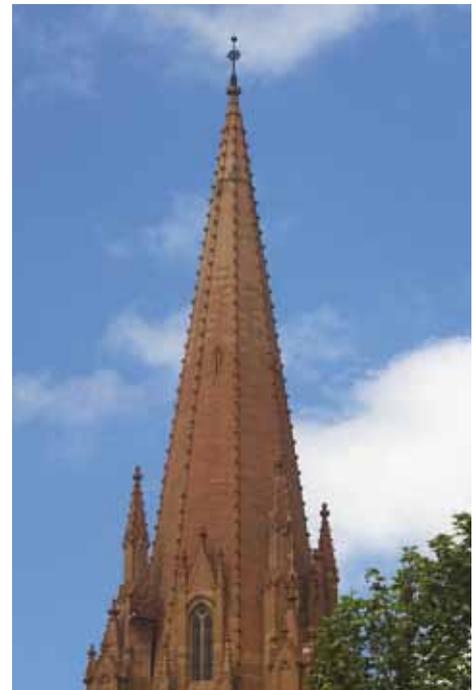
...where he learned a lot that was useful later on. ...he oversaw the putting of lift cages in high buildings that were going up. Usually the lift well was encircled by the stairway with, of course, no railing, but lots of rubble underfoot, making pretty treacherous to walk up. One time, high up on the stairs, Fred slipped and as he fell in he just managed to slutch [sic] a rope in one hand as he went. Saved, but terrified, he returned to earth.

These interesting examples of decorative ironwork can still be seen in Melbourne in the Windsor Hotel, the Melbourne Club and the Athenaeum, but are not likely to be designs by Fred.

Another trying time he had to go up and place the finial on the spire of the Church of England Cathedral in Swanson St.^{4H} For someone with an inborn dislike of heights [sic] such incidents were really trying.

This was indeed hard-won but invaluable experience for any industrial designer.

It seems likely that in the mid-1920s something made Fred Ward realise that *honesty* in design was a missing element in many of the functional items used by most people. Perhaps it was a reaction against the exuberance of the Victorian and Edwardian eras, epitomised by some of the decorative excesses in manufacturing following the discovery of cast iron (Singer sewing machines being a good example). Perhaps his training as an artist stimulated a search for elegance and gracefulness throughout his life and was to become such a vital element of his later design work.



4H Fred worked for a period with Charles Marshall's Structural Iron Works in Fitzroy and Puss records in her diary^{PD} how Fred had to place the finial on top of the spire of St Paul's Cathedral, Swanston St, Melbourne. Tough, but invaluable experience for any industrial designer. Probably between 1925–29.

5 Overseas and Australian influences

With hindsight, Fred's design story can be more clearly seen as an important link in the global history of furniture design—made all the more remarkable because, although he was a small part of a much larger jigsaw, he never went abroad until 1961 to experience or see the furniture of other countries. Even after this trip, his subsequent designs showed no variation from his very consistent approach.

Nor do I recollect seeing any overseas design magazines in the ANU Design Unit or in Fred's home. His 'style' seemed to bear no relationship to any fashion, even his very early prototypes around 1930. This is surprising because commercial furniture in the Australia of that era appeared to gain much of its 'inspiration' from Europe. Copying was rife in the furniture industry, but as Puss says in her diary^{PD} 'Fred never copied' and, having now photographed a large percentage of his work done since 1950, I believe that to be a true statement. Isolation *can* be an advantage to the really creative mind.

European influences such as the pioneers of the Arts and Crafts Movement in the late 19th century, for example, William Morris, Sidney and Ernest Barnsley, Ernest Gimson and Gordon Russell, a Cotswold furniture manufacturer in the early 20th century, also endeavoured to find an appropriate aesthetic through the medium of solid timber furniture, fabrics, wallpaper designs and other furnishings.

Art Nouveau, Art Deco, around the beginning of the 20th century gained a small foothold in Australia, particularly in architecture, but were more applied than integral and lacked the impetus and dedication of European designers. They were followed by De Stijl and Wiener Werkstätte influences which may have proved too avant garde for the Australian public at that time.

As I write in 2011, we are witnessing a resurgence of 'applied or pseudo' De Stijl in domestic architecture, showing a bankruptcy of thought about environmentally sound architecture by builders and developers. Outdated thinking is still with us apparently and stylism is rampant.

Fred, who was separated by time, distance and circumstances from the European stylistic influences, showed a design logic arising from first principles—need, materials and manufacturing economy. Ironically, these coincided well with Bauhaus thinking that artistic expression and craftsmanship could be compatible with production techniques. The Bauhaus pioneers tried to prove that, largely in an academic way, in the Weimar school between 1919 and 1933.

In around the same era, and almost certainly in his own way in Melbourne, Fred pioneered the concepts of usefulness, simplicity and economy as being fully compatible with commercially produced furniture.

Fred's design philosophy undoubtedly had some similarities with the English Arts and Crafts movement around the end of the 19th century in the sense that *similar materials, problems and design philosophies are likely to produce similar outcomes*, but with differences arising from machinery, climate, the timbers and their characteristics. Australian cabinet timbers *are* different from English timbers, requiring a different understanding and respect for their behavioural characteristics. They can warp, twist and shrink enough to make any woodworker weep; they can be very difficult to machine because of silica inclusions, and emissions from timber like black bean can seriously irritate the nasal passages—all factors which Australian designers and craftsmen eventually learn to respect.

While woodworking techniques may have many similarities around the world, Fred's designs exhibit a very practical, human quality, welcoming use and displaying warmth. Based on my knowledge of Fred and his work at the ANU, I can only conclude that what I have learned from my research into his earlier Melbourne years is that his 'style' was the natural outcome of a creative mind working from fundamentals. It is simply *good* furniture in the full sense of the word and the sheer demand for his pieces, evident around Canberra at the turn of the 21st century is testament to the public recognition of the quality he created. It has a rare quality of honesty of form and finish, letting the grain of natural timbers shine through without any false reflections such as staining and high gloss finishes. This factor alone makes his work distinctive and distinguishable from the commercial retail market.

During his Canberra years, Fred had to contend with one factor which was not so dominant in Europe—the fact that the finished furniture sometimes had to be transported over several hundred miles from the coastal cities of Sydney or Melbourne to Canberra, with its lower humidity and greater extremes of temperature. Any timber furniture from the coastal cities, which had a higher initial moisture content, would dry out in Canberra, inevitably resulting in shrinkage and loosened joints. Fred's preference for dowelled over tenoned joints was a direct result of this humidity problem, as also was his preference for seeking local manufacturers wherever possible.

Fred's practical skills coupled with a critical, balanced aesthetic sensitivity and his prolific output in Canberra alone would have put his name on the world stage and he was considered a firm favourite for the furnishing of Churchill College, Cambridge but this did not eventuate. I can only think, after many years of association with Fred, that considering all the circumstances behind every design decision, he would easily rank among the best *and most consistent* 20th century furniture designers in the world.

It would be surprising if Fred's experiences in the bush of western Victoria and his time in Melbourne before and during the Depression years did not influence his design and philosophy.^{PD}

Another Australian influence on Fred's design philosophy could well have been his wartime years with the Department of Aircraft Production at Melbourne where the Mosquito, Blenheim, Beaufort and Beaufighters were made during WW2. Cumulative structural weight in aircraft could easily become excessive and carry the seeds of failure where jointing strength had to complement member strength. The final complete element of the aircraft (e.g. wing or rudder profile) had not only to function effectively but also had to look good as an essential part of a well proportioned, elegant entity.

Such experiences must have moulded Fred's thinking toward economic simplicity of form and his training as an artist in *looking and seeing*, visualising and creating imagery would have been excellent prerequisites for a career in furniture design.

If Mies van der Rohe had not coined the quote 'less is more' (some decades later) I feel that Fred's Australian experiences would have led him to the same conclusion.

In the late 1940s Fred became acquainted with some of the more progressive Melbourne architects and their work—Brian Lewis, Roy Grounds, Robin Boyd, John Mockridge—all of whom taught design at the Melbourne University School of Architecture and were subsequently commissioned to design buildings for the ANU.

Many books, some by Fred's colleague and friend Robin Boyd, have been written about the refreshing changes being made in architecture during the 19th and 20th centuries—partly brought about by the discovery and commercialisation of new building materials such as cast iron, alloy steels, reinforced concrete, glass and plastics, each creating its own 'logical' aesthetic based on manufacturing and functional limitations. Architecture during Fred's creative period in the mid-20th century was experimenting and stretching its wings with these new forms, becoming simpler, more pure. I cannot however, believe that such Modernist architecture influenced Fred's philosophy—he was already ahead of that influence and his simple, timeless style ensured that his furniture was appropriate and stable for the whole of his career with only minor modifications.

Fred Ward was fundamentally a designer of timber furniture, with unparalleled skill in designing 'stick' chairs but with an important difference compared to other designers—his aesthetic training at the National Gallery School as an artist must have had a lasting influence on the form and the presentation of his work.

A final influence on Fred's style was the fact that, with the exception of the DC 1 chair for Fred Lowen and Ernest Rodeck (FLER), he never had the opportunity to experiment with the high production techniques which were available to Alvar Aalto and Michael Thonet. Fred's field was almost entirely small batch quantity work which had its inherent limitations. He undoubtedly recognised this and wisely stayed within its limits, but rather than limit his creativity in conceiving different forms of furniture, it caused him to refine his simple subtleties. This was part of his consistency.

6 The emergence of Fred the furniture designer

The Depression period around 1929–33 was a time of emergence for Fred and Puss that determined their life’s direction and brought new friends.

It must have been around 1929–30 that Fred and Puss moved to what is now known as Eaglemont, near Heidelberg, where Walter Burley Griffin had designed his Mount Eagle and the adjacent Glenard Estates about 1916. These were two of Australia’s earliest examples of garden suburb design and contain several houses designed by Griffin and his wife Marion. This area became very popular with architects and artists, including some now famous names—architects Robin Boyd, Desbrowe Annear, Frederick Romberg, and artists Tom Roberts, Arthur Streeton, Charles Conder, and Frederick McCubbin—as the residential centre of the Heidelberg School.

No. 21 Glenard Drive, known as the Lippincott house,^{6b} is Melbourne’s earliest and possibly best domestic example of architecture inspired by Frank Lloyd Wright, imported by Walter Burley Griffin and popularised by his employees, Lippincott, Bilson and Nichols.

Puss mentions^{PD} that their neighbour had one of the several Griffin cottages on the Glenard estate (she did not specify which one). Other more traditional suburban houses of the time may well have been similar to the house.^{6c}

The move to Eaglemont was most likely the start of Fred’s lifelong experience with furniture design—arising, as is often the case, from personal need.

The inter-relations of friends, colleagues and institutions in this period became complex, so to simplify this I have drawn a chart of Fred’s circles of interest^{6a} showing the people involved in the first half of Fred’s life in Melbourne from 1900–50. They cover a wide range of very well-known and interesting people with a fair degree of intersection so this must have had a significant influence on Fred’s design philosophy.

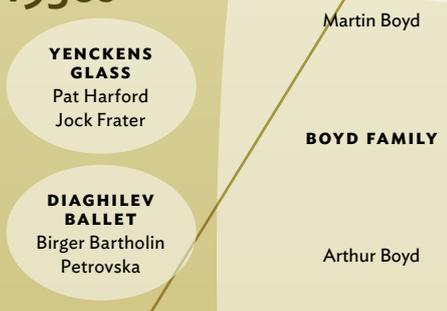
I met Eric Nichols in his office in Spring Street Sydney shortly after I arrived in Australia in 1947 (my sponsor, Marjorie White, worked for Nichols as an architect). Nichols carried on the aesthetic style of Wright and Griffin in the Willoughby incinerator and later the Canberra Incinerator, now so well hidden in the Westbourne Woods, part of the Royal Canberra Golf Club.

The Melbourne years: Fred Ward's friends, colleagues and circles of influence, 1900–52

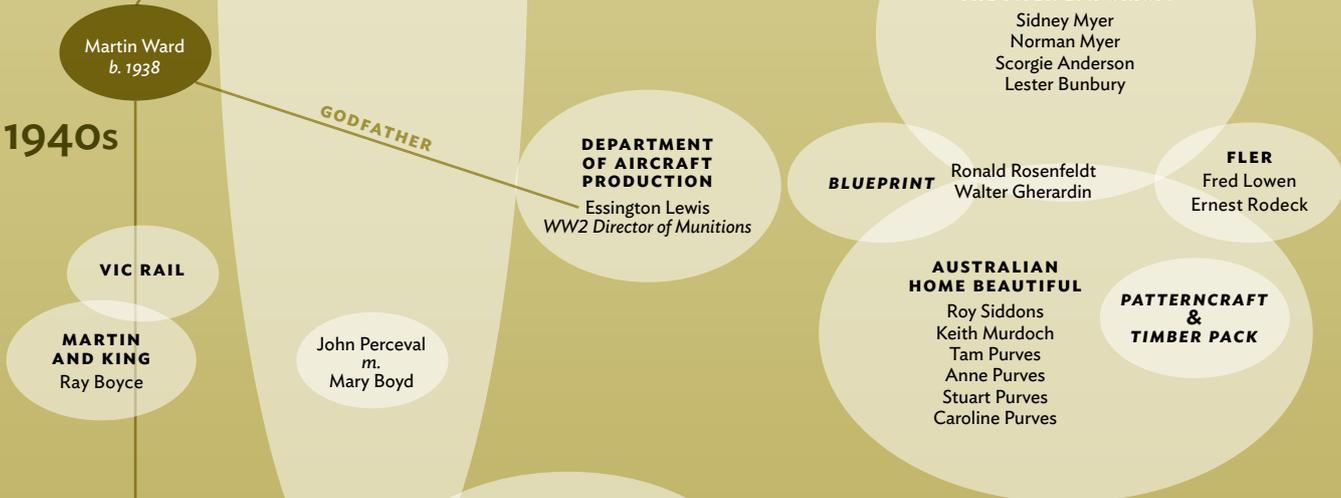
1920s



1930s



1940s



1950s





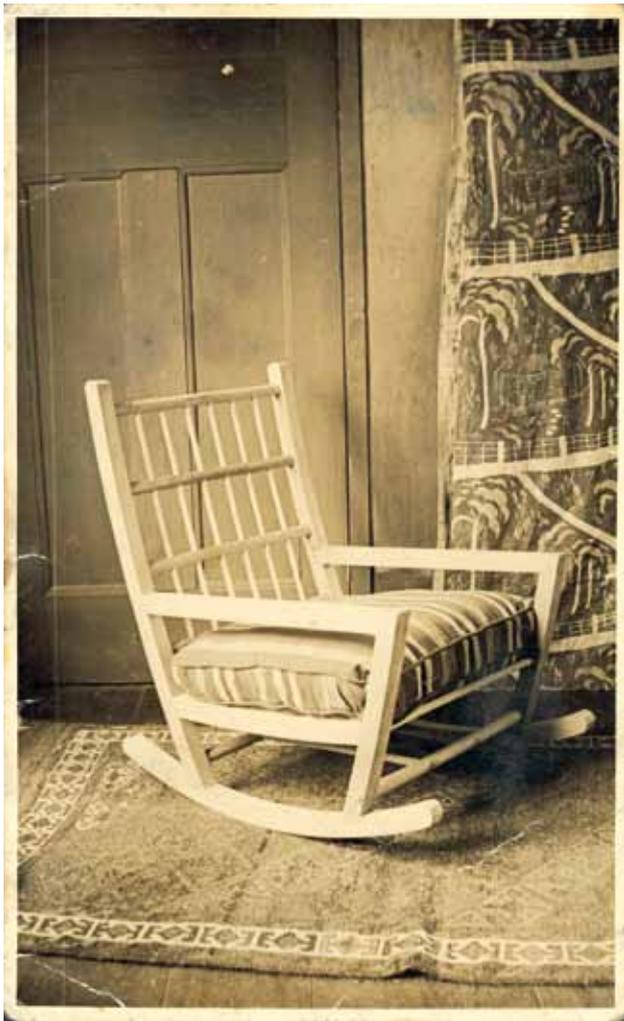
6B The Lippincott House designed either by Walter Burley Griffin around 1916–20 at 21 Glenard Drive, Eaglemont, Melbourne or by his assistant Roy Lippincott.

It shows several atypical features for houses of that period, such as the splayed abutment walls, patterned brickwork, diagonal glazing bars and a simple, bold form. These features, show some similarities to the style of Frank Lloyd Wright, USA whom Griffin worked with before coming to Australia.

Puss and Fred's house was also in Glenard Drive (number untraceable) and several well-known creative people resided in this area (see main text).

6C Typical Edwardian house in Heidelberg, Victoria. Most likely built around 1900–1910.





6D Rocking chair, probably made by Fred after their move to Glenard Drive, Eaglemont around 1930–32. Items around the chair would be compatible with an Eaglemont house of around that time. The hanging fabric was designed and printed by Michael O’Connell a friend of Fred c. 1932 and Prof. Edquist says it portrays ‘A hut in the trees’, but the subject is different from Fred’s ‘Hut in the trees’.^{4b, p.29}

The chair may possibly have been seen by the Myer representatives before Fred was asked to set up the Myer Furniture Design Studio, but I have no evidence that Myer put this chair into production.

It may well be the only rocking chair Fred ever designed, but its departure from the more common Thonet bentwood rocking chairs, was quite significant.

Its restrained structure contains the seeds of Fred’s future style, designed to be made using commonly available woodworking machinery. Note the subtle bow of the side seat rail between the straight arm and the very curved rocking rail, also the gentle curve of the back posts. These curves have the effect of softening the overall form of the chair, especially as these two planes (seat and back) are the ones most in contact with the body—if they were all straight the chair would have a harder, less welcoming appearance as seen in the angular arms—front legs joint.

Was a back cushion intended?

6E Fred on one of the chairs he probably made for the Eaglemont house around 1930.

It shows a significant departure from the common style of that era, with its simple lines, elimination of unnecessary structure and no hint of applied decoration.

The lumbar support in the lower part of the back shows Fred’s very early recognition of the emerging science of ergonomics or ‘human engineering’ as the Americans claimed it as a science during WW2—more than a decade later.^{DD}



Puss recalls^{PD} that:

Fred set out to make furniture more suitable for the new place— simple well proportioned pieces which fitted well into the rooms... pieces were made as needed, little stools and tables, a rocking chair and soon it started to look like a home...as friends called in they liked our place and loved the furniture and started to ask if Fred would make a piece for them. Knowledge of this spread until as Christmas came they came out in droves and bought things right and left, bought our seats from under us, until no more could be spared.

At this time also, the Arts and Crafts (Society) had asked Fred to furnish a room for their December Exhibition and when this was done they had photographs taken and gave us some of these. Suddenly, Fred thought, 'if these people like my things perhaps I could sell some to a shop, maybe even a dozen', we decided to try.

Their tentative showing of photographs, drawings and prototypes from the exhibition to the Myer representatives Mr Roberts and Mr Watt ended with Puss's very descriptive phrase '... a whacking big cheque and a vision of a glowing future'.

Fred's domestic prototypes were not completely recorded, but those in the photos shown here^{6D,E,F} seem likely to have been among them.

These formative years appear to have convinced Fred that his future direction lay with furniture design and it was presumably through John Reed that he and Puss became involved with the Heide group at Templestowe which included Herbert Evatt and his wife Mary Alice.

Fred had already become friends with Richard (Dick) and Maie Casey, the latter being an artist he had met at the National Gallery Art School. They later became Sir Richard Casey, Governor-General of Australia and Lady Casey and remained lifelong friends as Richard rose in the parliamentary and diplomatic ranks.

Fred was later to design furniture for Sir Richard and for Lady Casey during their occupancy of Admiralty House in Sydney and Government House in Canberra when Sir Richard was appointed Governor-General in the 1960s (see section 18, *Private practice*, p. 163).



6F A very early chest of drawers by Fred, possibly made by him for the Eaglemont house around 1930.

It shows a very early use of drawers with sloping fronts to provide integral finger pulls—perhaps the first in Australia to eliminate the use of drawer handles—Modernist philosophy at its best. Compare this ‘minimalist’ approach with Fred’s cupboard detailing for the Reserve Bank and the National Library in the 1960s in which he achieved the ultimate of no drawer or door furniture at all. ^{19E,G,H, P.173-4}

Also the use of butterbox dovetailing at the four corners of the carcass—an honest expression of construction which had a small decorative function—most unusual in that period.

The blackwood drawer unit and the two portraits of the Ward grandparents are in the collection of Martin and Robin Ward.

The wide floorboards were probably in well-seasoned pine, a common housing feature at that time.

7 The lively 'thirties

The 1930s proved to be a decade of excitement for Fred and Puss—discovering a talent for furniture design, moving to Eaglemont, buying a car, opening a shop, starting a Furniture Design Studio in the Myer Emporium, enjoying the de Basil Bolshoi Ballet and cartooning. In the middle of all this, Martin, their only son, was born in 1938, followed by a major but related change to Fred's occupation as a result of WW2 around 1939–1940. The Depression years were now behind them.

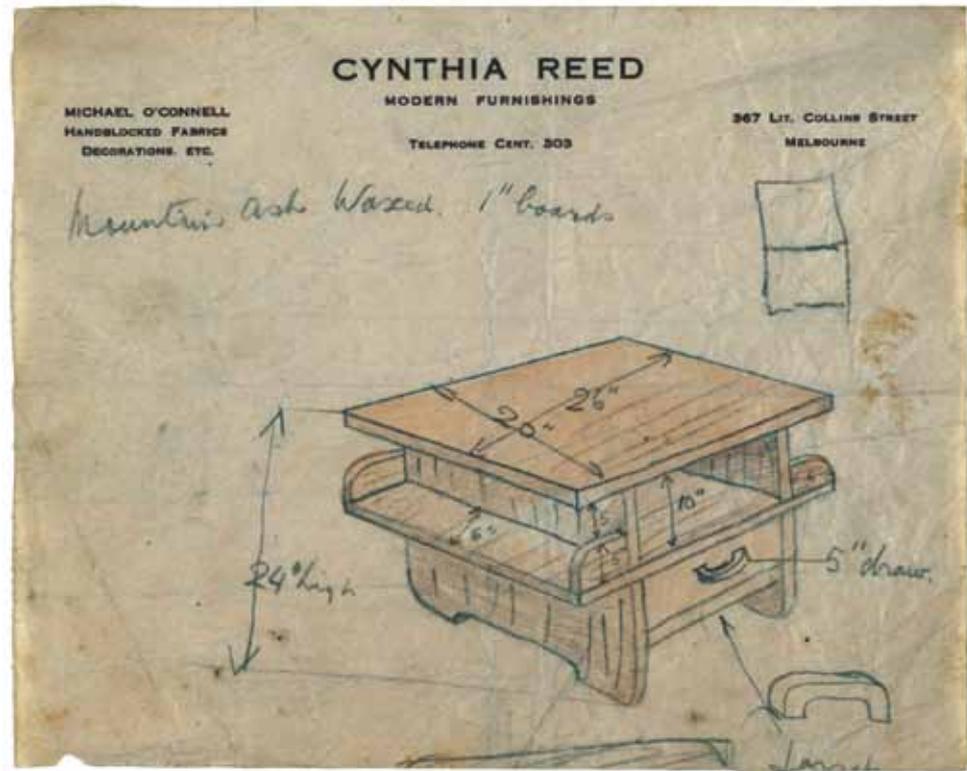
Puss recorded several of these moments in her diary, but regrettably did not supply many dates. Although Fred produced many drawings of projects, he did not always put dates on them, so the sequence is a little elastic.

According to Janine Burke's *The Heart Garden*,^{HG} 1932 proved to be a salient year for Ward: he established his own shop at 52a Collins Street from late 1932 to late 1933, which Robin Boyd noted '*displayed Melbourne's most innovative design, proving to be popular, at least with the discriminating public*'. In this venture Fred was assisted by Cynthia Reed (John Reed's sister) who later took over the second shop he moved to at 367 Little Collins Street when Fred was offered the job of establishing a furniture design studio at the Myer Emporium sometime around 1933.

Reed's letterhead for the new address^{7A} included Michael O'Connell (1898–1976), an English fabric designer from Darwen in Lancashire, who also designed and made large garden pots in those troubled financial times. Sam Atyeo (1910–90), a Melbourne architect, painter and furniture designer, exhibited furniture in her shop, such as the rough sketch of a table on the letterhead. He was also some kind of diplomat, being associated with Dr H.V. Evatt and served overseas with him for some years.

Cynthia Reed married Sidney Nolan after the establishment of Heide at Templestowe, Victoria as an artists' meeting place. Puss and Fred are mentioned several times in *The Heart Garden*, as '*uninhibited, unconventional and ready to talk about anything*' at Heide events.

7A Letterhead for Cynthia Reed's shop at 367 Little Collins St., Melbourne, c.1934. Cynthia was associated with Michael O'Connell in selling his fabric prints. This letterhead shows a rough sketch for a low table by Sam Atyeo, architect and furniture designer who also sold through her shop.



7B The Unit chair, designed 1933-4, to be placed side-by-side as units to make a larger furniture element in a large room. It shows an unusual rectangularity not evident in Fred's later chair designs in which he departed from overt verticality and horizontality, imparting much more gracefulness and human quality. However, the parallel sides in the *Unit* chair would be logical to suit the adjustable reclining mechanism for the seat and back. Note the 'butterbox' finger jointing at the arm/front leg joints, a common feature in many of his later works. The colour contrast in the joint gave a discreet decorative element due, in this case, to the contrast between blackwood end grain and face grain.

The cushion covers were possibly by Michael O'Connell, as Fred was still associated with him and Cynthia Reed through her shop in Lt. Collins St.

Significantly, in 1931 Myer had bought the Melbourne firm of W.H. Roche and Co.,^{YSM} in that way entering the field of furniture manufacturing. The offer to Fred to establish a Furniture Design Studio at the Myer Emporium in Bourke Street was an astute move (probably by Sidney Myer) with an eye to future trends. It eventually enabled Myer to establish a sound reputation for good quality ‘modern’ furniture. Other designers who joined Fred at various times went on to establish themselves in the design profession, including Ron Rosenfeldt, Peter Hutchison, Lester Bunbury, Mary Guy-Smith, Peter Barlow, Sue Dickenson and Scorgie Anderson (who was to join the ANU Design Unit in Canberra around 1963).

The Unit chair^{7B} showed good visual use of the butterbox dovetailing, made visible by clear finishes rather than painting by the use of a low-gloss clear finished Australian hardwood (Tasmanian blackwood in these photographs). The hinged seat and back form an easily adjustable reclining mechanism, allowing a small range of comfort adjustment. This common technique in England was attributed to William Morris and Phillip Webb, both active in the Arts and Crafts Movement in the mid to late 19th century. It is quite possible that the bold striped upholstery fabric was by Michael O’Connell.

It would seem that Fred designed ranges of furniture for the factory to produce as standard ‘floor’ items and he also designed specific settings for some Myer clients in their own homes. A few of Fred’s sketches for settings are in the archives of the Powerhouse Museum in Sydney, some of which are shown over the page.^{7C,D}

In all of these sketches it is easy to see that Fred’s design simplicity was clearly established at this early stage of his career, showing that he was remarkably consistent in his thinking throughout his life.

When Fred took up his opportunity in the Myer Emporium, Australia was just beginning to emerge from the Depression and Fred’s simple approach to basic furniture design may have been what was wanted by the buying public. This, plus the establishment of what may well have been the first commercial furniture design studio in Australia created a sound reputation for Myer furniture over the next 20 years. The ‘Heritage Range’ was, I believe, a Ward/Myer promotion but, despite many enquiries, I have been unable to locate any evidence of when it was publicised. It must have been just after WW2.

It would seem that Fred never repeated his experiment of painting furniture, exclusively using clear waxed Australian hardwoods to reveal their beautiful colours and grain patterns.

I have never been able to establish the exact nature of Fred’s employment at the Myer Emporium in order to establish the copyright applicable to his sketches. My apologies to Coles-Myer if I have transgressed any rights they have in this matter. Fred never bothered about such things, believing that any copier obviously had good taste(!) and by so doing would possibly be helping to raise the standard of manufactured goods in Australia (an initiative that Fred pursued with vigour in 1956 when he established the IDCA—see section 15, p. 135). It is significant that while Australian manufacturers in those days were only too happy to copy overseas designs, no one to my knowledge ever reproduced Fred’s Australian designs for commercial gain (except for one in Canberra). Myer clearly established a market advantage in the early 1930s with Fred’s designs, but it was rudely interrupted by WW2 and the impetus was not maintained after the war. I could find no Myer records that explained the demise of the Myer Design Studio.



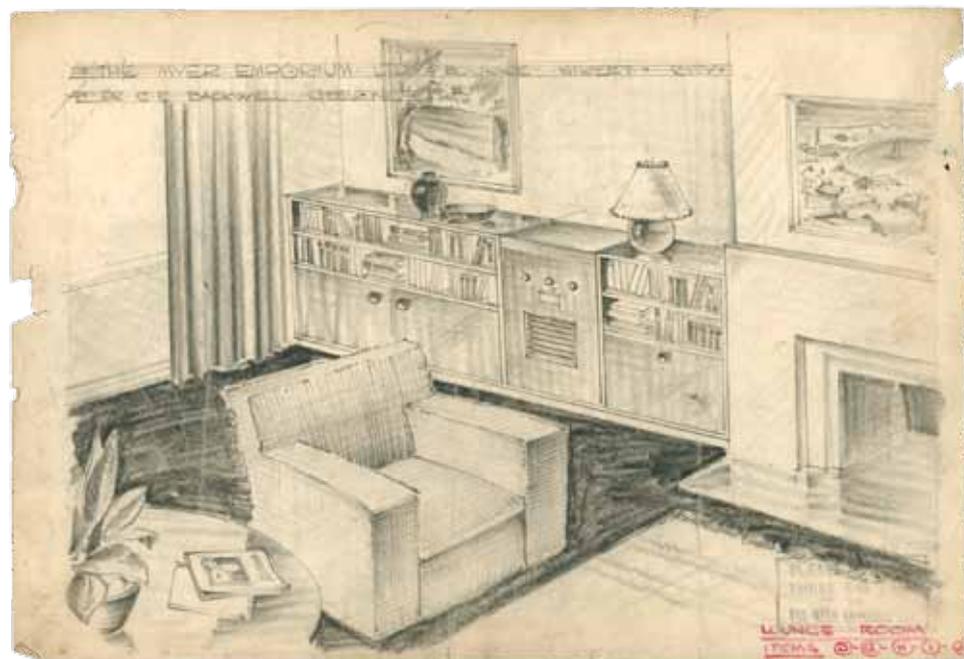
7c This typical sketch by Fred illustrates a potential furniture grouping for a client of the Myer Emporium around 1932. It is likely that this sort of designer service was not offered by any other department store in Australia.

This sketch shows a greater confidence by Fred, not only in the design and grouping of furniture but in the manner of his pencil sketching. His perspective was always impeccable and I never saw him set one up mechanically—he had an inherent drawing skill which helped his clients visualise furniture arrangements realistically.

The furniture itself shows that his simple style was well developed around the mid-1930s and consistently used throughout his career. The rounded corners on the bookcase and the chair arms may have been a small concession to ‘Modernism’ but were never used again by Fred after University House (1950–54). The chair arms were rather wasteful of solid timber and he must have felt that such wastage was too uneconomical.

7d Commissioned through the Myer Emporium from Dr C.E. Backwell, Geelong in the mid-1930s to design unit furniture to house books, radio and cupboards. The Furniture Design Studio within Myer enabled the designers to design not only new furniture items but to use other items such as carpets, curtains, flower vases that could also be bought off the shelves in Myer or create new designs.

His ability to create realistic pencil sketches of how the various items fitted together and looked ‘lived in’ would have impressed clients and facilitated sales.



Although Fred was embracing the commercial production of his furniture concepts with the Myer Emporium he had yet another side to his life—using his drawing skills during the 1930s to freelance his illustrative drawings from various theatrical events around Melbourne with various papers and magazines. Puss’s diary^{PD} indicates that Fred continued to make these illustrations during those financially difficult times and presumably received free tickets to performances for that purpose.

She described ‘... how Australians ... always loved ballet since the days of Pavlova’s tour’, reminding us of an earlier Diaghilev tour when Fred had drawn a caricature of Pavlova.^{7E} It is a bold linocut, hand coloured.

The de Basil company made a return trip to Melbourne later in the 1930s with the Ballets Russes and Puss and Fred made friends with some of the corps, inviting them to their home and having a great time in many parties well documented in Puss’s diary.^{PD}

In one incident Fred became actively involved with the *Firebird* production, taxing his artistic skill to the limit. Puss records^{PD} that the huge canvas backdrop expected by ship failed to arrive, apparently having been mistakenly stowed on a vessel destined for America.

Billy Bartholin, the Danish stage designer for the *Firebird*, roped in Fred and some of his artist friends for the emergency, tackling a huge 40’ x 30’ canvas laid out on the stage floor and, from a rough memory sketch by Bartholin managed to resurrect a more than passable duplicate backdrop *in one day* which satisfied the audience.^{7F} Free tickets were gratefully given to all the painters.

At some other time in the 1930s Fred must have been asked for a commemorative illustration of a T-Square Club lunch.^{7G} Fred created a pen and ink sketch of a group of successful Melbourne architects of the time, complete with names.

The T-Square Club was a group of architects who were also members of the Savage Club. They met regularly for lunch, discussion and entertainment in Bank Place, Melbourne. The caricatures are perceptive and finely drawn in this grouping by Fred, but the place of publication is unknown. It has some technical similarities to his earlier linocuts, but the lettering, brushwork and fine detailing indicate it was done in pen, ink and brush—the only extant sketch of this kind by Fred. He was much more facile with a pencil, so this cartoon shows evidence of his



7E Pavlova, linocut by Fred Ward. Anna Pavlova appeared in the Ballets Russes in Melbourne in 1926 and 1929 and Fred created this linocut with hand coloured prints from one of these visits.

Fred and Puss were to meet up with Bartholin again in 1961 when they visited Copenhagen. Bartholin’s sketch is now in the possession of Martin and Robin Ward.



7F Esquisse for the emergency stand-in backdrop for Stravinsky's *Firebird Suite*, Melbourne, 1936 by Billy Bartholin.

This original sketch by Billy Bartholin, dancer and designer for the *Firebird Suite* in the 1936 Ballets Russes was painted from memory when it was realised that the original backdrop would not arrive in Melbourne on time, having been put on the wrong ship in England and on its way to the USA instead of Melbourne.

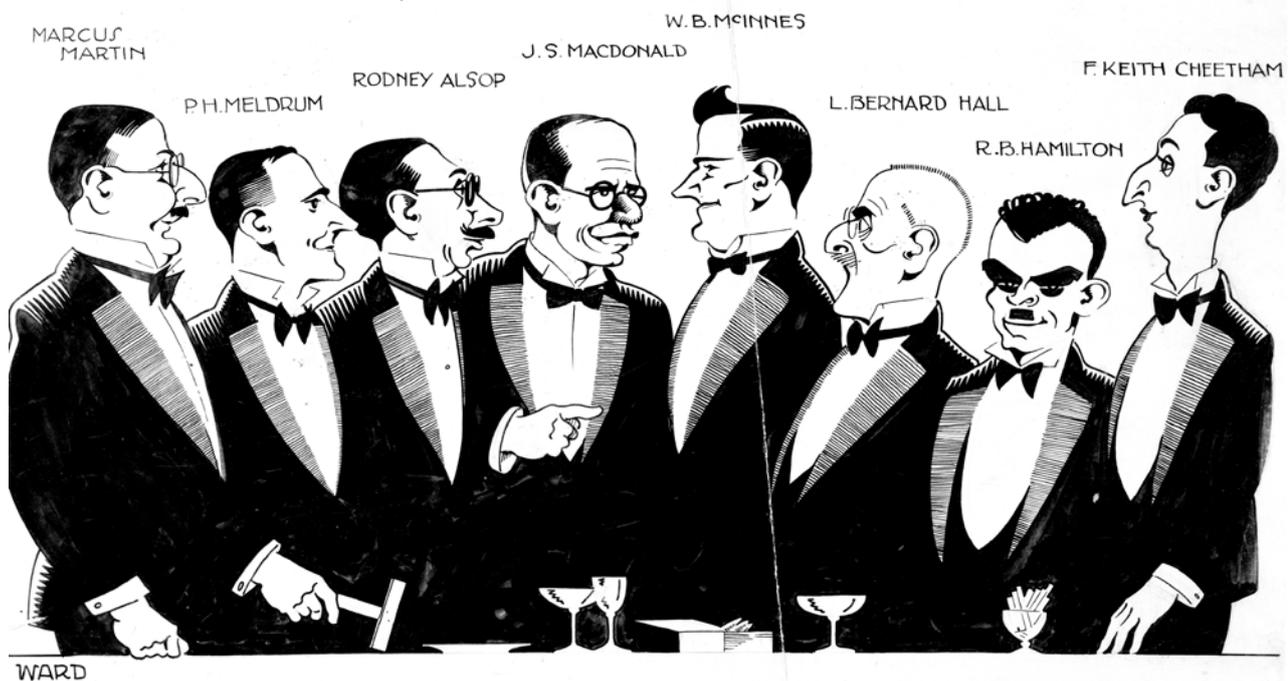
The sketch and the full backdrop were apparently made, squared off, sketched out and overpainted on a spare backdrop on the theatre stage in one day by Fred and friends—a significant feat. Full description in *Puss' Diary*.^{PD}

Inscription and working calculations in bottom margin reads: *To Frederick from Billy Bartholin, Melbourne, '36*
 $17 \times \text{FULL SIZE AND } 1\frac{1}{2}' = 30'$

7G The T Square Club was a club within a club—a group of Melbourne architects who frequented the Savage Club in central Melbourne, meeting for lunch, discussion and entertainment (in that order).

This shows Fred's perceptive skills in the caricatures of the members. The one on the right, Keith Cheetham, is mentioned in Joan Lindsay's book *Time Without Clocks*.^{TWC}

Note the Tee square gavel held by P.H. Meldrum.



versatility. His pastel sketch^{11H, P.94} of a scene near Bermagui gives evidence of this, probably around the early 1950s.

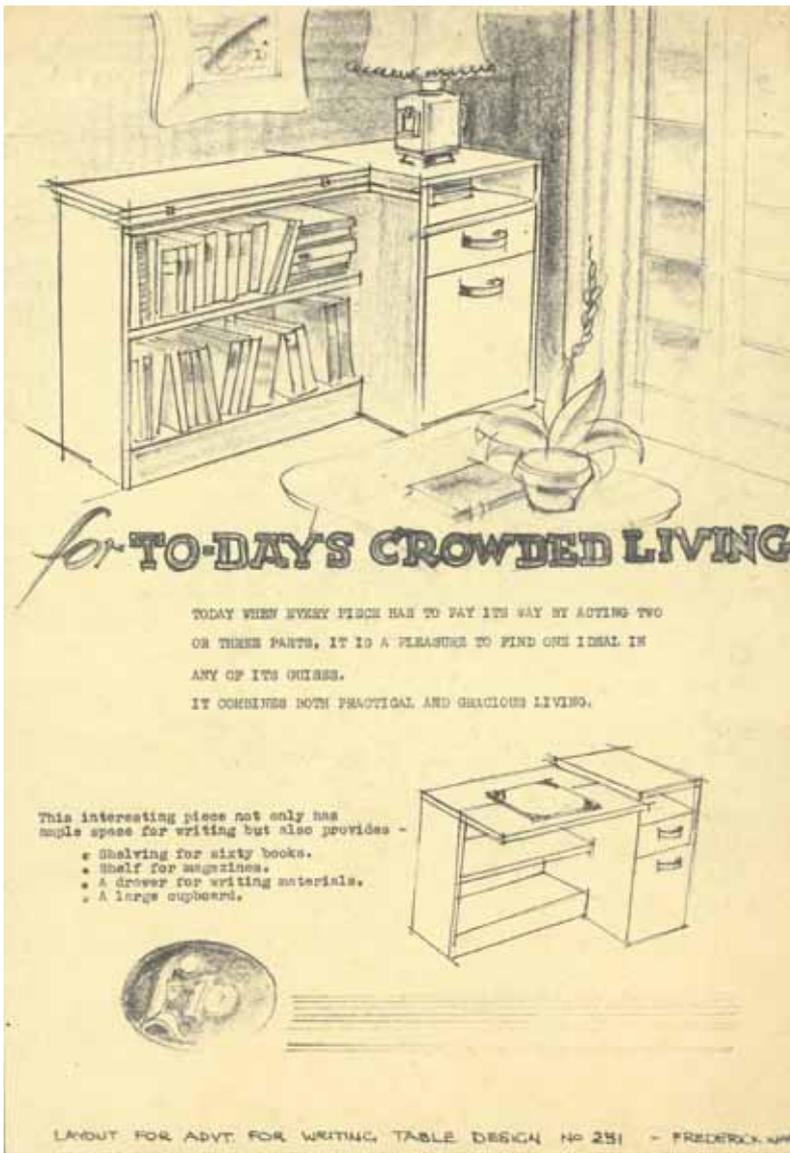
Fred's freehand pencil drawings became extremely useful in the Myer Design Studio. The undated sketch^{7H} was a rough layout for a Myer advertisement, showing his ability to combine an explanatory sketch with his own lettering in pencil and typed copy. The design of the unit shows an already well developed personal style recognisable in his later work.

Through John and Sunday Reed's friendship, and their establishment of Heide 1, Fred had the opportunity to rub shoulders with well-known artists, such as Sidney Nolan, Albert Tucker, Joy Heston, John Perceval and fabric designers such as Michael O'Connell, Frances Burke and architect, artist and furniture designer Sam Atyeo and others. Through them Fred may have matured his feeling for shapes and forms but such influences are impossible to determine, particularly with different genres so far apart in materials, formative techniques and innovative starting points.

In *The Heart Garden*,^{HG} Fred is described by John Reed (quoted by Puss in her diary)^{PD} as saying that '*Ward was always coming up with what seemed to me fresh thoughts about the world, about art, about our daily activities...and there was always a good deal of laughter*'. Reed's comment seems to echo that of Joan Lindsay.^{TWC}

The end of the 1930s brought the hard realities of WW2 which, in a curious way determined Fred's rather unusual war service. By 1939 he was getting into his stride at the Myer Emporium with a fine team of designers who were also to make their own imprint on Australian design.

I can only presume that most or all of the design team in the Myer Furniture Design Studio went into the services and that it closed for the 'duration'.



7H This mid-1930s pencil draft sketch for a Myer advertisement by Fred was for a storage item which could be easily converted to a writing desk. In the days when photography was not so flexible as it is today, items could be economically shown in use by sketching. One of these items was recently discovered in Gilles Bernardoff's Antique shop in Braidwood, NSW, still in good order.



7I Ron Rosenfeldt about 1939, when he worked with Fred in the Myer Furniture Design Studio. Returning from the war in 1946 Ron rejoined Fred at Myer and in 1952 when Fred left for Canberra he established his own industrial design practice in Carlton and later in partnership with Walter Gherardin, architect. With Fred, he was one of the founding fathers of the Society of Designers for Industry (later to become the IDIA) and the IDCA (later Chairman).

He was inducted to the Hall of Fame of the Design Institute of Australia in 2011.

A photo⁷¹ shows a young Ron Rosenfeldt in the Myer Furniture Design Studio with his professional tools of those days (probably around 1939)—simple drawing board, t-square and set squares. There are no drawing machines, no computers, no faxes or photocopiers, no mobiles—only blueprints, typewriters and fixed telephones.

I came to know Ron and his wife Beryl as friends and have great respect for his methodical approach to social design organisation from the beginning of the Society of Designers for Industry (SDI) and the subsequent Industrial Design Institute of Australia (IDIA) and the IDCA in 1956—right up to the time of the latter’s demise in the early 1980s. I am still in touch with his son Peter who made a significant contribution to this book. The (I)DIA continues to grow from strength to strength as the premier professional design organisation in Australia (see section 15, *Design Council*, p. 135).

Fred Ward was honoured by induction into the DIA Hall of Fame in 2010, not only for his unique design contribution to Australia, but for his pioneering *social* design in establishing the institutions just mentioned.

The 1930s were undoubtedly lively years for Fred and Puss.

8 The war years

World War 2 had the effect of decimating the Myer Furniture Design Studio. Ron Rosenfeldt^{8A} and Scorgie volunteered for the Army. Fred appears to have been seconded from Myer to the aircraft industry.



8A Ron Rosenfeldt in his AIF uniform around 1939. Ron returned to civilian life around 1945–6, rejoined Fred in the Myer Design Studio and gave generously of his spare time to the promotion of good design in Australia, playing a leading role in the formation of the Design Institute and the Design Council for another 40 years.

Britain could not spare any fighting aircraft at the end of 1939 (invasion from the north by the Japanese was regarded as a real threat and did, of course happen later), so there was an urgent need for Australia to develop its own aircraft manufacturing industry, made even more urgent in 1941 when Japan entered the war. Australia did not even have any aluminium smelting or fabricating industries so timber had to substitute wherever possible—wooden propellers and frames were made.

Fred, by this time well established with the Myer Emporium, had acquired a wide knowledge of the characteristics of Australian furniture timbers, especially coachwood which had very useful physical characteristics for the wooden framed Mosquito.^{8B}



8B The English De Havilland Mosquito, DH98, a wooden framed fighter bomber, proved to be such a versatile fighter-bomber in Europe during WW2 it was thought to be an ideal aircraft for Australian conditions, but it would have to be made in Australia. Because of Fred's knowledge of Australian timbers he was seconded from Myer in 1940 to assist in producing the Mosquito. Fred acted as Liaison Officer to coordinate the manufacture of the various parts of the Australian Mosquito which were made by firms around Australia.

Ricketts and Thorpe made the wing spars (the main structural beams which cantilevered out from the fuselage) and also the laminated wooden propellers.

Puss also records^{PD} that Fred did some work on the Beaufighter 'which Britain was letting us make' (Australia eventually made 364). The Beaufighter went on to serve as a deadly anti-shipping weapon, and to earn the nickname 'whispering death' over the jungles of Burma.



8C Ricketts and Thorpe, a well established furniture making firm in Sydney were chosen to make the main spars of the Australian Mosquito and the wooden laminated propellers.

This photo shows many spars under the various stages of construction involving many men and women and shows the large spaces needed for laying the spars out during laminating and glueing of

the very strong laminated box girders. These were new techniques and called for new skills in structural analysis and construction.

These two photos were kindly supplied by Alan Perry who worked at Ricketts and Thorpe in Rockdale, Sydney, who went on to make the conference seating for the Australian Academy of Science, c. 1959 (see section 16, *Australian Academy of Science*, p. 145).

Puss's diary^{PD} gives a more personal view of Fred's war effort:

Fred joined Aircraft Production down at Fishermans Bend, but also had an office in the Victoria Barracks in St Kilda Road. He had heard that an aircraft was to be made in timber—the 'Mosquito', and as he knew about timber he thought he might be of use. When he joined them there were only three men there and for some weeks no one paid them, the government having not yet caught up with things yet. When they did pay, Fred received 150 pounds more than he had been getting at Myers....

Later on, the Beaufort, Blenheim, Beaufighter range of aircraft and the American Mustang were built in Australia, all of which had played a significant role in the European war zone and were now needed in Australia—but would have to be made here.

The *Australian Dictionary of Biographies* contains this reference:

In 1942(?) Ward's experience was sought for the war effort by the Department of Aircraft Production for the manufacture of the timber-framed Mosquito aircraft at Fisherman's Bend, Melbourne. Later he took charge of plans and drawings for the Beaufighter instituting the continuous modifications sent from Britain. Appointed Liaison Officer, he worked between the Commonwealth Government, the RAF, the RAAF and the USAF creating a unit to handle the clarification of all drawings and manufacturing data.

The designs of these aircraft were sent from England and one of Fred's projects, as he recounted to me one day in the office, was to produce full-size profiles of the elevations and sections of the aircraft (presumably the Mosquito) on the hangar wall with accurate outlines of all structural members of the wings, fuselage and empennage of the aircraft. From this assembly each piece of timber could be accurately shaped and fitted together with appropriate joints. I have not been able to substantiate this story but it is supported by some photographs I have just received from Alan Perry who used to work at Ricketts and Thorpe, Rockdale, Sydney who were contractors to the Commonwealth Department of Aircraft Production (DAP) for the main spars of the Mosquito wing.^{8c}

This was really new territory for Ricketts and Thorpe who were more used to making furniture and radio cabinets and I have no doubt that Fred's liaison work was vital to success in farming out components to contractors several hundred miles away.

One item which Fred used at Fishermans Bend was a bowstring device for the drawing of smooth curves with long radii on the drawing board which Fred brought to the ANU Design Unit to help with designing chairs to full-size. (This device is described and sketched in section 23, *Designing and making*, p. 209.^{23B})

To coordinate the war effort in Australia, Essington Lewis, Chairman of BHP, had been appointed Director-General of the Department of Aircraft Production and Chair of the Aircraft Advisory Committee by Prime Minister John Curtin and subsequently became the inaugural Chair of the IDCA. (See section 15, *Design Council*, p. 135.)

Information about Fred's wartime years is very sketchy, despite several attempts to contact members of the various organisations and government departments that became responsible for building the aircraft needed for Australia's defence.

Tony Clark, current Secretary to the Beaufort Restoration Group in Melbourne indicated to me in an email of 8 February 2010 that Fred may have become an RAAF officer, but I could not substantiate this. He kindly sent me a web reference to papers^{DHM, BRG} which deal with the problems faced by DAP in substituting Australian timbers for metal and about the testing of aircraft frames.

A final extract from that paper is worth repeating as it sums up the importance of that war effort, showing what Australia was capable of when faced with a dire situation:

...To have produced 3,500 aircraft of nine different types and nearly 30,000 aircraft engines of three types, must, notwithstanding the mistakes and miscalculations that occurred, be ranked among the great achievements of Australian industry, especially when it is remembered that the fighter aircraft was one of the most highly complicated examples of precision engineering.

The real facts of this fascinating period in Fred's career are shrouded in mystery or are regarded as 'war secrets', but there seems to be no doubt that Fred played a significant role in the war effort, acting as a liaison officer, not only between the various contractors but also the RAAF, the RAF and the USAF.

There are two snippets of relevant biographical information worth recording from this interesting period.

Fred once told me a story about Sir Lawrence Wackett, an aeronautical engineer regarded as one of Australia's aviation pioneers who worked at DAP during WW2. (Wackett subsequently designed the Wirraway fighter, a highly successful training aircraft for the Empire Air Training Scheme.)

Fred and I were discussing the relationship between *function* and *form* and he mentioned his wartime association with Wackett at the DAP. Wackett apparently did not like a rudder outline that a draftsman was drawing on his drawing board. Despite the aerodynamic calculations Wackett took his pencil and sketched in a different outline, saying 'That looks a lot better—do it that way'. So much for calculating an effective form based upon its function!

Wackett himself went on to play a leading role in the design and manufacture of Australia's first car—the Holden—shortly after WW2.

Mustangs (US), Sabres (UK) and Mirages (Fr) were also produced under licence in Melbourne, so Fred as Liaison Officer must have been very busy.

Fred eventually returned to the Myer Emporium around 1946 but found that most members of the Myer Furniture Design Studio were hoping to start their own design practices. The excitement of peace seemed to be propitious for 'a new start' in which 'good design' (the latest buzz word) could play a significant role. Ron Rosenfeldt branched out in 1952 when Fred left for Canberra. Scorgie Anderson had served in the Australian Army, being captured by the Japanese in Malaya, spending a few years in the infamous prison camp Changi, near Singapore. He later joined the ANU Design Unit in the early 1960s and we worked well together.

Being a British migrant 'Pommie' in 1947 I knew nothing of the backgrounds of Fred, Ron and Scorgie, and interestingly none of them mentioned their wartime experiences during the numerous discussions I had with them. If only I had known I was going to write about them some 50 years later—what lost opportunities.

Many questions have arisen in writing this story whose answers are unlikely to be revealed. For example, Martin, Fred's only child, was born in 1938 and Essington Lewis agreed to be a godfather to Martin. Lewis was appointed Director of War Munitions for the government, including responsibility for the DAP, by the Prime Minister John Curtin, at Fishermans Bend in Melbourne. This was most likely around 1939–40.

The two dates seem to indicate that Fred and Puss knew Lewis about two years before Fred's time at DAP, yet I have found no reference anywhere to the possibility of an earlier friendship. Did Fred know Lewis before DAP—and how did Fred come to be appointed as a Liaison Officer for DAP? Did Lewis have anything to do with it?

It is also interesting that Fred's initiation of the formation of the IDCA in 1956 (when I first met Fred at ANU), resulted in Lewis becoming its inaugural Chairman in 1957–8. Did Fred have anything to do with that appointment? I had always assumed that Sir Roland Wilson or Dr H.C. Coombs might have persuaded Lewis to take on that role as the most significant Australian industrial leader of his day.

Intriguing questions—but no answers.

9 A new design age dawns: 1946–1950

Fred returned to the Myer Design Studio immediately following WW2, involving a social readjustment to peace. His practical nature led him to think of a quite significant design contribution for social benefit. Servicemen and women were returning to re-establish their domestic lives—Ron Rosenfeldt rejoined Fred, as did Scorgie Anderson, who had suffered the horrors of Changi Prison after the fall of Singapore.

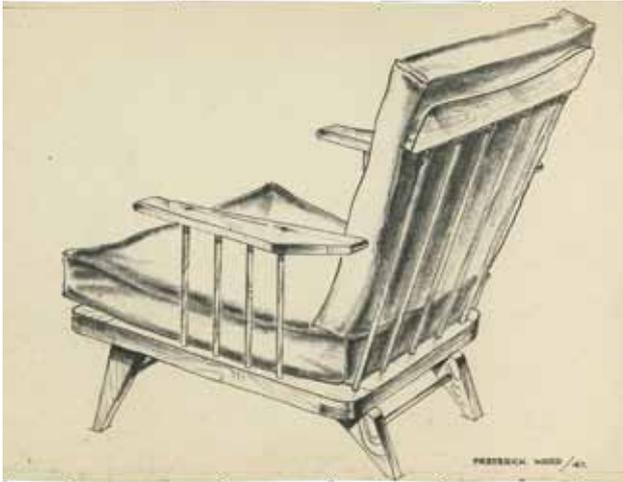
Fred was very aware of the immediate needs of service personnel wishing to re-establish their homes and perhaps build and furnish a new home with only minimal capital—to take up their lives from where they left off, with new needs and with little income.

Norman Myer, CEO of Myer Emporium, felt responsible for the re-employment of his staff members who had fought in the war and circulated a letter^{NM} to all employees in the services offering generous re-settlement terms. Fred would have known about this re-settlement policy and felt that modern furniture design had something to contribute to ease these returned servicemen and women back into society. Money, materials and trade skills were not readily available and a post-war Do-it-Yourself culture engendered by the war itself was almost a necessity—a challenge which gave Fred an opportunity to show how design could help socially, practically and aesthetically.

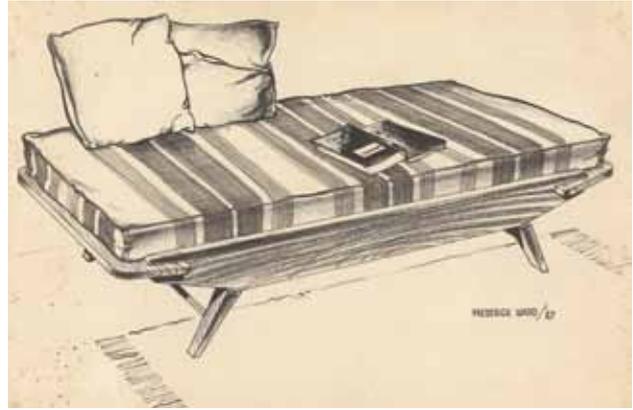
Attempting to make ‘traditional’ furniture required a level of skill, knowledge and wood-working machinery that was not possible at home, so Fred produced some very basic designs for chairs, tables, bookshelves etc which could be made from finished timber with the simplest of hand tools and no machinery. It was a very perceptive ‘Eureka’ moment, but a basic problem became evident—lack of simple, easy-to-make designs and methods to convey understandable information about sizes and jointing details to people unfamiliar with working drawings or even working with wood in any form.

Regrettably, despite some searching of the Myer archives in the State Library and the NGV and many inquiries to the Melbourne based Australian Furniture Historical Societies, no public reference to the Myer Design Studio or its design output has been found.

*This may well have been a stimulus to the Do-It-Yourself movement in Australia—and it is interesting to note the Australian contribution through the patenting of the first electric drill (possibly a non-portable drill) in 1889 by Arthur Arnot, a Melbourne electrical engineer. Black and Decker (B&D) did not patent their **portable** drill until 1917 in Germany^{AA} and it was not until 1946 that B&D introduced their first Home Utility kit for the consumer market in Maryland, USA. Melbourne again made its contribution through an Austrian immigrant Wilhelm Sher who started to manufacture the Sher hand-held electric drill in 1940 in Lt. William St, Melbourne.^{ABD} B&D opened their factory in Melbourne in 1946.*



9A Some of the early *Patterncraft* chairs to be created by Fred in post-war 1947 to meet the needs of returned servicemen trying to re-establish their homes with little money, just a few tools and minimal skill. Advertised in *Australian Home Beautiful* magazine, Keith Murdoch Press, Melbourne.



9B *Patterncraft* divan bed 1947—simple to make with minimal materials and tools. Masterly use of the pencil to give realistic impression—‘real’ upholstery.



9C Tam Purves enjoying the *Patterncraft* DIY easy chair and footstool. Designed by Fred Ward specifically for WW2 returned servicemen to help them make their own furniture at home with minimum hand tools and easy-to-make joints. The simple timber pieces could be easily made using the Butterick paper pattern system used for dressmaking, advertised in the Murdoch

Herald newspaper and in *Home Beautiful* just after the war. This collaborative system proved to be very popular and continued for several years. Alternatively, they could be bought as pre-cut *Timber Packs* which only needed assembly. According to Fred Lowen^{FL} ‘FLER supplied unpolished components that *Timberpack* sold in pack form’.

9D Yet another version of the *Patterncraft* chair, shown without seat or back cushions c. 1947. The height of the arms and the back detail would seem to be different when compared with the version of the same chair.^{9c} Its simple construction using hand tools at home made it easy to assemble.



Fred's simple, 'modern' concepts were eminently suitable and their low-cost promulgation turned out to be deceptively easy—made possible by his adaptation of the paper pattern system designed by Ebenezer Butterick in the USA in 1863.^{PD, SL} If it was suitable for dressmaking, why not for furniture?

Fred made his 'creative leap' in association with the popular magazine, *Australian Home Beautiful* and the encouragement of its owner Keith Murdoch and editor Roy Simmonds around 1946. Murdoch already ran the successful Butterick paper pattern service in the *Herald and Weekly Times* newspaper to help housewives do their own dressmaking at home. Tam and Anne Purves, who made the paper patterns in Collingwood, Melbourne, were enthusiastic about the use of their system for furniture as well as dressmaking. It adapted well to wood, and was advertised in *Australian Home Beautiful* and the *Herald* with articles on how to furnish rooms with low outlay, written by Puss. It was sold as *Patterncraft*^{9A, B, C, D}—a joint effort which, according to Puss's diary,^{PD} 'sold like hot cakes, earning a royalty of two shillings and sixpence each, which, over the years, came to quite a tidy sum'.

Fred's *Patterncraft* designs were not simply items of furniture but designed answers to social problems under the circumstances of the time (refer to Matchett's theory, p. 8).

The statement does not mention *Patterncraft* and tends to contribute to some slight confusion about the name of the inaugural promotion. Puss says in her diary^{PD} that it was *Patterncraft* and Anne Purves^{AP} and Fred Lowen^{FL} mention *Timberpack*.^{FL}

There is no doubt, however, that Fred initiated the *Patterncraft* design concept and with Roy Simmond's help as Editor of *Home Beautiful* integrated the Butterick system of paper patterns then in operation by Anne and Tam Purves. This collaboration proved to be a very successful social innovation, using 'design' in its conceptual and social sense. Nanette Carter sums it up very succinctly:^{SL}

'Patterncraft' was the name for the original designs on paper with purchasers buying their own timber and 'Timberpack' was the name of subsequent packs of ready-cut timber pieces of 'Patterncraft' designs for purchasers to assemble.

The intriguing question as to who actually made the pre-cut *Timberpacks* seems to be answered by Fred Lowen in his *Dunera Boys* book.^{FL} It was the newly formed FLER company.

Nanette Carter, Lecturer in Design, Society and Culture at Swinburne University of Technology has researched this topic in great depth, and her undated paper 'A pattern for modern life: Furniture patterns and packs in the post-war era'^{PML} is a fountainhead of information, as is her paper 'Blueprint to Patterncraft'.^{BP} They describe the social background which gave rise to these superb examples of the real value of design in society. It gave practical reality to Matchett's theory on 'good design' resulting from 'true needs' and 'circumstances' (see his statement on p. 8).

Anne Purves wrote some biographical notes^{AP} for the opening of the Australian Gallery in Collingwood in 1956 which included these comments:

During the immediate post-war years, we were approached by Roy Simmonds,^{RS} the editor of Home Beautiful Magazine, who asked us to also manufacture patterns for furniture to be released through his magazine. The designs were created by the eminent furniture designer Frederick Ward and were supplied in the 'Timber Pack' form, to be put together by readers who sent in for the components.

This whole furniture venture belonged to the time of post-war shortages and had no long-term future.

Readers may now be confused as to the spelling of Timberpack, Timber-Pack and Timber Pack. I have spelt them as I found them, but they are all the same concept.



9E DC 1 chair as originally designed by Fred Ward for FLER, c. 1946–7.

FLER (Fred Lowen and Ernest Rodeck) had a small backyard woodturning business in Richmond, Victoria, making bread boards, bowls and pencils, but wanted to expand into furniture. Fred (Ward) designed this chair c. 1947 to suit FLER's wood turning capabilities at that time, and Myer gave them an order for 500 chairs—a huge

quantity for a garage industry. Every item was turned except for the backrest and seat battens, which were bandsawn or milled.

This chair was very successful and enabled FLER to confidently enter the chair manufacturing industry in Melbourne, later becoming TWEN and finally TESSA.

Carter also comments:

Puss (Elinor) Ward's article appeared in the October 1947 Australian Home Beautiful as a double-page spread showing a living room furnished with three armchairs, a divan, stool and a magazine table with a combined list of materials totalling £34.11.9.

However, the article contained no mention of Fred Ward the designer!

Marketed as a coordinated range of 26 or so items of furniture to meet the needs of the average family, *Patterncraft* was extraordinarily successful, and I recall Puss telling me around 1958 in Canberra that they were still receiving royalties on the sale of the paper patterns.

The years of 1946–7 must have been a very busy period for Fred, as he was also designing the DC 1 chair^{9E} for two young immigrants who were earning a living from turning wooden bowls, pencils etc. under the joint name of FLER,^{FL} but wanted to enter the furniture industry.

They were Fritz (Fred) Lowen and Ernst (Ernest) Rodeck, both of whom had been interned in the UK at the beginning of WW2 and were transported to Australia in 1940 as enemy aliens on the HMT *Dunera*. Following their release from Tatura Camp around 1945–6 they became partners in a small woodturning business in a domestic garage in Richmond, Victoria.^{FL}

Fred (Ward) took an immediate interest in their small enterprise,^{PD} which resulted in him designing the DC 1, their first dining chair^{9E} to suit their very small woodturning equipment. Thus the DC 1 chair was born—a historically significant event. The Myer Emporium accepted their prototype with an order for 500 chairs at £2.10.0 each which was an enormous order for such a small firm with so little operating space. The chair was a huge success and their story is well described in the book *Fred Lowen: Dunera Boy*.^{FL} The original DC 1 chair version in the NGV should be regarded as a classic Australian chair as it typified the value of good design applied to manufactured products, illustrating how it can be a fundamental stimulus to successful enterprise.

Several years later, FLER became one of the most highly regarded chair makers in Australia, but in 1967 the company was taken over, and Lowen left to form the TWEN company, which in 1972 was renamed TESSA, introducing moulded, laminated

This attitude of the media about not crediting designers was, and remains, fairly common, even to this day, casting a rather sad commentary on the recognition of the value of design by society. Fred was, however, given due credit in a December 1947 article in Australian Home Beautiful.^{9H}



9F Version of the DC1 chair as illustrated in the 6th edition of the *Timber Pack* catalogue. It is not known if Fred Ward designed this, but it is possible that Fred Lowen did so, as FLER made the *Timber Pack* components.



9G Subsequent version of the DC1 chair. This chair is by an unknown manufacturer and has a similar structure, but without the aesthetic finesse of the DC1. Date unknown, but c. 2000.

timber to achieve some very beautiful chairs that would not have been possible in solid timbers. (There are several photos of the TWEN and TESSA chairs in the *Dunera* book.^{F1}) The laminating process is economical when significant quantities are produced, but could not be considered for the small quantities Fred was accustomed to at ANU or indeed any of his future bespoke commissions. It would indeed have been interesting to see what Fred might have done with such a liberating technique.

Let me jump now to December 2012, as what happened raised many questions in my mind about the post-war period and caused me to rewrite a major part of this section.

Breaking news

I received some new evidence which had just been discovered and kindly sent by Caroline Purves—Archives Manager at the Australian Galleries in Collingwood, Melbourne, and daughter of Tam and Anne Purves. It was an undated 6th edition of the *Timber-Pack* illustrated catalog containing over 20 photographs of furniture designs which could be bought from Timber Packs Pty Ltd, 35–43 Derby St, Collingwood, Victoria.

My curiosity was aroused at the number of different designs in the catalog (model numbers up to 53) and yet it would seem that Fred had only produced about 26 *Patterncraft* designs. This catalog was the 6th edition so some years must have elapsed since the 1st edition was produced around 1947–8. This confirmed what Carter had written^{BP} that probably *Timber Pack* included the work of other designers, accounting for the variations in style evident from the photographs. No designers were mentioned.

I invite the reader to look carefully at Fred’s DC1 chair^{9E} as designed for FLER in 1946–7 and the two iterations.^{9F,9G}

Chair^{9F} has now become included in the *Timber Pack* range and has been modified either by Fred or others to suit its inclusion in a ‘Swedish style’ dining suite. The chair is clearly derived from the DC1, indicating a Fred or FLER modification, but the legs have been changed to harmonise with the table legs. It is a good-looking chair and table combination, in advance of current commercial styles.

I doubt, however, if Fred (Ward) had any say in the choice of its description as 'Swedish style'. He was known even by 1946 for his unwavering views on the need for an Australian approach to design. Puss clearly stated in her diary^{PD} that Fred '*never copied antiques, but just designed simple, well-proportioned things for today in our beautiful Australian timbers*'. Indeed, it was this driving force that contributed to Fred initiating the formation of the Industrial Design Council of Australia^{IDCA} in 1956.

Some time later, however (probably the late 1940s), a similar dining chair came onto the market (possibly copied by another manufacturer). It seems to be a visual distortion of the DC 1, being very bulbous in the legs, ill-proportioned with horizontal back rails that tend to be uncomfortable. Fred's design philosophy could not possibly have produced such a foreign concept, and comparison of the two versions clearly shows that changes in proportion and lack of design integration can significantly change a sensitive concept into something totally different and usually degraded.

The visual evidence from these three examples indicates that Fred should not be assumed to be the designer of all the items of furniture in the 6th edition of the *Timber Pack* catalogue. There would seem to be only two 'pure' designs by Fred in that edition, and several which have been obviously designed by others, showing characteristics more aligned to commercial featurism.

It concerns me that the well-deserved reputation of one of Australia's outstanding furniture designers might be sullied by design plagiarism and the unintentional assumptions and implications reiterated by uninformed journalists.

My conclusions come from a 55-year study of Fred's work, and the man himself, having worked with him in the ANU Design Unit and in the formation of the Industrial Design Council of Australia.

Answers may well be lost in the mists of time.

It would be historically enlightening to compare the contents of previous catalogs, but my searches so far have failed to find even one. If any of my readers has information about the original *Patterncraft* and *Timber Pack* ranges I would be delighted to hear from them.



9H Anne Purves (seated) with Caroline (six years old) and her brother Stuart (one year old) in the family living room among five examples of the *Patterncraft* range by Fred Ward, c.1948.

The photo was probably used as an advertisement in the *Australian Home Beautiful* magazine, Keith Murdoch Press, Melbourne.

91 An advertorial, presumably by Puss Ward in *The Australian Home Beautiful*, December 1947, in which Fred is given some credit as the designer of *Patterncraft*. The pencil sketches are undoubtedly his and judging by the publication date would seem to be as close to the original design as we are likely to get.

Furniture design students with a keen eye will note several changes in the details shown in this illustration and the various later models of this armchair in the *Timber Pack* Catalog No. 6 (undated), indicating modifications by others.

Modern-type table lamp

Comfortable Patterncraft armchair.

Simply-made occasional table

Furniture from paper patterns

FOR DECEMBER, the Home Beautiful Patterncraft Furniture Service offers paper patterns for a simply constructed armchair, an attractive and useful occasional table, and a modern table lamp. Mailing forms for these patterns are published on page 52 of this issue.

All of these modern pieces of furniture have been specially designed for the Home Beautiful by one of Australia's leading furniture designers, Mr Frederick Ward. Even those readers who have not previously tackled any wood-working jobs can undertake the construction of this useful furniture with confidence because the paper pattern system makes this type of joinery virtually foolproof.

The simple lines of the pieces ensure that they will blend harmoniously with almost any type of furnishing setting and will grace almost any type of room. Nearly all of the saw cuts are straight and the use of wooden dowels ensures strength in the armchair coupled with a certain amount of comfortable resilience.

Each pattern contains a complete list of timber required and the sizes to which it should be machined or planed, together with detailed letterpress and diagrammatic instructions for shaping and assembling.

Amateur wood-workers will find that the work of hand finishing this furniture is interesting and the results will be a good reward for patience and care.
(Please turn to page 52 for coupon.)

40 The Australian HOME BEAUTIFUL December, 1947

Maybe it was coincidental but Fred's introduction of the subsequent *Blueprint* range of designs around 1950-51 could be seen to meet a public need for more 'up-market' types of furniture. There were several designs in this range, a dining chair and a coffee table^{9M,N,O} being examples.

Fred usually drew clear three-dimensional illustrations to give a realistic picture of his intention and often to show 'how to' manage some of the more difficult joints, still using the most basic items of home workshop equipment. He continued to include these perspective sketches throughout his career on most working drawings, as they were of significant help to the maker of what the finished item would look like. From past discussions with some of our ANU contractors, I know that they were appreciated. Fred continued this 3D approach on all his drawings.

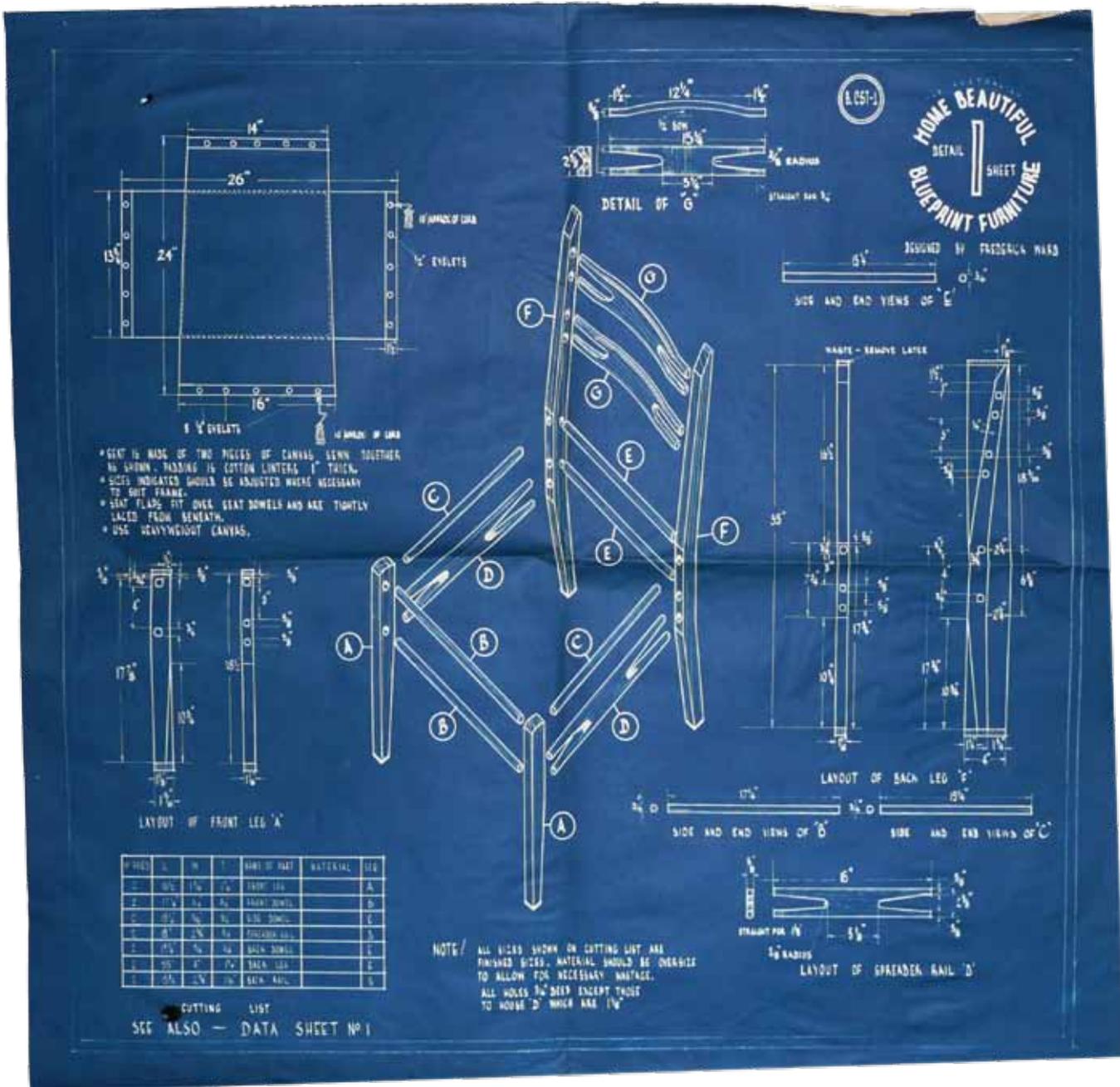
The *Blueprint* coffee table^{9M,N,O} is notable not only for its size and the rectangular directness of its top and the corner legs, but particularly for the way in which Fred ‘rescued’ the plainness with a sculptural element in the U-shaped cutouts of the end spreader rails (echoed in the dining chair). While many observers might conclude that Fred was lapsing into decorative elements, let me assure them that these were highly functional—largely to gain more structural stability in a simple rail by increasing its connective dimension at the legs, using double tenons which also make it more interesting to look at. Fred used this detail again in the back rails of the chairs he designed for Hall in University House, Canberra in the early 1950s. They became known as the ‘Honda’ chairs (because of the splat’s similarity to the Honda vehicle badge).

When Fred left Melbourne to live in Canberra in December 1952 it would seem that Rosenfeldt and Gherardin took over the management of the *Blueprint* range and as Carter reports,^{5L} it was discontinued in 1954 and replaced with *Plycraft*, but commercial copies of the concept such as *Woodpecker* soon appeared on the market^{9P,Q} and *Plycraft* only lasted a few months. An American company even tried the concept, but simply adapted old-style designs with applied ‘decoration’, which clearly distinguished them from Fred’s intention. They had not really understood the underlying ‘social’ significance of the *Patterncraft* timing.

It is not clear how long Fred or any other members of the team remained at Myer after returning from their war service. But what is socially interesting, in a sort of ironic way, is that at about the same time as *Patterncraft* became available around 1946–7, Fred was probably designing his upmarket Myer *Heritage* Range of furniture. He was seemingly tackling both ends of the market at around the same time for different segments of the community, so his professional engagement with the Myer Emporium must have been very flexible. No mention is made of this historically significant furniture or of Fred’s contribution to the Myer history in the *Myer Your Store* book, 2008.^{YSM} Nor did I find any references to Fred or the Myer design studio in the Myer Archives I was shown in the State Library of Victoria.

Despite several inquiries around Melbourne, only two known examples of the *Heritage* Range have been found (in Martin and Robin Ward’s house only 100 m away from my house!)—inherited from Fred and Puss in 1990—a tall writing bureau and a chest of drawers, both in Tasmanian blackwood, without any distinguishing marks as to designer or manufacturer or date.^{9R,S} They display many of Fred’s design characteristics, being notable for their constructional honesty, simple lines, almost complete

In the writing of this book I have been constantly amazed at this social lack of awareness about the critical, indeed, ‘vital’ role that furniture plays in our everyday lives—a topic I discuss in section 21, Fred’s design philosophy, p. 191. Let me just summarise it here in one simple sentence—civilisation could not function effectively without furniture—and if this book does nothing except impress that statement on the minds of its readers then my efforts will not have been in vain.



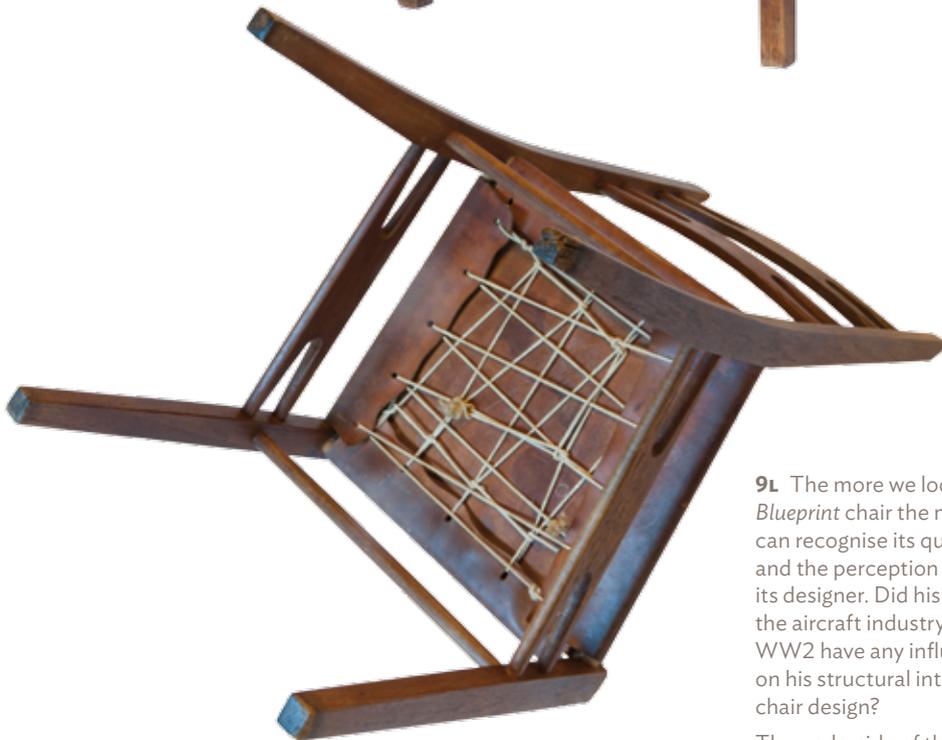
91 One of the *Blueprint* series for the more skilled amateur which followed the *Patterncraft* series in response to requests for some 'up-market' designs. The chair shown in the accompanying photos has been in use in the Ward family for at least 63 years without any glued

joints—testament to the way in which the double tenons and the corded leather seat play complementary roles in its structural integrity.

Note the 'Home Beautiful' title block in the top right hand corner, hand drawn by Fred.



9k This original *Blueprint* chair, assembled around 1950 by Fred without any glued joints is really quite a remarkable chair. The thick leather seat (no padding) acts as a diagonal brace and the underneath lacing (see underseat photo) serves to hold the seat rails together, assisted by the rigid ‘Honda’ type spreader rails between the back posts and between the front and back legs. Even though the dowel type joints have shrunk in Canberra’s low humidity and feels slightly wobbly the chair is still safe to sit on.



9l The more we look at the *Blueprint* chair the more we can recognise its qualities and the perception shown by its designer. Did his time in the aircraft industry during WW2 have any influence on his structural integrity in chair design?

The underside of this remarkable chair reveals that despite the seemingly haphazard arrangement of cords there was a sound logic

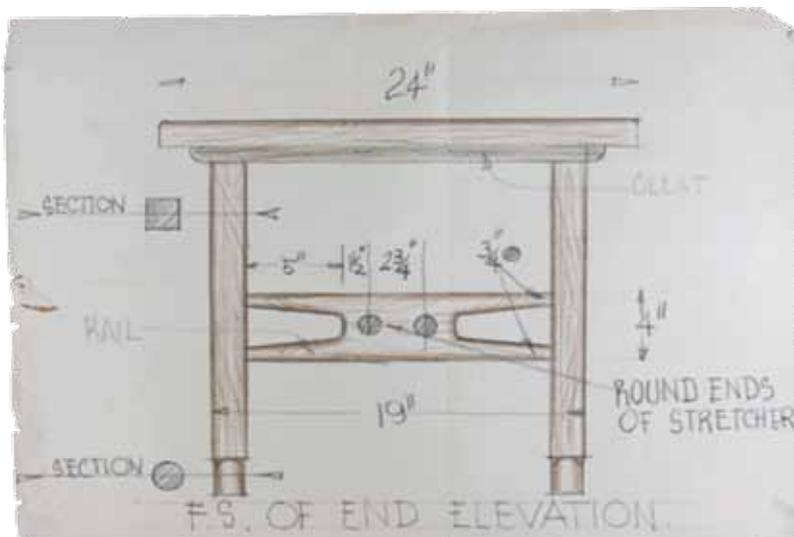
behind the even distribution of stresses. The economy of use of available, natural materials for the seat is an object lesson in reliance on renewable materials and good resolution of forces. It epitomises very elegantly the philosophy of ‘enoughness’ to our modern world where novelty and technological wizardry seem to be preferred qualities.

9M This coffee table, one of the *Blueprint* series by Fred Ward was designed in response to requests for 'something more up-market'. (following his *Patterncraft* series).

The groove around the edges of the table top lighten its visual weight.

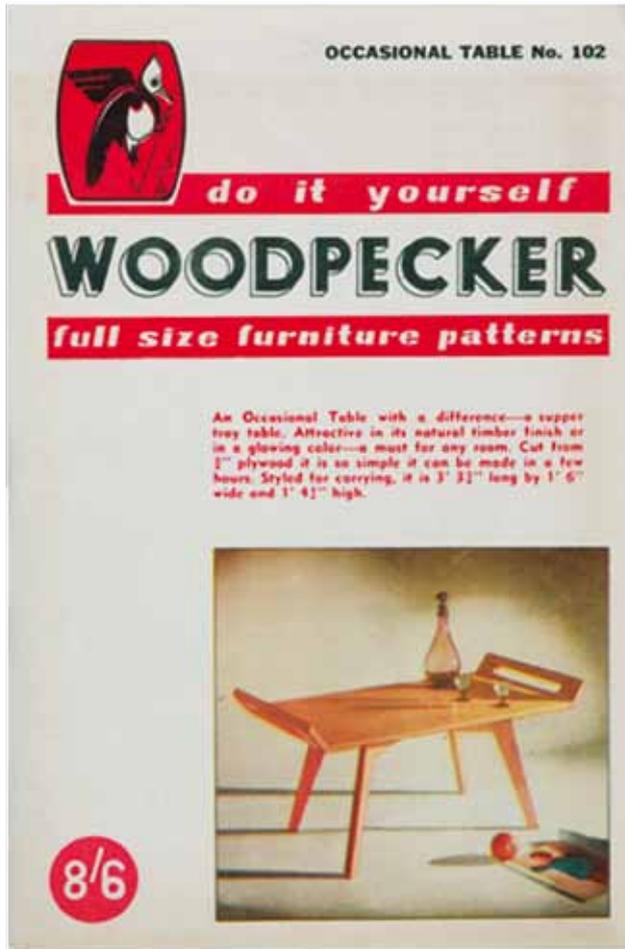


9N It is interesting to note the change in the two central spreader rails from square section to round to simplify the making of the mortices. This view shows the protruding circular tenons which play an important role in the structural stiffness of the table as well as adding an aesthetic, sculptural quality—or can it be construed as 'decoration'?



9O One of the many teaching illustrations used by Fred at Melbourne University School of Architecture around 1948–51. The rounded feet to the table legs are not evident in the real table.

When does a sculptural element become 'decoration'?



9P *Woodpecker* envelope. Copies soon appeared on the market as other manufacturers recognised the success of *Patterncraft* and *Blueprint* designs but they did not have the finesse of Fred's designs.

9Q This small coffee table in the *Woodpecker* range had the right idea, particularly in the economy of it all being cut from one sheet of plywood, but the design was angular and awkward, lacking subtlety and grace. The package had absolutely no information about the manufacturer or contact details.





9R This writing bureau was an interesting post-WW2 development by Fred to take Myer furniture into a slightly nostalgic era of framed and panelled doors rather than flush panelled. It was part of the 'Heritage Range', but little evidence has been found of other items in the range.

He skilfully used the wide colour range of blackwood by careful selection of its darker colours to emphasise the horizontal rails, thus reducing the apparent visual height of the unit. The use of lighter panels in the four small doors in contrast to the dark rails creates an interesting, subtle pattern. The wooden door

handles, although 'chunky' are appropriate in size and appearance to the scale of the whole unit. The centre panel drops down to form a writing desktop, supported on the two pull-out rails at the lower corners.

The butterbox open dovetailing at the top corner and the base are a small concession to inherent decoration. Similarly, the curved arc of the base and its stepped ends add a surprising hint of Art Deco which was characteristic of the earlier part of the century, but not a normal part of Fred's design philosophy.

9S Believed to be part of the Heritage collection produced at Myer after WW2.

These drawers are very plain and simple in concept and break with tradition in their use of full width continuous handles, showing no framework at either end.

They appear to have carried on the pre-war theory of the Unit range, their design making it feasible for units to be continued end to end with little visible break and no interruption by framing—further evidence of Fred's reductionist approach which derived from Modernist philosophy.



lack of any applied decoration and for letting the natural timber speak for itself—in great contrast to the staining and high polishes so common in commercial furniture of that time.

Fred's 'style' might be described as 'timeless modern', containing hints of 19th century framing construction and concept (writing bureau) with puritanical clarity (open butterbox finger jointing as was used in the Unit chairs)—all of which are logically reduced to minimum construction. This search for the simple drawer pull started with his construction of the waterfall louvred drawer fronts of around 1930,^{6F, P.46} followed by the full-length, rounded drawer handles around 1946,^{9S} and his final distillation of cupboard doors without any indication of handles at all, as were shown in the 1960s Reserve Bank of Australia (RBA)^{19H, P.174} and National Library of Australia (NLA) projects.^{20J, P.185} This continuing quest for simplicity over four decades shows an intriguing and remarkable consistency in his search for an ideal solution, and even further, his willingness to experiment and risk ridicule from a sea of conservative people who feel they need handles.

Such experimentation was a vital element of Fred's nature because his designs were based on an elegant simplicity that stood apart from furniture trends of his time. In the post-war era perhaps the public were ready for what Fred had tried out in the 1930s; maybe the post-WW2 public were wanting a refreshing change from what the furniture industry was producing before the war. A new social awareness was certainly in the air—an anticipation of better things. Wartime does tend to initiate new thinking, arising from new experiences.

Fred's natural reticence, apparent desire for anonymity and sparse dating of drawings makes it hard for historians to find facts, and should be a lesson to all designers. Fred may have been inherently inclined to a philosophy of craftsmanship such as that in the teachings of Yanagi Sōetsu about the signing of craft work by their creator—'*he need not advertise his name; his work will speak for him...and...the objects themselves are a better assurance than any signature could give*'.^{UC} Indeed, Fred's consistency in design gave that assurance. I can only conclude from his output and his timing that, as in so many other aspects of his work, he was well in front of current thinking in this field.

Readers wishing to absorb the philosophy of beauty and anonymity in craft work would find interesting reading in Yanagi's profound book The Unknown Craftsman.^{UC} This work was published in 1972 after Fred had created virtually all his work.

With social change in the air immediately after WW2, some of the members of the Myer design team were restless to start their own design practices. Ron Rosenfeldt left in 1952, so it is likely that the Myer Furniture Design Studio lost its impetus as

This aspect of instilling 'good design' into industry was a major platform of the Industrial Design Council which Fred was to initiate in 1956 in Canberra (see section 15, Design Council, p. 135).

a commercial trailblazer. Nevertheless, some very significant designs were produced in the immediate post-war years.

Puss recorded in her diary^{PD} that during the late 1940s Fred was venturing into more industrial products of an engineering nature, indicating that he had probably left Myer (no dates have been found, but this was probably around 1948) or he had an arrangement that permitted some freelance work. He designed an incubator for chickens for Marshall's that was so successful that '*...there were young chicks everywhere*'.^{PD}

Around this time, according to the Australian Railway Historical Society, the Victorian Railways wanted to redesign the livery of their trains. There is some visual evidence of new livery design, but nothing conclusive to say that Fred was responsible for it.

During the final years of the 1940s Fred had joined the part-time lecturing team at the invitation of Professor Brian Lewis. Three other part-time lecturers were making names for themselves as 'modern' architects in Melbourne—Robin Boyd, Roy Grounds and John Mockridge.

Documentation of this period has been difficult to locate, but time has revealed an interesting coincidence. I paid a visit to Melbourne late in December 1949 to talk to Professor Brian Lewis at the School of Architecture, University of Melbourne about the teaching of building science to architecture students around the time when Fred must have been lecturing there in interior design. We might have met then, but it was not to be—I would have to wait almost another decade before the names of Fred Ward or the three architects I was to collaborate with were to have any significance for me.

While talking to Professor Brian Lewis I was introduced to his assistant Walter Pollock, an architect who was working on drawings for a University House under Lewis to be built in Canberra. Lewis was already busy designing the Cockcroft Building for the Research School of Physical Sciences headed by Professor Mark Oliphant (completed in 1953).

Fred Ward must have received his big commission around 1948–9 to design all the furnishings for University House, so he would have been collaborating with Lewis at the time of my visit. Martin tells me that he, Fred and Puss had a few trips up the Hume Highway to Canberra (two days each way by car, staying in Brassey House for about a week each time), to check on the progress of University House for any details which affected the design of the furniture.

This was Fred's really big break, finally requiring his family's move to Canberra in 1952, to stay albeit temporarily in one of the houses designed by Lewis in what is now known as Brian Lewis Crescent, opposite University House. Canberra was to be his base for the rest of his life, but I had no inkling at that time how my future life was to become so entwined with his. History has strange ways of revealing its serendipities.

Roy Grounds subsequently designed the Academy of Science; Robin Boyd, the ANU Zoology building and John Mockridge, the H.C. Coombs building—all furnished by the ANU Design Unit. Fred renewed his friendships and I made new ones—ours lasted until his death in 1990, transferring to his son Martin and daughter-in-law Robin.

To give pleasure in the things
they must perform use, that is
one great office of decoration;
to give people pleasure in the
things they must perform make,
that is the other use of it.

WILLIAM MORRIS

10 The beginnings of design professionalism

Fred's vision of the usefulness of design went well beyond furniture. Perhaps the privations Puss and he had endured in the Depression led him to believe that everybody's life in Australia could be improved by way of better design. I recall seeing a *bon mot* of his written at the top of his drawing board, 'There is always a better way', which seemed to epitomise his approach to design. It all depends on what is meant by 'better'. Fred's 'better' would always have had a large element of *simplicity* in it, certainly not being gimmicky or fashionable just for the sake of it.

His vision of design, however, was to look beyond designed objects to a wider social context of what *could* be better for society. His drive and determination in trying to raise the overall standard of design in Australia's manufactured goods led him to play a leading role in the formation of two important design groups—the Society of Designers for Industry (1940s) and the Industrial Design Council of Australia (1956–8). The first dealt with creators, the second was more about makers and consumers. Seen in retrospect, this was an enormous educational task which was to consume much of his spare time for about 25 years, and not in the public eye.

The SDI later became the Industrial Design Institute of Australia in 1958.

Fred was the driving force in the early years of both organisations, realising their potential for Australia, and persuading those who would listen and open doors to others who had the power and the means to move in the direction he visualised. Design was always his mainspring and history will prove him to be the man of the moment with the appropriate vision, energy and opportunity.

Joan Lindsay in *Time Without Clocks*^{TWC} summed up Fred's early visions of the 1920s and '30s, long before his first 'social design' efforts initiated the SDI just after WW2.

Fred and Ron Rosenfeldt^{8A, P.57} worked together in the Myer Design Studio before and after WW2 and were the main initiators of the formation of the Society of Designers for Industry (SDI 1947), which eventually became the professional Industrial Design Institute of Australia (IDIA 1958) and then the Design Institute of Australia (DIA) several years later. The DIA is now the leading design organisation in Australia for all types of designers, with chapters in all States. Ward, Rosenfeldt and Wrigley were all involved in the formation of the IDCA from 1956 and inducted to the DIA Hall of Fame in 2010/11.



10A Fred Ward, as he probably looked during the war years. Fred was the lead initiator of both the SDI and the IDCA in association with Ron Rosenfeldt in Melbourne and Wrigley in Sydney/Canberra.

Design in the 1920s and 1930s was not really recognised as a ‘profession’. There were architects, commercial artists, engineers and fabric designer/printers of various kinds, but no *collective* of designers who could design for production of any kind. Commercial artists gradually morphed into graphic designers around the 1950s and formed the Australian Commercial and Industrial Artists’ Association as their professional body. Architects had a clear-cut role in Australian society—they designed buildings, but those in society who thought about furniture and all the other products which made life easier were invisible in the public’s mind. It was often said that a manufacturer’s inspiration was humorously attributed to the managing director’s wife thumbing through the latest copy of *House and Garden* which had arrived by ship from the UK or the USA, already out of fashion(!) or even the local *Australian Home Beautiful*.

Any design from the UK or the USA was usually thought to be superior to anything Australian, contributing to the ‘cultural cringe’ syndrome, stimulated no doubt by WW2. Certainly the science of human engineering or ergonomics was developed in the USA by designers such as Henry Dreyfus, Walter Dorwin Teague in the 1940s and by Robin Day, Ernest Race and Mischa Black in Britain in the late 1940s and 1950s.

Industrial design probably gained currency *as a profession* in Australia around 1947–48, most likely stimulated by discussion between Fred and his designer colleagues engaged at the Myer Emporium Furniture Design Studio after their wartime service.

The term ‘product designers’ only came into currency around the 1950s in Europe and Australia and became a jealously guarded collective term for a few members of the SDI who regarded themselves as the ‘real’ industrial designers. Many early members were in related yet equally valid areas of the design profession which concerned itself with designing (creating concepts for others to make) but not necessarily for ‘mass’ production (whatever ‘mass’ meant in those days). In 1958 these ‘real’ industrial designers even went so far as to form a special breakaway group called the Society of Industrial Designers Australia, only to rejoin the IDIA in 1965.

Some of the founding members of the SDI (Vic) around 1947 were: Fred Ward, Ron Rosenfeldt, Scorgie Anderson, Max Hutchinson, Howard Johnson, Falconer Green, Bruce Anderson, Lester Bunbury, Max Forbes ... and others joined soon after: Clem Meadmore, Grant Featherston, Richard ‘Dicky’ Beck, Gerard Herbst, George Kral, Trevor Wilson and others.

Ron Rosenfeldt describes this episode in his History of the SDI on the website of the DIA. ^{HSD, DIA}

This was to be the starting point of my awareness of Fred Ward, perhaps around 1951–52 when I was building my second house in Dee Why, Sydney, but I did not recognise Fred at that time as being the pivot around which most of my future life would revolve—including the writing of this book a half-century later.

Having read a very brief article in the *Sydney Morning Herald* about the formation of the SDI in Melbourne, I wrote to Ron Rosenfeldt, the Honorary Secretary of the group, asking, ‘Can we start such a group in Sydney?’. Firstly, I had to join the Victorian SDI and, having made one or two items of furniture (including what was probably the first handmade fibreglass chair in Australia, 1953), I was accepted as an industrial designer.

I then rang a few ‘designers’ in Sydney, such as Alastair Morrison—a graphic designer, (of *Afferbecklauder* fame), and Arthur Baldwinson, a ‘Modernist’ architect. I clearly remember our meeting at Al’s place in Roseville Chase, probably in early 1952, where we talked about the need to raise the design standard of Australian manufactured goods. I also talked to Gordon Andrews and Bim Hilder. They were not really interested at that time, but Gordon Andrews came aboard later and subsequently became inaugural President of the NSW Chapter of the IDIA when the SDI was renamed in 1958.

Inaugural members of the SDI (NSW), from memory, were: John Day, Peter Hunt, Arthur Robinson, Eric Towell, Tom Dowson and George Waddington with myself as Secretary/Treasurer. Then we were off. Others such as Carl Neilsen, Adrian Knaap, Paul Schremmer, Charles Furey and Gordon Andrews joined a little later.

Almost by osmosis we gradually collected an interested group of ‘designers’ of various persuasions (we could not be too fussy, being rather thin on the ground in the early to mid-1950s) and a NSW chapter of the SDI came into existence ‘to promote the cause of design in industry’, probably around 1953.

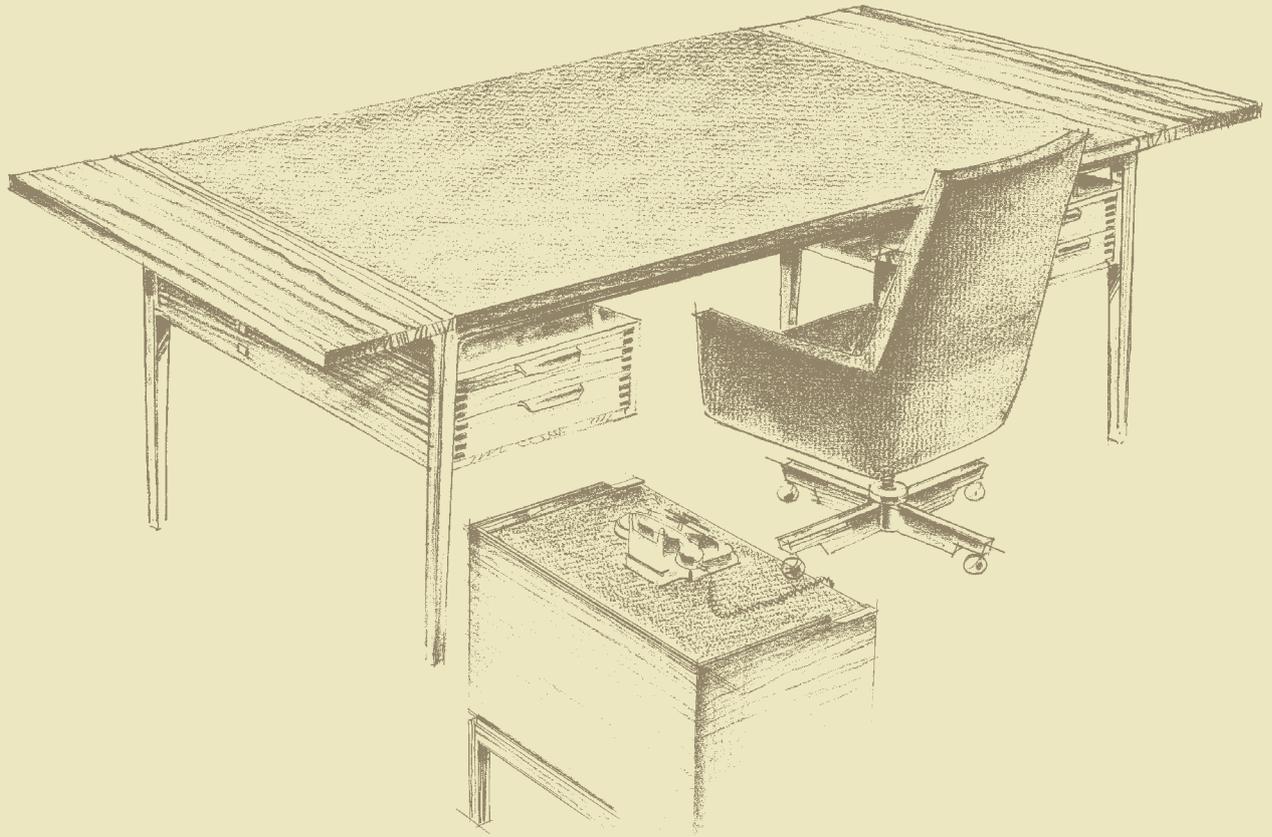
It may well have been the first time that the words ‘industrial design’ had been uttered in Sydney and to call it a *professional* body would have been somewhat premature. Copying from overseas magazines was rife, particularly in the furniture industry. ‘Design’ was almost a dirty word in industry in those days, being equated with art or style *applied* as a sort of a veneer to make an engineered product more desirable in the consumer’s eyes.

Thus started a chain of events which would lead me to join Fred in Canberra in January 1957 and to extend the usefulness of the ANU Design Unit into an even more complete integration of design throughout the campus.

For the sake of the record the SDI outgrew its 'society' status and industrial design became a 'profession' in Melbourne, Sydney, Adelaide and Brisbane in 1958 with the formation of the Industrial Design Institute of Australia with Fred, myself and a few others engaged in trying to start an ACT Chapter in Canberra as an offshoot of the new IDIA in NSW.

1958 was a turning point in the history of design in Australia, not only for the IDIA but for the germination of Fred's long-held belief of the need for an Industrial Design *Council* of Australia to encourage and promote better design—not only in industry but in that vital corollary—the community. This was the time when the big guns of industry (knightships galore—see section 15, *Design Council*, p. 135) put their shoulders to the wheel of design, but even they could not foresee the power of apathy and ignorance when the wheels fell off the IDCA wagon in the 1980s.

Frederick Ward/67



The Canberra Years

1952-90

11 Early days in Canberra

Canberra, the nation's capital, was a 'city' of only 28,000 people around the end of WW2—just emerging from paddocks—no lake, no freeways, no real city centre such as in Sydney or Melbourne. It was a place ridiculed by non-Canberrans as 'a good sheep station spoiled', freezing in winter and like an oven in summer. Its airport opened in March 1939 but in 1957 its terminal building was still one wooden hut about the size of two houses with two airlines, TAA and ANA, served by the old DC 3 aircraft. Canberra's railway station was down in Kingston, miles away from the centre of town.

The nation's capital had a chequered growth history following the selection of Walter and Marion Burley Griffin's plan for Canberra in 1913. It suffered the delays of two world wars, a major depression and political procrastination,^{4A, p.26} but now in 2012 is a thriving city of about 360,000, fully justifying the faith of several great Australians just before WW1.

It can be seen as an enormous act of great faith in the future that the ANU was initiated in 1946 as an institution for pure research into '...the nature of things' on a magnificent site at Acton, adjacent to Civic.

This concept of a *research* university (the first in Australia with no undergraduates) was to have many ramifications on the way buildings and their furnishings were to be considered and organised to ensure greater collaboration between architects and interior designers.

Professor Brian Lewis, University of Melbourne Head of the School of Architecture was commissioned by the ANU Interim Council in 1947 to 'produce an overall concept and to design some of the initial buildings'—for Physical Sciences, Medical Research and University House^{UH} (see section 12, *University House*, p. 99).

The motto on the ANU Arms (approved by Council in 1953) was 'Naturam Primum Cognoscere Rerum'—First to learn the nature of things.^{11A} Exactly what 'things' are appears not to have been clarified by Council, but the Oxford English Dictionary (OED) describes it extremely broadly as a derivative of 'anything, everything, nothing and something' which gives the widest possible scope for research activities! A most profound choice.



11A The cast bronze arms of the ANU which is fixed in front of the chairman's seat at the 44-seater Council table in the Mills Room, Chancelry.

The elements of the shield are the waves of the Pacific Ocean, a boomerang and the stars of the Southern Cross as suggested by Professor Sir Mark Oliphant around 1952–3.

The motto translates as *First to learn the nature of things*.

Approximate height 350mm.

Designed by Derek F. Wrigley in 1962.



11B Settee designed for the ANU Cockcroft Building, c. 1952–3. Probably one of the first pieces designed for that building.

It bears all the hallmarks of Fred's simple design style and could reasonably be assumed to be the first manufactured item of furniture for the ANU. When one considers the utilitarian nature of the Cockcroft Building as a 'no nonsense structure for physical research with a life of about 15 years' (the gist of Oliphant's architectural brief to Professor Brian Lewis, architect), the grace of this settee was a little out of character in such an industrial building. On the other hand,

however, it could be argued that such a graceful item was completely in harmony with the elegance of the laws of physics?

Perhaps it was a prototype for potential use in University House. It is the only existing example of its type to be found in the whole of the ANU. It should be distinguished with a permanent descriptive plaque—I regard it as a particularly well-integrated and beautiful design by Fred. It can now be seen in the Drill Hall Gallery, Kingsley Street.

Regrettably the maker is unknown.

The Cockcroft Building was the first building designed by Lewis and was built to house the Cockcroft-Walton accelerator (completed in 1953)—with an estimated building life of 15 years because of the rapidly changing needs of physics (it is still there in 2012). It was in this building that a very early and graceful settee^{11B} by Fred was found (now in the Drill Hall Gallery, 2012). He must have designed this soon after his arrival in 1952, while still involved with completing his commission for University House.

University House quickly followed as ‘a more permanent building’ as it was quite obvious that the sparse accommodation in the small town of Canberra would not be able to cope with an influx of postgraduate students. Sir Keith Hancock is credited with having first initiated the proposal for such a building when he was a member of the Academic Advisory Committee and was supported by his colleagues Sir Mark Oliphant, Sir Howard Florey and Sir Raymond Firth.^{UH}

University House was on its way and was to change Fred’s life significantly. After surviving two wars and an economic depression this commission must have seemed like a dream come true for Fred as ‘design’ in the mid-1950s was still a very misunderstood concept in the mind of the community. Now in his 50s Fred still have had the fire in his belly about the value of design to society and this was an opportunity like no other in which to put his ideals into practice.

Fred was a part-time lecturer in Interior Architecture in Lewis’s School of Architecture and it seems likely that he was recommended by Lewis as a most appropriate designer for the furnishing of University House.

So it was that, following the furniture design period in Melbourne and close collaboration with Lewis at the School of Architecture, Fred, with Puss and their 14-year-old son Martin,^{UH} moved to Canberra in 1952, in order for him to supervise the installation of all the furniture in University House which was opened on 16 February 1954.

It should be recognised at this point that the establishment of the ANU Design Unit was, I suspect, due to the encouragement and support given to Fred mainly by Vice-Chancellor Sir Leslie Melville, Registrar Ross Hohnen and Bursar Bill Hamilton. They all seemed to have a good appreciation of the fundamental role of design and its value to the ANU, providing a quiet protective barrier against the few deniers in the academic ranks who did not yet understand the underlying function of design,



11c Canberra University College (CUC) Council tables and chairs—now in the Menzies Building of the University Library. It is likely that Dr Joe Burton, Principal CUC or Tom Owen, Registrar would have asked Fred to design these. All elements of the designs are in solid timber—as sound today as when made over 50 years ago.



11d,e This free-standing cupboard and the single table are on the 4th floor of the ANU Chancelry building, remnants of the days around 1953 when Canberra University College existed as a separate entity between the city and the ANU, before their politically motivated amalgamation by Prime Minister Sir Robert Menzies around 1960.



particularly in an academic institution. The success of University House helped to neutralise this view over the coming years and Fred started a new career as University Designer.

There was a University Architect John Scollay who was concerned with buildings and planning so *architectural* design was already established as an integral element in the establishment of a university. With the success of University House it was clearly seen by some in authority that good architecture and furnishings were complementary elements to success—thus the seeds of *Total Design* were sown (if perhaps unrecognised) for a unique design directive which would take a few years to flower. It was not realised at that stage, but this was to be a significant time in the history of design in Australia. My ANU study tour around the world’s universities in 1965 made it clear that we were spearheading a salient change toward an in-house, *integrative* design unit which had a unique chance of putting ‘total design’ into practice.

Such a concept had taken root in the UK, Michael Farr being a proponent for integrated design around the 1960s. I had a long talk with him in London in 1965 and was much enthused with the concept and the opportunity that the ANU presented.

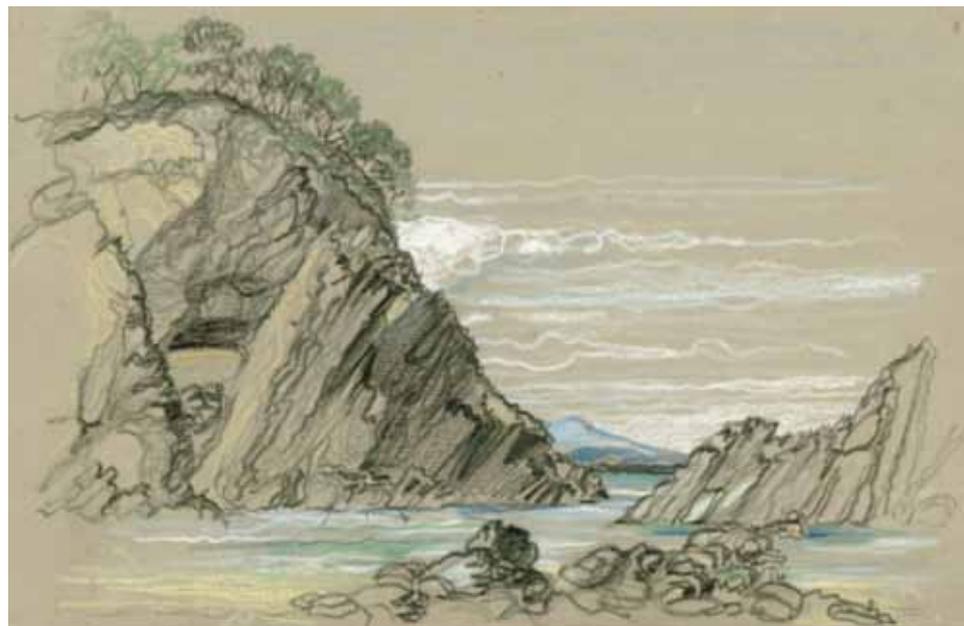
Fred had a broad vision of the value-added qualities that design can contribute to living, of enabling students to learn in a subliminal way through *well-designed, bespoke* facilities. Graduates could leave the university having learned something about quality of living *other than through their chosen discipline*, on the assumption that ‘something might rub off’ over their few years. This could quietly be achieved by osmosis, being part of Fred’s belief that ‘good design’ could inculcate better standards into the wider Australian society. In effect, he was putting into practice part of the program that an Industrial Design Council of Australia might hopefully implement on a nationwide basis (see section 15, *Design Council*, p. 135).

The ANU Council recognised the value of its professional staff doing occasional extra-mural work, within reason, and Fred carried out a variety of commissions such as furnishing the new buildings for the Ainslie Goodwin Centre (1957) and Council Room tables and chairs for the contiguous Canberra University College (1953).^{11c,d,e} Fred also designed a new ministerial office suite for his old friend of National Gallery School days, Sir Richard ‘Dick’ Casey who was now Minister for External Affairs in the Menzies government. One particular chair in that commission was the CS 3.^{11f}



11g In 1957 Fred Ward was asked to design a presentation gift from the Australian Parliament to the newly formed Malaysian Parliament. This elegant desk with a raised edge top in Queensland walnut was crafted by Alfons Stuetz and Oswald Paseka, both from 'Jenning's Germans' group who settled in Canberra as building workers around 1951–52, subsequently forming Canberra Furniture Manufacturers in Fyshwick, ACT. This company, and other cabinet makers who also settled in Canberra and Queanbeyan, made many items of furniture for the ANU over the next three decades. Their superb cabinet and chairmaking skills were a significant contribution to the development of Canberra during this period of rapid growth.

11h This pastel sketch of a coastal rock formation by Fred indicates a site somewhere around the Bermagui area looking north probably toward Mt Dromedary in the background. Fred built his coastal retreat *Walden*, hidden away in the coastal bush at Cuttagee, south of Bermagui. Thought to have been drawn about 1958.



It seems likely that Casey was also responsible for Fred designing a commemorative gift to be given to the Malaysian government from the Australian government around 1957. This was a very elegant writing desk¹¹⁶ made in Queensland walnut by Alfons Stuetz, one of ‘Jennings’ Germans’ (see section 23, *Designing and making*, p. 209).

The National Capital Development Commission (NCDC) was also formed in 1957 (the year I joined the Design Unit) and Fred was asked by the new Commissioner, Sir John Overall, to furnish their new offices in 220 Northbourne Avenue, Braddon.

In 1958 Sir Mark Oliphant, Director of the ANU Research School of Physical Sciences, and Sir John Eccles, Director of the ANU John Curtin School of Medical Research, on behalf of the newly formed Academy of Science asked the Vice-Chancellor if the ANU Design Unit could help in the design of furniture and furnishings of the new building in Canberra—to be designed by Roy Grounds, Fred’s architectural colleague of Melbourne University days (see section 18, *Australian Academy of Science*, p. 163).

In 1955 Fred was requested to assist in the furnishing design for the newly-formed Commonwealth Club to be temporarily housed in the Old Canberra House which stood on the ANU campus. Fred was later to furnish the new building in Forster Crescent, Yarralumla, designed by John Mansfield of Fowell, Mansfield and Maclurcan, architects, Sydney—the firm that offered me my first job when I arrived in Australia in 1947.

In these and many other ways the ANU, through Fred, was making a wider contribution to the development of Canberra. His reputation spread among the ANU and there are several houses in Canberra using Fred Ward furniture.

Canberrans seemed to need a retreat away from the cold winters in those early years and it was probably soon after 1952 that Fred and Puss bought a block of bushland at Cuttagee Lake, south of Bermagui. There he built a small wood cabin of interesting prefabricated construction with clear plastic windows, surrounded by tall straight eucalypts. They called it *Walden* after Thoreau’s novel, thus revealing their sympathies for simpler ways of living.

This delightful sketch^{11H} by Fred is reminiscent of the Bermagui coast and was discovered in the Powerhouse Museum’s archives. The location of the view has not yet been identified but the picture does show Fred’s competence in a variety of media.

The Canberra years: Fred Ward's friends, colleagues and circles of influence, 1952–90

1950s

CANBERRA ART CLUB

GRIFFIN CENTRE
Derek Wrigley *Initiator*
Lady Margaret Frankel

CRAFT ASSOCIATION OF THE ACT

Derek Wrigley *Initiator*
Fred Ward
John Scollay
Theo Bischoff

UNIVERSITY HOUSE

Sir Douglas Copland *Vice-Chancellor*
Ross Hohnen
Prof A.D. Trendall *Master*
William Hamilton *Bursar*
Sir Leslie Melville *Vice-Chancellor*
Fred Ward

ECLARTÉ

Catherine Hardress
Molly Groves

COMMONWEALTH CLUB

GOODWIN CENTRE AINSLIE

NATIONAL CAPITAL DEVELOPMENT COMMISSION

ANU DESIGN UNIT

Fred Ward *Initiator 1954–61*
Derek Wrigley 1957–77

Furniture & interior design

Hans Pillig
Scorgie Anderson
Charles Bastable
Gerald Easden

Site planning, architecture
Roy Simpson

AUSTRALIAN ACADEMY OF SCIENCE

Fred Ward Sir John Eccles
Derek Wrigley Sir Roy Grounds
Sir Mark Oliphant Robin Boyd
Frank Fenner Jack Deeble

1960s

1960
Received inaugural
Essington Lewis Award
from the IDCA

CRAFT COUNCIL OF THE ACT

Derek Wrigley
Fred Ward
John Scollay
David Walker

Landscape design

John Stevens
Roger Mann
Pertti Tukkiainen

Secretary

Marie Penhaligon

Graphic design

David Walker
Adrian Young
John Reid

UNIVERSITY OF NEW ENGLAND

P&O LINE

SYDNEY UNIVERSITY

INDUSTRIAL DESIGN COUNCIL OF AUSTRALIA

Fred Ward *Initiator*
Essington Lewis *Inaugural Chair*
Ross Hohnen *Subseq. Chair*
Sir Roland Wilson
Derek Wrigley *Sec/Treas*
Ron Rosenfeldt *Subseq. Chair*
Sir Mark Oliphant

Sir Walter Scott *Subseq. Chair*
Sir James Forrest
Sir Archie Glenn
Sir John Webster
Prof Joe Burke
Prof Fred Towndrow
Peter Hunt
David Terry *Director*
Ern Rothschild

RESERVE BANK OF AUSTRALIA

Fred Ward
H.C. 'Nugget' Coombs *Governor*
Reserve Bank PNG

GOVERNMENT HOUSE, SYDNEY

Governor-General
Baron Richard &
Lady Maie Casey

1970s

1970
Received MBE for
services to design from
the Governor-General

INDUSTRIAL DESIGN INSTITUTE OF AUSTRALIA (ACT)

Fred Ward
Derek Wrigley *Chair*
Arthur Robinson
David Walker

CANBERRA COLLEGE OF ADVANCED EDUCATION [LATER UNIVERSITY OF CANBERRA] SCHOOL OF ENVIRONMENTAL DESIGN

Sam Richardson *Principal*
Derek Wrigley *Initiator*
Fred Ward
Arthur Robinson
David Walker
John Stevens

NATIONAL LIBRARY OF AUSTRALIA

Fred Ward
Sir Harold White
Arthur Robinson
George Clarke

FURNITURE WORKSHOP SCHOOL OF ART, ANU

George Ingham

DESIGN IN SCHOOLS

Derek Wrigley
Fred Ward
Noeline Naar

GOVERNMENT HOUSE, CANBERRA

GOVERNMENT HOUSE, PORT MORESBY

AUSTRALIAN INDUSTRIAL DEVELOPMENT COMMISSION

1980s

Fred's ill health during the 1980s confined him to a wheelchair, bringing his half century of creative design years to a close. He died in Canberra in 1990 and has been recognised by his peers as a superb designer of fine

furniture and a pioneer of the industrial design movement in Australia. The physical evidence of all the design activity touched by Frederick Ward remains to this day in many offices and homes in

Australia, PNG and Malaysia. None of it would be possible without the skills of numerous craftspeople, mainly in Melbourne, Canberra and Sydney who are gratefully remembered—cabinet makers, chair makers, weavers, upholsterers, potters,

printers, metal workers, gardeners, administrators and bean counters whose essential skills helped in their own way to turn these design contributions into reality (see lists at the end of the book).

Fred and Puss were most likely introduced to the Canberra Art Club by John Scollay around 1953. Fred, John and I were later to play our collective parts in helping to establish the craft movement in subsequent years resulting in the Griffin Centre in 1966 and the Craft Association of the ACT, and ultimately in the formation of the Crafts Council of the ACT, a local chapter of the Crafts Council of Australia.

A chart on the adjacent page¹¹ gives some idea of Fred's connections in Canberra from 1952 to 1990. His Canberra years might well be regarded as his most productive period during which he produced some of his finest and most mature designs, notably the RBA building in Sydney and the NLA in Canberra—both in the 1960s (see later sections).

Most of Fred's connections understood his wider views on design and were to prove helpful in the establishment of organisations which could bring about the social realisation of design as a major contributor to human wellbeing. Fred's awareness of the benefits of design to civilised lives covered the broad spectrum of the practical arts in schools, universities, industry, commerce, public institutions and he quietly enthused many of the people listed in this chart. It illustrates how the people and their spheres of interest overlapped, illustrating yet again how pervasive the nature of design is as an activity.

There were, however, one or two disappointments in store where people in positions of authority did not have the matching vision that could enable Fred's initiatives to deliver their full promise. Each of us has our own set of values, moulded by experience and education, but Fred and I were as one in the realisation that the public *valuation* of design was rudimentary at best. That brings us back to education. Fred's design skills resulted in many *visible* manifestations as described in this book, but his more *intangible* social movements were unrecognised as social benefits by the pragmatic section of society and were revoked through lack of awareness and misunderstandings about the long-term benefits (Design Council and the Design Unit—in much the same way as the ANU School of Music in 2012). These events reveal serious flaws in our approach to a valid, rounded education.

The transfer and development of visions and subjective values is a very special art and although Fred was a persuasive speaker he found it could be extremely difficult to convey understanding and enthusiasm to those with the authority to turn new concepts into useful reality. Today, we still suffer from this *syndrome of perpetuated ignorance* and Fred and I could

only conclude that the inability of our educational authorities to understand the real effectiveness of design thinking is being *perpetuated* over the decades through the ‘art education’ system. Any concepts involving ‘design’ are especially subject to misinterpretation into ‘useless art’ and therefore—in *the minds we have ‘educated’ which are now in positions of authority*—have nothing to do with the business of effective living, profitable manufacturing and ultimately the national economy. Fred understood this connection but was up against many deaf (and powerful) ears. Section 17, *Design in education* (p. 153) covers this problem in more detail.

12 University House

The ANU commission to Fred to design the furniture and furnishings for University House was unquestionably an Australian landmark in client/architect/interior designer relations around 1948–50. It provided not only an opportunity to integrate furniture and furnishings more carefully with enclosing architecture, but also to practice the unusual tightrope balance between *room* scale and *human* scale—a design problem Fred was not too familiar with in his mainly domestic designs in the Myer Emporium during the 1930s and 1940s.

I suspect ANU Registrar Ross Hohnen was the driving force in commissioning Fred for University House and was no doubt aware that the building's architect Professor Brian Lewis from the University of Melbourne and Fred were academic colleagues, Fred being a lecturer in Interior Design in the School of Architecture.

It would appear from Fred's early drawings for University House that he must have been busy designing at Ash Grove, Toorak around 1949–51. He only moved his family to Canberra around December 1952 to supervise the storage and installation of all the furniture in readiness for the opening of the building in February 1954.^{UH}

Fred, Puss and Martin stayed in a university housing complex from December 1952, known for many years as the 'F type houses' designed by Brian Lewis. The 'F type houses' are still in what has subsequently been named Brian Lewis Crescent, opposite the main entrance to University House. They are a group of long low dwellings overlooking Lake Burley Griffin (then the Molonglo River) and were undoubtedly architecturally far ahead of their time.

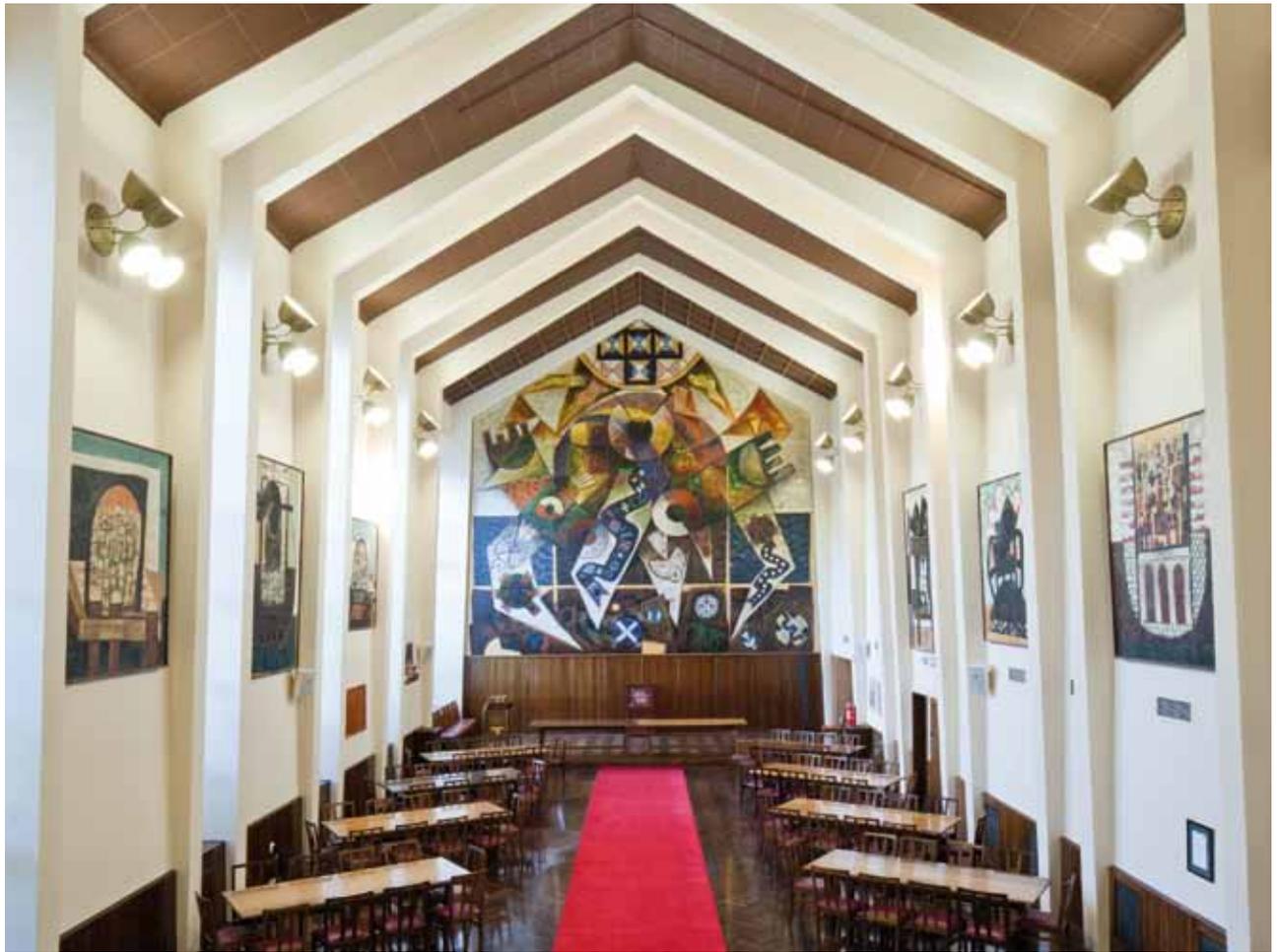
Whether Lewis had any influence on Fred's appointment is not known, but it was a most fortunate collaboration of design talents. I heard comments that a limited competition had been held but have found no evidence of that. If there had been a competition it would have been a 'first' in this field



12A This photograph was taken in the Brian Lewis Crescent house occupied by Fred, Puss and Martin when they first came to Canberra in December 1952.

The chair on the right is a very elegant design, showing many of Fred's design characteristics, but with turned front legs and rails under the seat—never seen in any of his subsequent chairs, for reasons related largely to the lack of equipment of tenderers. This chair has proved untraceable, so if anyone knows of its location today I would be grateful for a call—02 6286 6134.

The chair and table on left and centre are well known in University House and ANU buildings.



12B Hall in University House calls for special comment as it illustrates the powerful psychological effect that an architectural space of unusual proportions, combined with decorative elements and furnishings can have on our perception of interiors. The original intention of the founders of University House was to have a feeling of ‘secular modernism’,^{UH} (in contrast to the often Gothic characteristics of many of the English colleges). Close aesthetic collaboration by the architect, Brian Lewis and Fred Ward produced, in 1954, an interior that was plain and simple, having no mural on the end wall or any paintings on the side walls (although Lewis did indeed show a mural on an interior perspective drawing).

It did, however, present Fred with a difficult problem of scale for the furniture, which not only satisfied the ergonomic needs of the people who dined there, but did not look tiny and domestic in such a large space. His solution of dark walnut wainscoting and furniture with a very dark brown ceiling has worked well to reduce the apparent large volume, the justification for which can only be attributed to an aesthetic, English historical context. Subsequent donors to ANU, aided perhaps by the traditional memories of some academics, have been attracted by the ‘empty’ walls and an accretion of decorative elements has resulted over time in an ecclesiastical/collegiate effect which may well not be what the founders had in mind.

Leonard French’s imposing mural ‘Regeneration’ appeared in 1972, evoking Christian, Byzantine and Celtic symbolism with their dark, warm colours which certainly blend very well with the room and its furnishings. Fred’s original table layout for Hall was three lines of tables down the length of the room which avoided the ecclesiastical central aisle, but (in the photo) the symmetrical arrangement of tables each side of the central carpeted aisle gives a strong impression of pews with visual hints of side aisles, leading the eye forcibly to the focal point of the rich mural. While this photograph, taken from the Minstrel Gallery, emphasises the strong perspective and apparent

length of the room, this effect is not so obvious when visiting or dining in Hall. The Hall tables and chairs were made by Alfons Stuetz and Oswald Paseka, of Canberra Furniture Manufacturers, Fyshwick, ACT around 1953—a tribute to the craft skills available in Canberra at that time and to the European migration culture of that era which brought many of these skills to Canberra (see section 23, *Designing and making*, p. 209, for background to this unique combination of skills).

as architects at that time usually left clients to furnish their own buildings.

This collaboration is most visible in the public rooms—Hall, Anteroom, Common Room, Music Room and Library and in the many study-bedrooms. When opened University House constituted a remarkable example of well furnished, modern, restrained architecture, despite the many shortages of materials still prevalent after WW2.

At the time of writing, 2012.

The decision to build University House was a quantum leap in administrative foresight, particularly in view of the relative remoteness of the project in what looked like sheep paddocks—and should be recognised as such. Over the last 58 years, it has played a highly significant part in the growth of the ANU and Canberra.

The first Master of University House, Professor A.D. Trendall impressed on me in 1957 that the correct way to describe the dining space was ‘Hall’ and not ‘The Hall’, so I am following his lead.

The impressive Hall is a very large space (‘room’ is a totally inadequate word) designed to seat about 120 academics and postgraduate students, with High Table on a dais at one end, now graced by a large mural above. This communal dining space is a modern descendant of the English collegiate tradition—even to the extent of a Minstrel’s Gallery at the opposite end to High Table.

Hall^{12b} is of almost cathedral nave proportions. It has large repetitive portal frames dividing its length into unequal bays with tall, recessed vertical windows on its long northern side, engendering some surprise and awe at the spatial contrast suddenly revealed on entry through low, dark entry doors leading in from the Anteroom. The simple space is unadorned by any pretence of gothic ornamentation—a major point of the architect’s brief being the need for a *secular* appearance. What it does have in common with cathedrals, however, is the incremental acquisition of decorative elements. (See also the caption for illustration 12b for the psychological effect these have had.)

Fred told me around 1957 that the tables and chairs in University House Hall were made in Italian walnut taken from a ship sunk in Sydney Harbour during WW2, brought to Canberra by Department of Works and stored in Kingston for some prestigious use’. Despite some searches this has not been substantiated, but Alfons Stuetz recently confirmed that these items were made from Queensland walnut by his firm Canberra Furniture Manufacturers.

Although Fred’s furniture designs for Hall were conceived long before any of the decorative elements were installed it is remarkable how well everything fits together, creating an atmosphere of quiet appropriateness, matching the large spatial scale with tables to seat 100 diners^{12c} and simple chairs with their now famous ‘Honda’ back splats,^{12d,e} which, seen *en masse* without occupants present a visual background rhythm to quietly complement the exuberance of the Leonard French mural. The tables epitomise an oxymoronic ‘massive elegance’, having solid end frames and a large central stretcher rail—all

superbly in scale with the Hall proportions yet ergonomically appropriate. The fact that they have survived 58 years of hard treatment in continual rearrangement for different functions is testimony enough to Fred's design skill. Domestic sized tables, although easier to move around, would have looked completely wrong and socially inappropriate in such a situation.

The large bell-shaped wall lights, high up on the side walls were also designed by Fred to be in scale—anything smaller would have been too insignificant. In later years Fred told me that he agonised over the colour for the ceiling panels—a very dark 'donkey brown' which was not too red and not too black. Selection of large panels of colour in such a position is not easy. It required a degree of sensitivity and courage. Fred's art training served him well in arriving at that decision. The colour looks right and successfully lowers the apparent visual height of the ceiling.

Fred also made a significant contribution to the selection of suitable crockery, glassware and napery required for the daily functioning of Hall, even to the point of commissioning Ronald Rosenfeldt, who had specialised in ecclesiastical silverware, to design candelabra for all the tables.^{12f}

While Hall represents the jewel in the crown of University House, it must be viewed in association with its Anteroom/ Foyer.^{12g} This is a most appropriate introduction to Hall, not only in a functional sense, but also aesthetically. Its simply stated and beautifully proportioned coffered ceiling and lighting with subtle play of light and shade achieves a sculptural relief which is not immediately apparent because of its height. Its close relationship to the quiet dignity of Hall has an important role, complementing rather than competing.

The Anteroom space works well in other ways, serving a useful role for many functions held in Hall, Common Room or Boffins (restaurant) and has acquired a gracious maturity over the last half century. While its understated simplicity is a perfect foil to Hall, the acquisition of its four magnificent tapestries by Valerie Kirk has now given it a more elegant partnership role. It has proved a very successful combination.

Fred Ward's furniture in both spaces continues to play its part with timeless quality which reveals his skill. The designs are just as fine or appropriate today as they were when he designed the pieces—a record when seen in the context of today's rapid changes of fashions.



12c The tables in Hall are made from well-seasoned Queensland walnut and have withstood 58 years of constant use and re-arrangements—testament to their rugged design by Fred and the skilled workmanship of Alfons Stuetz and Oswald Paseka around 1953.

The design of Hall and its surrounding rooms did not take into consideration the constant number of table movements and storage requirements for the many different functions which I have witnessed since 1957.

Normal seating is four chairs each side, but the design allows for extra seating at the ends when necessary. Compare the visually harmonising end view of the table frames with the back splats of the associated chairs.





12d This arrangement of ten chairs shows how the width of the table and the end overhangs allow extra seating to be comfortably achieved.

Floor parquetry and wainscoting is also in Queensland walnut.

The High Table chairs seen in the background are almost identical to the Council Room chairs Fred designed for Canberra University College around the same time—costing £14 each (from old records), imbuing some historical significance of its early association with ANU. This view of the reflective surface finish (subsequently applied by restorers) to the table top gives some indication of the visual barrier effect mentioned in the text—Fred always preferred a low gloss satin finish to reduce reflections, enabling the colour and grain of the timber to be better appreciated. Note the trapdoor in the floor (under the carpet) enabling easy storage of chairs in the basement—in hindsight a table sized hoist would have been a much better investment as the tables have been moved in and out of Hall many times and very laboriously.

12e The original dining chair, made in Queensland walnut for Hall in University House. Its distinctive back splat (hence the 'Honda' epithet) echoes the end frames of the dining tables and the drop-in saddle seat provides adequate comfort for the period of a meal. The red leather upholstery covers have lasted 57 years with only the padding needing replacement, representing excellent value for money.

Traditional in structure and flexible in use for the many different functions such as dining, concerts or graduation ceremonies, these chairs have proved to be a wise choice compared to the bench seats originally mooted by some members of the Management Committee in the design phase of the House.



The noblest of the weaving arts is Tapestry, in which there is nothing mechanical; it may be looked upon as a mosaic of pieces of colour made up of dyed threads, and is capable of producing wall ornament within the proper limits of duly considered decorative work.

WILLIAM MORRIS
TEXTILES
1893



12F One of a set of silver candelabra for ceremonial dinners held in University House.

Commissioned by Fred Ward for University House, 1954–1960.

Designed by Ronald Rosenfeldt, industrial designer, Melbourne, recognised as a designer of ceremonial and ecclesiastic silverware.



12G This Anteroom to Hall serves many functions—not only as a nucleus for other contiguous spaces—Common Room, Hall, Boffins restaurant and the outdoor lobbies, but as a gracious meeting place for many formal and informal gatherings.

Its structural style with its attached columns and restrained coffered ceiling has a dignified atmosphere giving a visual continuity with the Hall and an element of surprise when entering through relatively small doorways.

This formal group of useful spaces has now become, over time, a focal point for

the ANU displaying very appropriately on neutral ground, tapestries by Valerie Kirk, all of which remind us of significant achievements by alumni who have been awarded Nobel Prizes and other significant honours. Yet another Nobel Prize has been awarded recently and a tapestry is being woven, so perhaps it is time for this room to be graced with a more descriptive name?

The architect, Professor Brian Lewis and the interior consultant and designer of all the furniture, Fred Ward, collaborated well to achieve such distinctive spaces in University House.

Fred did say to me during one of our many visits to University House that he and Brian Lewis collaborated to create the very special ‘atmosphere’ of this very functional suite of spaces—a quietly elegant symbol of postgraduate university life in Australia—a new concept in the 1950s that respected the English tradition of collegiate togetherness, but in a contemporary Australian way. This included Hall, its Anteroom, Common Room, Library and Music Room—not forgetting the more separate Upper and Lower Private Dining Rooms and Boffins adjacent to Hall and the all important kitchens—the very critical function that makes the whole place ‘work’ so well. This functional suite of rooms served not only the ANU but Canberra, especially during the early years when the city lacked such communal facilities.

This suite had some very special design features which contributed a very special character to the rooms—the leather wall panelling and the heavy timber screen around the fireplace in the Common Room, the large scale light fittings in the Anteroom and Hall, the dark walnut wainscoting in Hall and the other two dining rooms. All these elements harmonise with the dining furniture timber and especially the very restrained colour scheme that melds everything together into a unified and effective whole.

The original purpose of University House was to house postgraduate students in comfortable study-bedrooms. There were about 100 rooms, each with their own divan/bed, bathroom, desk and living facilities in a variety of arrangements.^{12H,1} They were reasonably spacious and worked well. Several special flats were provided for visiting scholars and a suite for the Chancellor for his occasional visits and for entertaining, not forgetting a library for relaxed reading.^{12J}

In reviewing these spaces after many years for the purpose of this book, I have been able to see them with fresh eyes—a most valuable gift to any creative person. Knowing a little of the background of their creation and their use during my time at ANU, I am even more appreciative of the early administrative vision, the design skills they recognised and commissioned and of the post-war difficulties they overcame. University House has undoubtedly become an icon of appropriate design—well deserving of its Sulman Medals from the Royal Australian Institute of Architects in 1953 and again in 1995 for ‘Sustained architectural excellence’ from the ACT Chapter of the RAI.

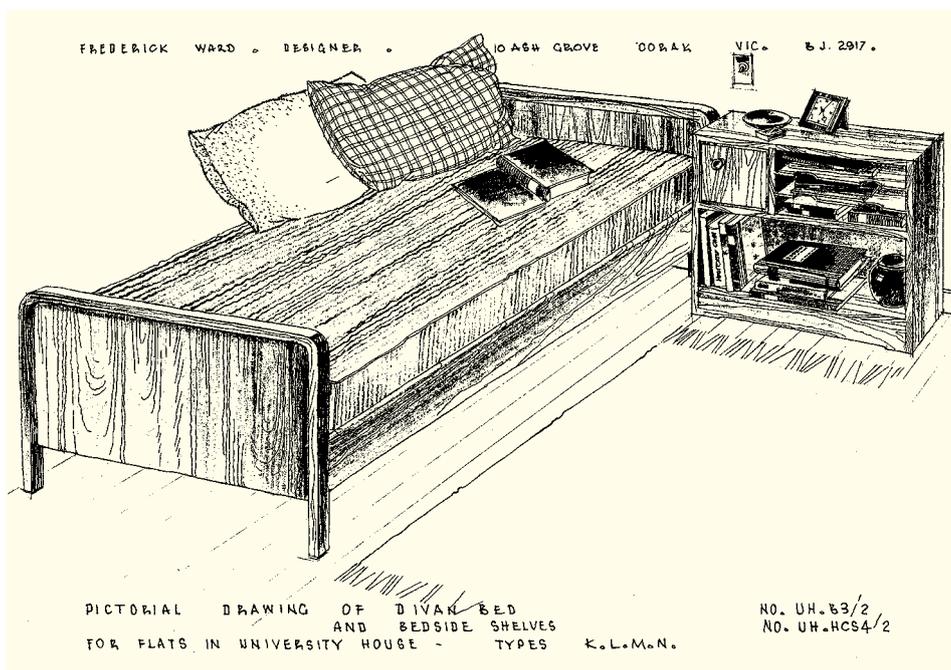
12H Chest of drawers for University House study-bedrooms with Formica top for hard wear. Silver ash, c.1948–9. Note the reduced size of the turned handles—an indicator perhaps that Fred was applying his 'reductionist' principle?

The turned feet are reminiscent of the earlier concept he used on the DC 1 chair he designed for FLER (1947). It was never used in later work, perhaps because it introduced another operation—and cost?



12I Presentation sketch of a typical divan bed for a post-graduate student in a University House flat, with bedside bookshelf unit. Drawn by Fred Ward c.1952 for approval by the Interim Board of Management for University House.

In those pre-computer days the transference of concepts from a designer's imagination to committees for approval were limited to their ability and skill at drawing realistically with simple media such as pencil or ink. Fred's training at Melbourne's National Gallery Art School enabled him to use these skills most effectively. Even in the 1950s, monochromatic reproduction for committee purposes was the most economical due to the extra cost involved in using colour.



12J A quiet reading group in the Library of University House. Smaller and more intimate than the Common Room, the furniture is scaled a little smaller. The bookshelving was also designed by Fred.

Although the Oxbridge collegiate tradition from which University House sprang is still evident, its Modernist, architectural form conceived in the late 1940s by Lewis and especially its internal comforts and convenience by Fred were a far cry from the accepted medieval austerity. These combined skills created a quietly elegant, *modern* example of what Australian university life *could* be—albeit with a strong postgraduate atmosphere.

University House has also served to initiate a most important (and continuing) function for the ANU of acquiring and integrating the art works of several ‘Modernists’ of the mid-20th century, including the designs of Fred Ward—in itself a most remarkable event in a very conservative post-war world—especially in Canberra.

Contemporary Australian artists, including Frank Hinder, whose brass inlaid pattern of Australian animals enhanced a terrazzo entrance foyer floor in University House as ‘art to be walked on’; Gerald Lewers, who sculpted the welcoming image of *Relaxation* near the main entrance doors. Both of these works were commissioned and integrated into the original building, encouraged by Lyndon Dadswell who was advising the ANU on art works. Fred told me later that he and ‘Dads’ had suggested to Lewis that a massive ‘sculpted’ wooden screen be incorporated to form a backdrop to the Common Room fireplace. The screen was successfully built but never sculpted—possibly because it looked so magnificent in its rough sawn state—simplicity prevailed. Perhaps this had some symbolic roots in the motto of the ANU Arms?

In later years the works of other creative people have been installed such as Leonard French’s mural *Regeneration* in Hall^{12b} and his *Seven Days of Creation* were proudly hung there for several years, (now replaced by *The Journey* by French) the large scale of their spaces being most appropriate for these works. Other sculptors such as Aurel Regus, Mark Grey-Smith, Donald Brook and Inge King have subsequently installed their creative works around University House and in recent years Valerie Kirk’s four magnificent tapestries have added relevant, integrated character to the Hall Anteroom.^{12c}

After creating his *Relaxation* sculpture, Gerry Lewers created the bronze Theaden Hancock memorial fountain outside the Women’s Drawing Room, a delightfully graceful portrayal of wild swans taking off from water. Other creative works such as ceramics and fibre hangings have found homes in University House and the wider spaces of the ANU since then, assisted by

Jill Waterhouse describes some of the ANU art works in her book University House,^{UH} all eventually becoming part of a more formal ANU Art Collection under the guardianship of Nancy Sever, Director of the Drill Hall Gallery. This topic continues a little further in the next section on Art, design and craftsmanship.



12k This wing back easy chair, now very familiar around the ANU, was originally designed for the Common Room of University House around 1950.

It has a scale appropriate to such a large room with comfort for long discussions, simplicity of structure which retains the loose cushions in place.

a generous art policy. Fred, Bill Hamilton and Sir Daryl Lindsay bought suitable works as opportunities presented themselves.

Fred's colour scheme throughout University House, with its well-scaled furniture of settees, easy chairs,^{12*} coffee tables, serving and dining tables, chairs and a myriad other items—even several natural wood frames of generous proportions for significant paintings and mirrors—has complemented a beautiful architectural ambience which has functioned well as a quiet meeting place over the last half century.

The ANU has certainly received a handsome return on its investment in good design—as much a reflection on its advisors and administrators as upon the creative inspiration embodied in its very structure. Even the simple twill curtains, upholstery fabrics and bedspreads throughout the building were specially woven by two éclarté weavers, Catherine Hardress and Molly Groves from Heathcote in Victoria.

Wherever would such *appropriate* tables, chairs and light fittings and incidentals have been found in the retail stores in the early 1950s that could satisfactorily combine into a total design—and be required to last for at least six decades? However intangible the return might be in commissioning bespoke design for such a building, surely the economists in the ranks of the ANU would agree that the university has had more than its money's worth?

May I direct readers to the list of craft workers on p. 248 who made most of it possible.

In writing about the creativity of Fred and his part in making the building successful, it should not be forgotten that it is only through the skill of craftsmen that such elegant items of furniture can come into existence—and *at an affordable price*.

University House is still fulfilling its aim of ensuring good functional effectiveness between buildings and their occupants, but it has had to play varying roles to remain economically viable. While it serves as a living museum of many superb examples of furniture design and art of the mid-20th century, above all it stands as a remarkable example of administrative wisdom, foresight and integrated design, all of which arose from the ashes of WW2 in the late 1940s. Time and familiarity tend to make us take our background for granted, but we need to be reminded that overseas visitors who have stayed at University House have also made its welcoming ambience internationally famous.

This unspoken achievement quickly became obvious when the functional success of University House was realised and the Registrar Ross Hohnen and the Vice-Chancellor Professor Leslie Melville asked Fred to stay on in Canberra to form the ANU Design Unit. Read on.

Postscript

The passage of time, a sequence of different 'leaders' and philosophies have left their mark on the appearance of University House as we see it today. Subsequently, what we might see today is not necessarily as Fred left it.

13 Art, design, craftsmanship and the ANU

Very soon after I joined the ANU Design Unit in 1957, Fred and Puss introduced Hilary and me to the Canberra Art Club (CAC), which was housed in one of a group of Nissen huts—now completely demolished, in the area known as Riverside, in part of Barton just down the hill from St Marks Memorial Library. John Scollay, ANU Architect, was also President of CAC at that time.

The Artist's Society and the Repertory Theatre also had their premises in these huts, which were previously occupied by 'the workmen who built Canberra'. The structures served as Canberra's cultural centre for many years, until we started a movement which ultimately resulted in the Griffin Centre in Civic.

It is a measure of the public attitude of the mid-1950s that the Artist's Society took a rather narrow view of 'art' as being paintings, drawings and sculptures and apparently did not recognise 'art' as including ceramics, woodwork, weavings or any craft work at all. It seemed to be almost a white collar versus blue collar argument with some element of aloofness not too far below the surface. 'Craft' was seen as a 3-dimensional, useful 'handi'craft' tainted by practicality and without any aesthetic merit. This attitude had led to CAC becoming a breakaway group prior to 1957 which aimed to take a much more open view of any distinctions between what was 'art' and what was 'craft'—if indeed there were any differences other than 2D and 3D.

Several well-known artists in the Canberra area became CAC members who exhibited frequently—Nancy Parker (later Sawyer), Jan Brown, Theo Bischoff, Margaret Frankel, Henri Le Grand (both potters), several weavers—Solvig Baas Becking, Pauline Lynga, Freya van Holst Pelikaan, Belinda Ramson who experimented with large wall hangings using unusual wefts beyond the familiar cottons, linens and wools, and Gemma Black (calligrapher). The printmakers, typographers and graphic designers became more evident as the years rolled on.

How things have changed over the intervening 50 years.

They all contributed to turning craft into a valid, exciting visual genre, exploring larger scale in forms and textures. There was an awakening; a realisation that the limited vision of artists in the previous eras provided a fertile ground for exploration and experimentation with new/old materials, seen anew with fresh eyes—a ‘why not?’ attitude. The second half of the 20th century was an exciting time—in which ‘design’ began to earn some recognition by emerging from the commonly accepted view of superficially applied decoration to its more fundamental process of satisfying visual and physical functional need by way of sensitive thought and knowledge of materials and processes.

From Fred’s and my points of view as designers, the CAC was a link between our very practical design work and the art world of Canberra, and we gave a couple of talks on design and its relationship to art. Everything that we designed at ANU Design Unit had to serve a very practical purpose, look good in its ‘designed’ location and satisfy our inner selves that we had furthered the aims of the ANU. Most fine art work and a lot of craft work, as seen in the galleries today is, on the other hand, inherently self-serving. Its primary aim being to satisfy the artist, unless it is a commissioned work where other factors creep in as to who or what is to be satisfied or achieved. This is interesting philosophical country and worthy of a book on its own, but the interested reader would find a lot of stimulating material in Yanagi and Pye’s writings.^{UC, NAW, ND}

The word ‘design’ began to acquire a new kind of somewhat intangible meaning in this post-war period, being an inherent, but publicly unrecognised element of the established art forms. Fred’s arrival in Canberra in 1952 may well have been a stimulus in this direction as the opening of University House in 1954 should now be viewed in retrospect as a significant event in the design world— new forms of furniture, upholsteries and curtains, light fittings, door fittings, glassware, cutlery, crockery were either designed or sought out from the more enlightened manufacturers. It was a unique display of largely non-commercial design which had its roots firmly in the art/craft/industry *mélange* stimulated in various ways by Fred and others in Melbourne in the 1930s and 1940s (see next section).

‘Design’ in the craft areas could be seen as the first primitive steps toward their logical acceptance in manufactured goods. Design in furniture could equally be seen in that way, particularly when polyester resin and fibreglass became available in Australia in the mid-1950s and polypropylene arrived in the mid-1960s—

opening up a whole new world of mass production and new, undreamed of forms with no joints—an area which Fred never ventured into because of his limited production commissions and no funds for research—indeed design research was completely unrecognised.

To return to the crafts in Canberra and in particular the inclusion of ‘design’ as an element of craft work—Fred, John Scollay, Theo Bischoff and I were the only ‘designer’ members in the Canberra Art Club. We *designed* our forms and shapes but didn’t *make* them.

Although Fred and I gave talks to the membership on aspects of design I do not ever recall furniture items being exhibited as craft work in the club’s annual exhibitions. Sadly, furniture was not usually seen as an exhibitable ‘art’. I wonder what William Morris would have had to say about that?

Essentially, and perhaps a little ironically, Fred’s design style had its roots in the crafts, assisted by the development of simple machinery, so it was natural that, as designers, we had an interest in the really serious craft activities and became somewhat concerned that the word ‘craftsman’ was commonly being de-valued in conversation. So when the Crafts Council was promoted in the 1960s, Fred, John and I felt the terminology should be clarified in the light of mechanisation and the rise of the designer as a valid member of such an important group.

We eventually formulated a set of three categories which aimed to distinguish between the skills of *design*, *workmanship* and *craftsmanship*, as the three essential skills to clarify the increasingly sloppy use of the term ‘craftsman’.

For example, we saw quite a few pieces of woodwork in galleries that were extremely well made but *badly designed* which made us feel that they should not be labelled as competent craftsmanship.

It all really depended on what was actually meant by the term ‘craftsman’. What did it imply? Was it still a valid term in the 20th century?

It was time for a clearer definition of the word in a modern context—which was recognised by Morris, Gimson, Barnsley and others during the Industrial Revolution. After all, we, as designers, were engaged in the process of *envisioning* objects for the use and visual enjoyment by human beings, but the skills of others were needed to turn the visions into reality. The Industrial

Throughout this book I use the word **form** to mean a 3-dimensional object and the word **shape** to mean 2-dimensional planar shapes. The dictionary is not perfectly clear about this distinction, but I believe it to be an important clarification in this context.

The boundaries between making one-off items, small quantities and large scale (or mass production) are somewhat blurred, but what we engaged in at the ANU Design Unit was designing for small scale production using craft techniques rather than large scale industrial. In view of the strong presence of furniture and cabinet making skills in Canberra, emanating largely from the influx of European migrants from the Snowy Mountains Hydro-Electricity Scheme and Albert Jennings' import of German, Austrian and Dutch woodworkers after the war, we had a latent European interest in serious craft activities.

Revolution had driven wedges between the various production stages. Clearly, designers are not craftsmen as they do not make the items, but equally skilled woodworkers who produce badly *designed* work are not craftsmen either, no matter how skilfully their work is made. They have not skilfully *designed* the item. Some clarity was now needed in the middle of the 20th century.

We eventually formulated a set of three categories which aimed to distinguish between *design*, *workmanship* and *craftsmanship*:

Craft designer—the person who can design but cannot make in any *consistent* way—an industrial designer could often qualify and most of us in the ANU Design Unit would have fitted into this category. The emphasis on *consistency* was, we felt, important, as many designers may probably *make* a passable one-off item, but be hard pressed to do it continually in any consistent and skilled way.

Craft maker—the person who can make but cannot design. There are many examples of craft work around that are superbly made, but fall down, often badly, on its fundamental design—*functionally* and/or *visually*—of the object. In our opinion there was little value in producing well-made but dysfunctional and/or ugly items. A person *making* such an object (or which has been designed by others) should really be called a *craft maker*—but surely not a *craftsman*. Many of our furniture manufacturing contractors would have fitted into this category—they were superb makers, precise and well able to produce small quantities economically from working drawings produced by others. These are valuable members of the craft community, but we felt that they were not *craftsmen* in the complete meaning of the word. But, while history has inserted the role of the designer as a separate activity into the process of achieving useful artifacts we should not be forgetting that there are still people who can both *design* and *make*. They are re-emerging from the turmoil of the Industrial Revolution as the really true craftsmen or, if you wish to be more politically correct, *craftspeople* or *craftspersons*. So we can now complete the modern version as Fred, John and I saw it around the late 1960s:

Craftsman, craftsperson—the person who can both design and make; who has the conceptual and manual skills to *consistently* produce functional and elegant designs. The Furniture Workshop established at the ANU, firstly by George Ingham and succeeded by Rodney Hayward is graduating many true *craftspeople* who have the right philosophy and are beginning to establish themselves in commercial production. This is as it should be and is injecting new life into the industry.

Ashley Eriksmoen is the current head of the Furniture Workshop.

Developing technology and resource scarcities may well deflect these craftspeople, but they will serve a useful social function in causing us all to think and question new directions in a world which has no choice but to become sustainable in the true sense of the word. Hans Pillig was probably the only member of our ANU Design Unit team who was capable of fitting into this category.

While Fred, John and I felt sure there was a need for a more detailed clarification of skills classification in the post-Industrial Revolution world, the idea did not receive general acceptance in the craft fraternity. I had helped to stimulate the emergence of the ACT Wood Group in the 1970s and the problems of skill descriptions emerged again. Perhaps we were exposing some sensitive human perceptions of self-worth? Many *craftmakers* have aspired to be called designers, but the finished results of their often excellent workmanship have left a lot to be desired when viewed as sensitively designed items worthy of the description of ‘good design’. These are sensitive, very subjective issues which can involve hurt pride and generate arguments about very intangible standards and qualities.

But, for the sake of the future of real craftsmanship, these issues have to be faced. Otherwise, if history is any guide, *real quality* could well descend to the common denominator of commercial featurism where low cost, economic solutions become the determinants in which all pretensions to elegance and quality may well have been abandoned. This aspect, Fred believed, made the craft classifications highly desirable in that the craft *designer* when commissioned, can understand and see the big picture in terms of relevance, relationships, appropriateness, detail, consistency and overall economy—and is in a position to require or maintain a high standard of workmanship *from* the craft *maker* or industry. It is undoubtedly a more appropriate use of skills in the modern world.

In this context, Fred’s contribution as a superb craft designer (*I doubt he would have laid claim to craftsman status*) might be perceived more clearly by analysing two of his post-ANU commissions, their social context and their place in history. His finest and most mature work is clearly evident in the RBA commission and the NLA. The immense perception and consistency imbued in these works should be deserving of National Heritage status (*discussed later*).

See discussion elsewhere on the Dunoon boys, Jennings’ Germans and the skill fallout from it and the Snowy Hydro-electricity Project. Their influx of woodworking skills into the Canberra region admirably complemented our skills in the ANU Design Unit and proved to be a significant factor in our ability to produce well-designed, low-volume, highly skilled craft work for the ANU. It was a remarkable demonstration of serendipity in terms of complementary skills, timing and location.

For those visiting the Museum of Australian Democracy in Old Parliament House in Canberra—please look for the visitors chairs in the Prime Minister’s suite. They are examples of Fred’s finest chair designs and are really repeat designs ‘borrowed’ in some mysterious way from his RBA project.

Our role as a Design Unit within an educational institution was sometimes raised by academics—*Why do we need designers in an institution such as this? Why can’t we just buy commercially made furniture?* Seen in hindsight they appear to be rather philistine questions—particularly in an enlightened university ambience where we were surrounded by experts in many areas. Fred had a few discussions on these questions in the early days of the ANU Design Unit .

It is not only the practical aspect, where every element of the design must work well, but also its aesthetic appeal and sympathy to its surroundings. The visual calibre of Fred’s designs has proved to be ‘timeless’—they look as appropriate to their function and surroundings today as they did when new and the question of fashion almost becomes irrelevant. It is this aspect which justifies the designer’s role of sensitivity to *appropriateness* and *continuity*. If commercial and domestic furniture of the mid-20th century era had been bought it would have looked completely inappropriate and discontinuous in most ANU buildings, as no one manufacturer of the period could possibly have profitably catered for the wide variety of tables, chairs, storage units of esoteric requirements.

It is all very well to furnish new buildings with the physical means of using spaces for the intended purposes, but the human soul does seem to crave some form of inherent or added aesthetic delight—a sort of softness or warm relief from the hardness of structure. We have, over the millennia of creating buildings for ourselves, become accustomed to hanging pleasant tapestries or images which tell stories on our walls, or buying decorative pots, vases for flowers or dried arrangements, sculptures—*‘to humanise’* our internal spaces.

Bill Hamilton recalls that around the opening of University House in 1954, Sir Leslie Melville appointed an Art Buying Committee of Professor Geoffrey Sawer, William Hamilton with Sir Daryl Lindsay, Director of the NGV, as adviser and ‘spotter’ to recommend the purchase of suitable works of art for the ANU. In this way I presume the ANU Art Collection took its first steps with Eric Westbrook succeeding Lindsay, followed by Dr H.C. Coombs.

Hamilton spotted Nolan’s nine-panel *River Bend* in David Jones Gallery, Sydney sometime around 1962, and with a generous grant from the John Darling Foundation was able to procure it for the ANU. It is currently located in a most appropriate setting—the Research School of Biological Sciences.

Buying ceramics in the early days posed a problem in that the works of most local potters were usually too small in scale for the larger rooms of the ANU with suitable locations for ceramic works. We usually relied on travelling exhibitions and around 1963 I recall recommending the purchase of some reasonably scaled pots by Ivan Englund, Bernard Sahm and Peter Travis which seemed suitable for placement in the Menzies Library and the Council Room of the ANU.

Jill Waterhouse gives a good account^{UH} of the 1971 acquisition of Leonard French's 'Seven Days', a massive series of six rectangular paintings culminating in the 3.6 m diameter panel of the Seventh Day.^{13A} The need to display the group together presented a challenge as to where and how to place them. They went on to be displayed first in University House, then Bruce Hall and, as a gesture to the Canberra community the South Building of Civic Square, and years later in the Albert Hall, Canberra, and were even sent as far as Perth in Western Australia.

One of the major 'art' programs initiated by the ANU Design Unit in the mid-1970s was an open sculpture competition, inviting submissions of suitable external sculptures of significant scale to be selected for purchase or commission and placement in the ANU landscape. This was most successful, resulting in commissions to Ken Unsworth,^{13B} for a series of stainless steel 'wings' (untitled), now located in the forecourt of the ANU Drill Hall Gallery.

Inge King, a well known sculptor in Melbourne was commissioned to erect her *Black Sun* now on the grassy bank between University House and the R.G. Menzies Library. A third sculpture by Reginald Parker was placed in a reflection pool near the Chemistry Building, University Avenue.

Since then the ANU Art Collection, now consisting of several thousand items has been professionally catalogued by the Director of the Drill Hall Gallery, Nancy Sever and regular exhibitions are held.

In this way ANU and Fred have, in various ways, played their part in encouraging art and design in their many forms in the ACT community, complementing and balancing the ANU output of learning and research in many other disciplines.



13A Leonard French's *Seventh Day of Creation* (3.6 m diam.) was acquired by the ANU in 1971, together with the accompanying *Six days*—a magnificent sequence of rich allegorical paintings which presented significant challenges of appropriate location and availability for public viewing.

It was initially hung in Hall of University House, totally changing its character (see section 12, *University House*, p. 99 and the effect of *Regeneration* mural). The seven paintings have been displayed to the Canberra public on two occasions and were also shown in Perth WA, as part of the ANU's responsibility to society.

13B Ken Unsworth's stainless steel sculpture stands in the forecourt of the University Drill Hall Gallery in Kingsley Street. It was purchased through a competitive invitation open to all Australian sculptors in the mid-1970s organised by the ANU Design Unit.



14 ANU Design Unit

THE FLOWERING OF ‘INTEGRATED’ OR ‘TOTAL’ DESIGN

University House opened in February 1954 so for Fred and Puss the question was, where to next? ANU files say nothing about this, and Fred’s ANU file is unobtainable. The future development of a large campus must have been exercising the minds of the senior ranks in the university and no doubt there had been whispers in the Federal government about the contiguity of the Canberra University College and the ANU with an anticipated duplication of administrative effort. All of which pointed to a growing need for skilled design services such as Fred could provide.

Design, as a conceptual need within an organisation was beginning to be accepted and the success of University House showed that skilled attention to interiors would be necessary, based on an almost primal need of staff and students having effective places in which to work and live. The new Vice-Chancellor of ANU, Leslie Melville, simply asked Fred around 1954 if he would stay in Canberra to undertake this task. The ANU Design Unit came into existence from that moment and Fred was able to employ an assistant, Margaret O’Donoghue who, I believe, was an architecture student.

Although I had heard of Fred from Ron Rosenfeldt during our establishment of the NSW Chapter of the SDI, it would be 1956 before I was to meet him, at the very beginning of Fred’s initiative in the forming of the IDCA (see section 15, *Design Council*, p. 135). That led to my joining Fred in the ANU Design Unit in January 1957—and the most creative and rewarding period of my life—where the integrative nature of design really fell into place.

Fred was a quiet, down-to-earth achiever, an excellent, intuitive designer who was able to strip a problem down to its bare essentials with no unnecessary pretensions. Perhaps this resulted from an art training which gave him an eye for detail and good drafting ability to record his perceptions. These were valuable skills for a furniture designer, leading to a pragmatic approach where simplicity and elegance predominated

Throughout the writing of this book I have battled with the inclusion of my name in this story about Fred. My skills complemented those held by Fred and we formed a very productive team, becoming firm friends to the end. It is hardly surprising that our thoughts and actions merged and this story involves both names.

These arts ... are the sweeteners
of human labour, both to the
handicraftsman, whose life is
spent in working in them, and
to people in general who are
influenced by the sight of them at
every turn of the day's work: they
make our toil, our rest fruitful.

WILLIAM MORRIS
THE LESSER ARTS LECTURE
1877

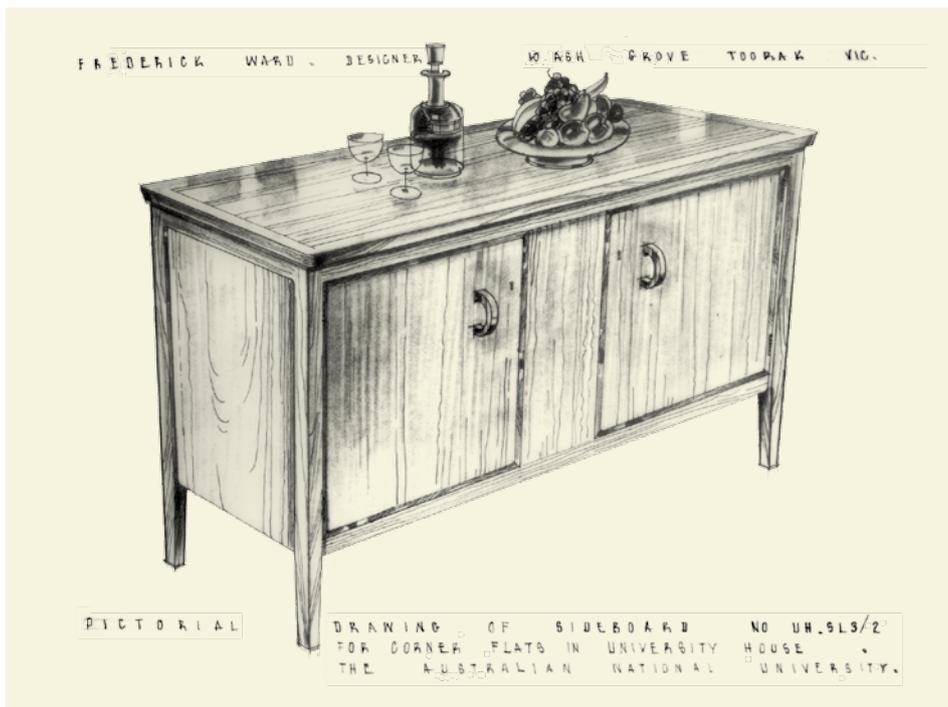
in his transformation of Australian timbers. His ability in furniture and mine in architecture were basic elements for what was to become an integrated design effort within an institution—a unique and vibrant centre that was soon to attract some good designers in landscape, furniture and graphics to complement our core skills.

I do not think, with hindsight, that the senior echelon of the ANU, recognised what we were initiating; it was new thought, based on the universality of design which just grew naturally *according to the needs* of the moment, a significant part of which was to be able to *recognise* those needs. We eventually became a well-knit team of 13 designers and administrative staff committed to the design of a wholesome, integrated campus.

So it was that Hans Pillig joined Fred and me around 1958. Hans was a skilled cabinet maker from Munich, one of ‘Jenning’s Germans’ group who added a wealth of practical knowledge about fashioning wood. John Stevens, an early pioneer landscape architect from Melbourne, came on board in 1964 and made a significant contribution to the ANU landscape which has matured into a most important part of the central area of Canberra.

The Design Unit introduced graphic design into ANU publications which soon grew beyond my capacity to handle and we attracted David Walker from Perth, WA around the mid-1960s—a most competent graphic designer and silversmith (also Manchester-trained at the same college as myself). Fred had moved on to the RBA project in 1961 which left a huge hole in our creative team, so as the expansion of ANU took place in that era, we were joined by Gerald Easden and Charles Bastable, both with impeccable UK credentials in furniture design, and also Jack Low and Arthur Robinson from Sydney, leaving me more time to devote to the planning and architectural side of a holistic campus.

They were exciting and creative years as the various strands of design were at last beginning to form the cloth of an integrated campus. The concept was bearing fruit, based on a solid foundation of quality design by Fred, once again the pioneer in his second era—which I aimed to carry on after 1961 because his designs were functional, economic and, most importantly, good to look at, thus maintaining a continuity of approach to the furnishing of a university.



14A An early sketch for a sideboard in the Chancellor's flat in University House, drawn by Fred around 1951 for presentation to the Management Committee.

Fred's skill in sketching with a pencil is evident here with his representation of wood grain, shadows, reflections, and the casual arrangement of what one might expect to find in such a room. A simple statement of practical, well proportioned design, no frills—and economic to make.

The same egalitarian quality of concept and simple design was inherent in all the furniture, be it intended for the Chancellor or the postgraduate student studies or the staff quarters. Any differentiation to account for status (if practiced at all) would be more likely to show in the timber used—the darker timbers such as walnut and black bean usually being preferred for people such as the Chancellor.

Part of the pleasure I had in admiring the aesthetic subtleties of Fred's furniture was looking at his pencil and occasional pen and ink sketches prepared with loving attention to detail many months in advance of the making. His ability with a pencil and his observation of everyday details was skilful and showed great observation—the shadows and highlights of glass objects placed on top of wood grain had just the right transparency and were in just the right places.^{14A}

His uncanny ability to draw the correct 3-point perspective without any drawn vanishing points was a joy to watch. They looked so natural and often had the accoutrements of open books in use, ashtrays (with cigarettes and upward curling smoke—before the bans on smoking), glasses and decanters of wine, flowers and so on.

Fred's earlier training as an artist found a natural outlet in his delineation of furniture and the delights of living. These sketches served several purposes: they gave life to a project; they conveyed their relativity to other furniture items in the same room; they showed the client exactly what they could expect, free of any additional 'unrealities'; they served as immediate and very useful recognition of detail for tenderers and for the person on the bench who was the maker. To those of us in the drawing office the very mention of a drawing number conjured up a picture in the mind which was, more often than not, Fred's sketch rather than its working drawing.

Such was the power of the ‘artist’s impression’. It should not be underestimated. His psychology was practical—‘*Papering the walls with sketches makes the selection committee feel at home*’. Never, to my knowledge, did he ever have trouble in persuading his clients to adopt his proposals. Such simple presentation skill has become a distant memory now that computer generated ‘reality’ has taken over with its magical lexicon of imagery. In some ways that is a great pity as computerised *reality* is replacing a lovable skill in the presentation of ideas, but at least some of his skill rubbed off on me and I find great pleasure in working up a sketch—an extended skill which owes much to Fred.

Fred, and the rest of us in the Design Unit, made decisions which resulted in useful and integrated forms for the benefit of all members of the ANU—from furniture, interiors, lighting, acoustics, graphics and landscape design—even the design of certificates or presentation gifts to visiting dignitaries or to prizewinning students—anything requiring *creative thought, imagination, appropriateness and the skill* to turn needs into realities—hence the concept of *Integrated* in the title of this section. After Fred left in 1961 I was appointed as University Architect/Designer (a somewhat lugubrious title) which added site planning and architectural design to my portfolio, thus logically completing my role as a design *coordinator*.

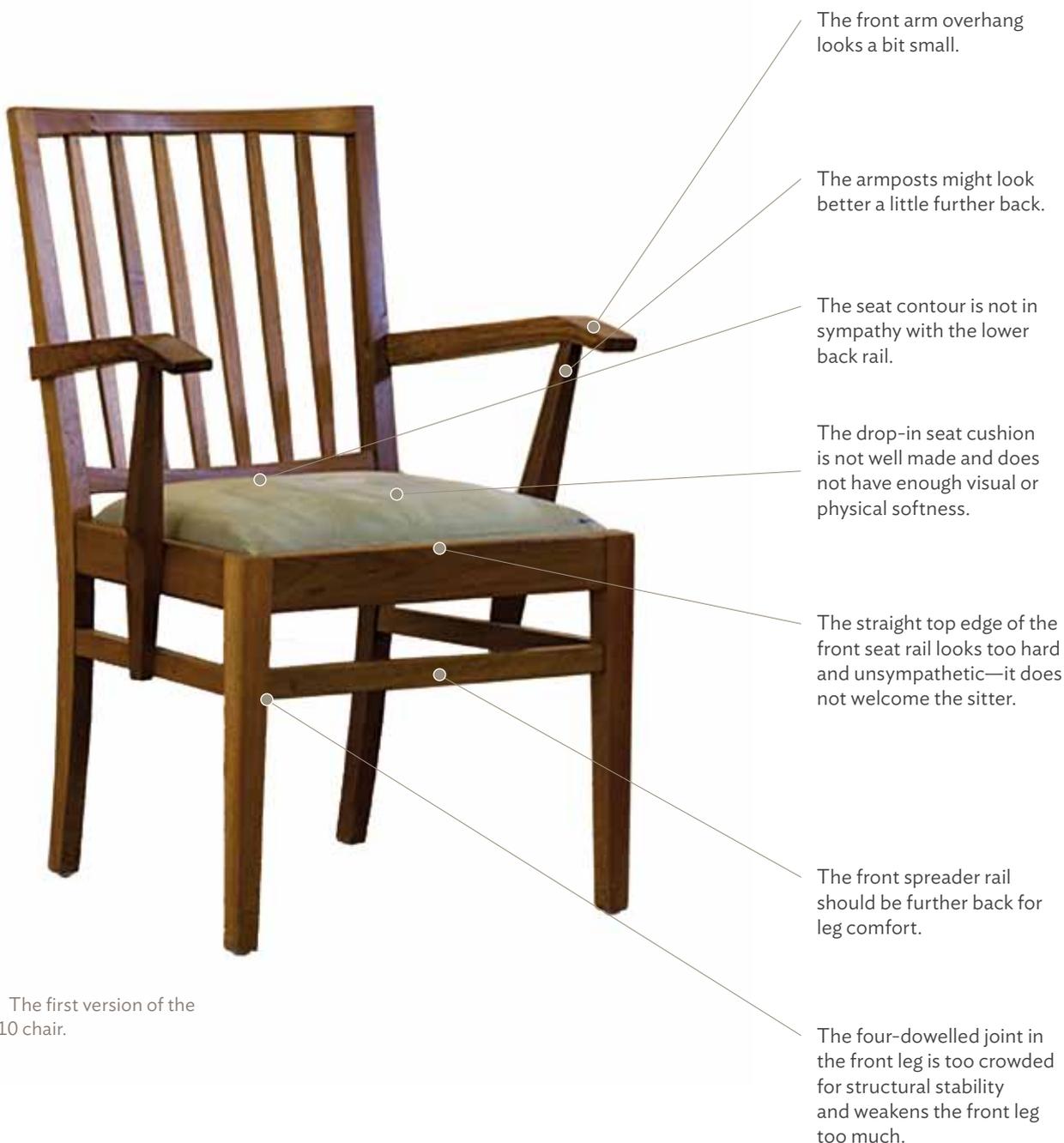
Again, it was an example of keeping the big picture in mind all the time. Does ‘it’ fit in to the general ethos of the university and, now that ‘the environment’ is reminding us that it cannot be ignored any longer, are our design actions positive or negative in relation to the natural environment?

One of ANU Design Unit’s big advantages in having an office on site was in being able to build up a practical body of design experience and a *continuity* of visual recognition in an institution—giving us an opportunity to modify previous designs which might only have been 95 per cent successful and to refine and refine again—an iterative process which is the essence of really good design in repetitive situations. In that way we rarely had to prototype new furniture concepts, such was our quiet confidence that the new model was based on what we had learned from something similar beforehand that had worked well and here was another opportunity to make it *that little bit better*—and maybe even cheaper to make. That theory did not work in relation to architecture however.

The iterative design process adopted by the ANU Design Unit

The first version of the CA 10 chair designed by Fred Ward
for the John Curtin School of Medical Research c.1956

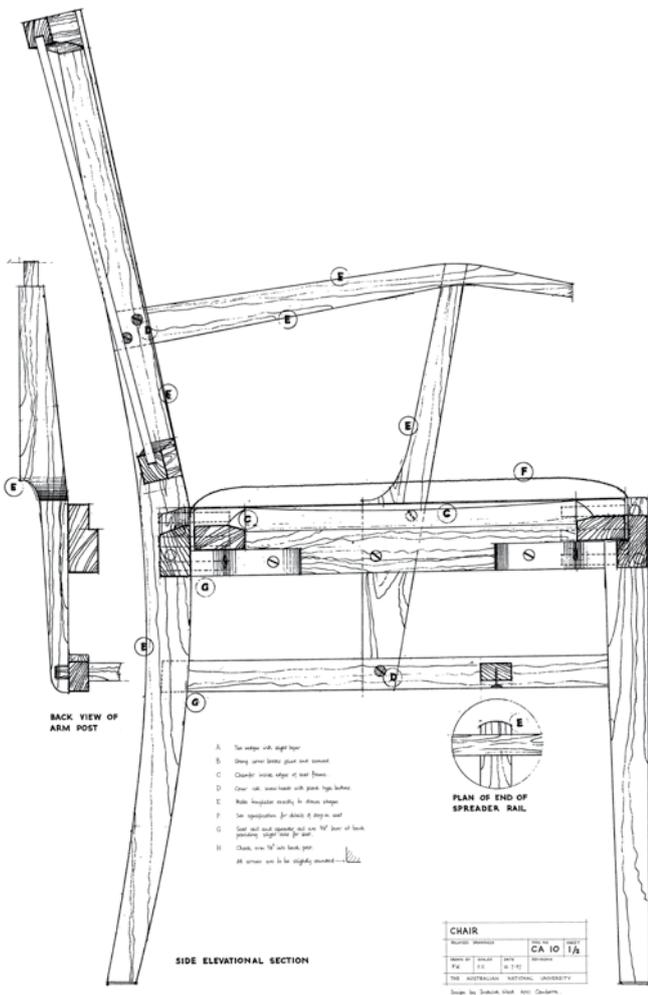
Aesthetic and functional
evaluations made by Fred
on the first model



14B The first version of the CA 10 chair.

Modifications made to full-size working drawings

Corrections made to subsequent chairs which have improved the chair's function and appearance



14c Working drawing of the latest CA10 chair.



14d The final version of the CA10 chair.

ABBREVIATIONS AND NUMBERS FOR DRAWINGS AND DATA.

F.W.

SEATS

EASY CHAIR ARM CHAIR OCCASIONAL CHAIR UNIT CHAIR SIDE CHAIR STANDARD CHAIR OFFICE CHAIR
~~LONG CHAIR~~ STOOL PORCH CHAIR

GE-123456789 CA-123456789 CO-123456789
 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15

CU-123456789 CS-123456789 CST-123456789
 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15

CL-123456789 CSL-123456789 CP-123456789

TABLES

HIGH TABLE LOW TABLE ROUND TABLE SIDE TABLE WRITING TABLE CONFERENCE TABLE
~~CARD TABLE~~ SERVING TABLE MOBILE TABLE

TH-123456789 TL-123456789 TR-123456789 TS-123456789 TW-123456789 TC-123456789 TSB-123456789 TM-123456789
 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15

LOUNGES

SOFA COUCH OR SOFA SETTEE SETTEE WITH ARMS DIVAN SEAT BED

LS-123456789 LC-123456789 LGS-123456789 LA-123456789 LD-123456789 LST-123456789 LB-123456789
 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15

STORAGE

HIGH CUPBOARD LOW CUPBOARD CUPBOARD AND SHELVES SHELVES CHEST OF DRAWERS MAGAZINE HOLDER

SH-123456789 SL-123456789 HCS-123456789 HS-123456789 HD-123456789 STM-123456789
 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15 10 11 12 13 14 15

MISCELLANEOUS TRAYS, MIRRORS, HANDLES, ETC. 123456789 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27.

NOTE: ADD - 'M' FOR METAL - 'F' FOR FOLDING - 'E' FOR EXTENSION - 'P' FOR PIVOT - 'LC' FOR LOOSE CUSHION - 'BI' FOR BUILT IN.

14e This chart shows the various types of furniture items and their corresponding abbreviations, to which a consecutive number would be added. For example, CA 10 would be a chair with arms and the tenth in that type of chair.

Fred started this chart when in Melbourne and carried it through into his work at the ANU. It worked well as a system and he used it with his later commissions.

The chart has been modified at various times, based on experience, and it is likely that there would be several thousand drawings in these categories created by Fred for all his commissions if they were all to be collated. Many of the ANU Design Unit drawings have been digitised and many of the original drawings are stored in the ANU Archives. Digital copies are held by the author and by ANU Archives.

This was especially true of the chairs we designed as they were more sculptural in their form than many of the more rectangular storage items, the CA 10 being just one example.^{14B,C,D}

This iterative approach gave Fred a degree of confidence, based on growing experience, that each model had been assessed and, if necessary, modified, and so was usually up to date. His ability to turn his designs into clear and understandable working drawings gave him a great amount of confidence and I can only ever remember one chair prototype being made—a process necessary for the hesitant designer. Our quantities at ANU were commercially small which reduced the risk. We were not involved with large production quantities or the making of moulds such as for laminated ply members, which could be very expensive, thus requiring large production runs. We could not afford the luxury of such exotic concepts as our budgets were in the basic economy range, except on rare occasions. Down to earth budgets have the effect of crystallising design concepts to their very essence which usually improves the final design.

In many ways such as that our unit was conducting *iterative research* of benefit to a burgeoning university scene throughout Australia. Unfortunately, the field of *design* was not sufficiently recognised by society at that time so there was not much hope for *design research* to be funded. Fred and I wrote a paper on the topic, but the work we were doing in the ANU Design Unit did not apparently warrant recognition or funding. It was disappointing, but we did it anyway, within the furnishing budget.

The iterative design process worked particularly well in our new concept for fixed benches in stepped lecture theatres^{14F}—an area of teaching in the 1960s that was breaking new ground in the presentation of graphic images to students beyond the old chalk and chalkboard which has severe limitations. That was dual projection of larger, prepared images and overhead projectors, long before the magic of computers and digital projection.

There was an increasing need for large projection screens on which two or possibly three images could be projected simultaneously. Other communication advances quickly followed—lighting, acoustics, sight-lines and ergonomic lecterns which improved the capability of lecturers to electronically put their messages across, simply and clearly, especially with audio-visual technologies which were advancing quite rapidly.

In addition the Universities Commission laid down financial costs per place in lecture theatres and we embarked on a ‘research-on-the-run’ program to reduce the unit area per

14f An example of Design Unit research ‘on the run’ to find economical ways of enabling the maximum number of students to see the chalkboard and projected images and hear the lecturer, whilst still enabling freedom of access in and out at any time for latecomers and fire emergencies. The loose chairs ensured maximum adjustment and comfort in relation to the fixed writing desks and the whole system was significantly cheaper than the usual tip-up seats and writing tablets in a rigid frame. This enabled the platform widths to be reduced, thus fitting the maximum number of students into the minimum space with reduced building costs.

In later undergraduate theatres a maximum span of about 4m between columns was achieved, reducing the number of column supports and overall cost. Continuing iterations enabled the ANU Design Unit designers to continually improve the design with increasing success. This design was close to reaching its economic and physical limits—a mature design.

From a maintenance point of view this design reduced the time taken to clean the theatres and even more so when we were able to convince the Universities Commission that it was cheaper in the long run (and acoustically more effective) to use carpet rather than vinyl tiles. Even the bean counters could see the cost advantages!

Another advantage of the type of chair design was the almost complete reduction of movement noise during lectures compared to the only other commercial model with mechanical linkages for tablets and chairs which could be noisy.



14g Ross Hohnen AM, Secretary to the ANU receiving his retirement presentation gift of a table sculpture from the Chancellor, Dr H.C. Coombs in 1975.

Designed by the author, it was made in the Physical Sciences workshop by boring large holes through a block of aluminium to symbolise the penetrating process used by the Secretary to analyse and understand proposals put to him in his daily work, reducing them to an irreducible minimum structure having an economically elegant outcome.

student, not only from a financial viewpoint but to minimise the distance to the screen for students in the back row to improve their visual recognition of written information. In this way we had to work closely with our external architects to make sure that they embodied our lecture theatre needs into their building designs.

These improvements in theatre design came thick and fast with the addition of the School of General Studies requiring several theatres. Although Aristoc Industries in Melbourne had a well thought out hinged seating and writing tablet design for lecture theatres it did not suit the ACT Fire Chief on grounds of access and egress in an emergency.

We designed a more economical *fixed* writing desk and loose chair system which had many functional and aesthetic advantages and proved to be extremely cost effective in cost per place.^{14f} It really was ‘*research on the run*’—in reality rather than in the laboratory. In the 1960s we were able to refine the design sequentially for several lecture theatres for the School of General Studies, eventually arriving at a very simple, economical design using the minimum of resources and making maximum use of the capital grants. We were able to show the Universities Commission that the seating platform width could be reduced with financial and visual benefits.

It reminds me of that very precise statement by Anon: ‘*Simplicity is a profound and subtle ideal, it is the final distillation of skill and sensitivity, and the apparent effortless of the result conceals immense mental application*’.

There was one further advantage of that seating concept. The cleaners were able to upturn the chairs onto the writing benches and thus have a clear run through with their mechanical polishers for the vinyl floor tiles which significantly reduced their cleaning time.

We were able, eventually, in the more public type of auditorium such as the Coombs Theatre, to convince the ACT Fire Chief to introduce ‘continental seating’ into the design (the first in Canberra and possibly Australia) in 1963. While this had *wider* platforms for quick egress in case of fire it eliminated the centre aisle so common in theatres in those days (*the best seats in the house*). It also enabled more seats to be placed in a given space. We worked in well with the architect, John Mockridge, one of the partners of Mockridge, Stahle and Mitchell, Melbourne and it proved to be a great success.

Once seated the students could not get out in a fire emergency and if there were seating gaps left in the middle then latecomers could not access them unless everybody seated was disturbed.

At that time we had not had our battle about the economics of vinyl versus carpet floor covering—see later.

Our early designs for fixed seats with folding writing arms was in the Haydon-Allen lecture theatre (c. 1960). This was new to Australia and stimulated the commercial furniture companies to design their own. They were exciting design days with new ideas put into practice with great frequency.

Fred had left in 1961 (*discussed elsewhere*) and I became involved in discussions with the person to whom I was then accountable, as to the merits of one preferred material over another. This is where a holistic approach proved to be necessary, but required the passage of about 20 years to be conclusive—always a problem for the bean counters.

This attitudinal problem surfaced with moderate frequency in various guises, involving tangible factors like capital cost versus the intangible benefits of acoustical quietness (so necessary for verbal communication in lecture rooms and theatres). At that time, vinyl or lino tiles were the cheapest floor covering over concrete slab floors—but when considered *holistically* in terms of capital cost *plus* the cost of cleaning and polishing over its lifetime, it became a very expensive floor and a good carpet was, in theory, a much better buy. Vinyl and lino were also ‘hard’ sound reflective floor coverings and acoustically very inferior to softer coverings like carpet, especially when complemented by increasingly large glass window areas in classrooms lit by daylight.

Properly selected for hard wear and stain resistance, carpet can now be more than competitive in cost over its life expectancy and the beneficial advantages of better acoustics, noise reduction and easier cleaning made it, in actuality, the better choice.

The battle still rages even today to a much lesser degree, but it was exhilarating (and time consuming) to convince dyed-in-the-wool money-men that it was more economical in the long run to buy a relatively expensive carpet rather than a cheaper vinyl floor covering. The many issues mentioned above had to be explored, in addition to the new environmental factors (late 1970s) of embodied energy, resource depletion, local versus imported, transport costs, wool versus nylon and pile carpet versus Brussels loop pile carpet issues. We even made a carpet wear test machine in the Design Unit to give us comparative figures over the various types of carpet weaves and with this information we were able to win that battle. All these factors meant some fairly sophisticated balancing of objective versus subjective issues, value of first cost versus value of total cost, availability of funds now versus theoretical availability of funds

in an unknown future—all rather hairy stuff, but it made us realise the magnitude and scope of all the inputs to making good design decisions.

Such design decision making has now spread to many other areas where good selection analyses are environmentally essential, especially where energy consumption is concerned—lighting, window design, curtains, insulation, mass, orientation of buildings, solar control.

Building design, since we started to be environmentally aware in the late 1960s, has become much more of a design science as well as an art. But doesn't it rather beg the question that if it is important now to design buildings to be more efficient why wasn't it important many years ago? Maybe the spectre of *unsustainability* had not been realised in a lucky country?

Design methodology had not been born in the early days, nor had design research, but they are now surfacing into mainstream professional thinking—half a century later. Pioneers usually have a hard time convincing others about new and better ways of doing things, but we can only hope that the scare of global pollution and climate change will stimulate action before it is too late to be effective. Sound design thinking is fundamental to success.

There were occasionally some moments of free, non-practical designing at the ANU Design Unit; we were asked to design a presentation from ANU Council to Ross Hohnen, to whom Fred and I had been responsible. This sculpture¹⁴⁶ was formed by drilling seven large diameter horizontal, intersecting holes through a block of solid aluminium. Ross was well known for his penetrating, sharp questions designed to whittle away at your argument until you were left with the kernel of your proposal which either stood up or not on two legs. The sculpture was designed as a physical manifestation of his characteristic approach—he had a good laugh when it was explained to him.

If your proposal stood up (met with his approval) he would back it—as described in the next section about Fred's proposal to form an IDCA, of which Ross was to become Chairman around the late 1960s.

The graphic design component of our integrated design output had become successful throughout the ANU under the competent hands of David Walker and later, Adrian Young. Both made very professional contributions in developing the communication image of the ANU and I suspect it was thought

that the ANU Design Unit was growing too big so Graphic Design was hived off without any discussion around the early 1970s to operate as a separate entity in a separate location. This was yet another example of a management style that did not understand the value of *integrated* design.

John Steven's far-sighted landscape vision was slowly developing as a natural parkland campus which has now, in 2012, matured over the intervening decades into a magnificent setting for research and learning. If only John could see it now.

Gerald Easden and Charles Bastable sympathetically extended Fred's thinking in the furniture area, giving me more time to devote to the architecture and site planning in collaboration with Roy Simpson, our consultant site planner.

See p. 8 for the statement coined by Ted Matchett in 1965 and adopted by me as one of the best definitions of 'good design' I have found. His course on design methodology was a wonderful stimulus to my concept of total, or integrated design, which flowered in the ANU Design Unit and on campus.

The 1950s and 1960s were the boom years for the ANU, especially for the ANU Design Unit, fully justifying our creative team with its integrative approach to institutional design, under—as Matchett described it so succinctly, ...*the circumstances* of the period.

However, the ANU building program slowed down in the 1970s; Ross retired in 1975 and it became clear that new administrators with little or no understanding of the role of design were now inserted into the hierarchy.

Like Fred, I was offered an outside project—the furnishing and coordination of the Australian Arms sculptures in the High Court—and, in a similar way, an opportunity that could not be missed.

The ANU Design Unit is no more; the vision has dissipated; the consequences are obvious on walking around the campus. But that, as they say, is another story.

However, I have raced ahead. I need to return to Fred Ward's early days at the ANU and his vision of better design for everyone—raising the standard of design in the Australian manufacturing industry and how Ross Hohnen played his significant part.

15 Design Council

The Industrial Design Council of Australia, later called the Australian Design Council, must be credited as Fred's brainchild, supported by Ron Rosenfeldt as Honorary Secretary of the SDI, Victoria, and myself as Honorary Secretary, NSW around 1956. It brought Fred, Ron and me into firm friendship, and resulted in my moving to Canberra in January 1957 with Hilary and our son Adam, two months old.

The instigation of the IDCA was entirely due to Fred within the ANU Design Unit office with the agreement of Ross Hohnen, then Registrar of the ANU, but I feel it would be useful to record how the organisation started from the realisation of one man that design was not really recognised as a vital, dynamic force by Australia's industry.

For me, it started around the early 1950s when I initiated the formation of the NSW chapter of the SDI (see section 10, *The beginnings of design professionalism*, p. 81). Our fledgling group had many discussions about the low quality designs being produced by Australian industry and had to conclude that the problem was not with industry alone, but with the community at large. It was a huge problem of education at all levels and an Australia-wide problem. Added to that, Australia had a problem of remoteness from European markets and the burden of shipping costs. We had to find a way to simply make our products better than our competitors and better design was the obvious answer at that time. Something like the UK Council of Industrial Design in London would be needed if Australia was going to have any chance of success.

Around 1955–6, I saw a small paragraph in the Sydney Morning Herald in which the Governor of the RBA, Dr H.C. Coombs, speaking at a meeting at the NSW University of Technology, was reported as saying almost the same thing, uttering the eye-catching words ‘design’ and ‘industry’ in the same sentence. He clearly stated that:

Australia needs to study the needs of the overseas markets and ... to produce goods designed to meet them ... and ‘designed’ is the operative word ... that Australia has an untapped wealth of industrial design.

This was music to our ears, the implication being that what Australia needed was to pull up its socks and produce better designed products.

As Secretary of the SDI (NSW), I hastily penned a letter of response to Dr Coombs congratulating him on his statement about the need for industrial design and adding our weight to the need for better design from industry. Our first President, Peter Hunt, signed and it was posted next day. A month went by before we received a letter from a Frederick C. Ward, University Designer to the ANU, inviting us to Canberra to discuss the formation of an Australian version of the UK Council of Industrial Design.

It was revealed some months later that Fred had either written or suggested the concept to Coombs around 1954–5, probably by way of Ross Hohnen, who was a keen supporter of Fred’s activity, especially just after the successful opening of University House in 1954. Coombs was also a founding member of the ANU and in close contact with Hohnen.

From what Ross Hohnen told me (much later), Fred had ‘belly-ached’ to him about the need for a national body similar to the Council of Industrial Design in London (formed in 1946). In typical Ross fashion he had said to Fred, ‘*Why don’t you do something about it then?*’ Little did Ross and Fred realise that with that statement they were starting a chain of events which were to substantially occupy an enormous amount of our collective spare time over the next 30 years.

The invitation in Fred’s letter to me was to join an investigative meeting sometime in 1956 to be held in the Committee Room of University House, to discuss the possibility of starting an organisation ‘to advance the design quality of Australia’s manufactured goods’. On the committee were Professor Mark Oliphant, Director of the ANU Research School of Physical Sciences; Sir Roland Wilson, Head of the Australian Treasury; Ross Hohnen, Registrar to the ANU; Professor Leicester Webb; Ron Rosenfeldt, Honorary Secretary of the SDI (Vic); Eric Towell, architect; Eric Cox, journalist (ACT) and myself from the SDI (NSW).

Ron and I returned to our homes in a state of quiet euphoria, charged with the task of surveying our respective states and writing separate reports about ‘the role of design in industry and the state of design education at all levels in Sydney and Melbourne’.

After that meeting Fred came to Sydney to visit me in my second house perched on top of the quarry at Dee Why to see the furniture I had designed and made—particularly the fibreglass easy chair on a welded steel rod frame—arguably the first moulded fibreglass chair in Australia. He must have been impressed because he offered me a position as Assistant University Designer in the ANU Design Unit. Although an architect by training I have always felt that, if industrial design had been recognised as a profession in Manchester (1940) that is probably the direction I would have chosen.

Ron and I combined our two reports as a submission from the SDI, convincing the Canberra committee at a second meeting that there was a good case for the formation of some kind of design council and Sir Roland Wilson, Head of the Treasury, gave us £100 and said ‘go ahead’. I had by that time joined Fred in Canberra and together we took on the task of starting the IDCA in the ANU Design Unit (1957), until its new Administrative Officer, Beth Chalmers and the new Director Colin Barrie joined us for a few months around 1958, prior to taking the young infant IDCA to an office in Imperial Chemical Industries (ICI) House, 1 Nicholson Street, Melbourne. The first office furniture for the IDCA was made by Kees Westra in Canberra from Fred’s designs and shipped to Melbourne.

All that would not have been possible without the support of Ross Hohnen who encouraged our use of the ANU Design Unit facilities to sponsor such a worthy Australian cause, believing that the conceptual recognition of beneficial social movements and the support of their development was a legitimate role of universities.

The ‘old boys’ network’ really came into play, starting with the appointment of Essington Lewis, Chairman of BHP, Australia’s largest steel making company. He had been in charge of Australia’s war effort with virtually unlimited powers to get things done and knew Fred from his WW2 days with the Department of Aircraft Production. I recall him saying, at our very first council meeting in the ANU Council room ‘*Get the bell wether through the gate and the others will follow*’—and indeed they did. In quick time we had one of the most be-knighted boards around with people like Sir Roland Wilson (Treasury), Sir

These combined reports are probably in the archives of the Powerhouse Museum, Sydney and resulted in the birth of the IDCA. It is a long story, worthy of a book in its own right, telling the tale of a unique Australian organisation, initially supported in principle (but never understood) by industry and government, and not adequately supported. It would make interesting reading about public attitudes to art and design arising from our colonial history and Australia’s position in the world.

The space in ICI House was (I suspect) generously made available by Sir Archibald Glenn, then Chairman of ICI, who Essington Lewis had persuaded to join the new Industrial Design Council.

Mark Oliphant (ANU), Sir John Forrest (Australian Consolidated Industries Ltd.), Sir Archibald Glenn (ICI), Sir Walter Scott (Management Consultant), Sir John Anderson (Bradford Industries), and Sir John Hurley (Berlei Industries), mostly captains of Australian industry. There was, initially, a handful of designers and administrators, all plain Misters—Frederick Ward (designer), Ross Hohnen (ANU Registrar), Ron Rosenfeldt (designer), Derek Wrigley (architect), Frederick Towndrow (my previous Professor of Architecture at University of NSW), Eric Towell (architect), Eric Westbrook (Director of the NGV) and Peter Hunt (designer). They were the greatest mixed bag of professional people that could be imagined.

The inaugural gathering in 1958 was a psychologically interesting meeting with industrialists on one side of the ANU Council Room table who were, (we suspected) suspicious of what on earth design had to do with industry and we designers on the other side, somewhat overawed by the industrial power opposite. The industrialists were on a steep learning curve as to what industrial design was all about (without, of course revealing their ignorance on the topic) and the designers were soon to learn by some verbal osmosis how business was conducted at the rarified levels of the board room. Each group was a little wary of the other. It was a highly charged atmosphere.

A most subtle educational ‘campaign’ ensued, led by Fred our ‘learned leader’, who, having age and stature on his side, did not bat an eyelid. He gave an excellent summary of why Australia needed to invest in better industrial design and his experience at Myer in Melbourne stood him in good stead. He was patient in his explanations to the industrialists as to what industrial design was all about, the state of design in Australia’s manufactured goods (very tactfully!) and how, if we wanted to compete overseas, our standards had to be equal to or better than those of Europe. He stressed that small countries like Switzerland, and those of Scandinavia had achieved reputations for well designed products such as watches, furniture and similar products and that Australia could not continue its common method of copying from European magazines because the styles were virtually out of date by the time the magazines arrived here by ship. Designs were copied, manufactured and shipped back—and of course would be well out of date by then.

Fred clarified very well the role of the industrial designer, stressing that design was not an applied veneer to ‘pretty up’ an industrial product, but was a process from the very beginning, with an exhaustive analysis of real needs and how those needs could be satisfied, using carefully selected materials and

With the benefit of hindsight (2012) I feel we were too Eurocentric, ignoring our high standard of living (hence costs) and did not recognise the mass market to our north or its relative culture and lower labour costs.

manufacturing techniques, producing functional, good looking products at affordable costs.

That message was reinforced with the example of how the United States had helped Japanese industry get back on its feet after WW2 by introducing the concept of industrial design as an essential discipline in the manufacturing process from beginning to end.

We never really knew if that message was ‘received and understood’ by the captains of industry and the designers gained the impression (perhaps unfairly) that the manufacturers were there just to see what was going on.

Nevertheless, support was engendered and the first Australian Design Centre was officially opened by the Minister for Trade in the Menzies government, the Rt Hon. John McEwen in 1964 in Degraes Street Melbourne, with Colin Barrie as its Director.^{15A} Fred was given the initial honour of explaining to the audience the need for Australia to recognise its skills in the design of manufactured goods.

As part of the recognised educational need, one of the early programs organised by the Council was the annual Australian Dunhill Lecture series conducted for a number of years. Sponsored by the Dunhill tobacco company (politically acceptable in those days!), it enabled famous designers from overseas to give a series of talks around Australia.

The cultural cringe prevailed, even here, but perhaps served its purpose.

Mischa Black, a world famous UK designer, was invited over in 1970 and talked to audiences in most Australian cities about the myth that perpetuated the concept of the industrial designer as a decorator, saying that ‘*fashion is a sugar coating on the pill of mass production*’. This series (despite its underlying social drawbacks) served a valuable role in keeping Australian manufacturers in touch with overseas industrial philosophies and hopefully opened their eyes to ways of improving trade.

The most successful program organised by the Design Council, however, was the Australian Design Award, which ran for many years. Australian manufacturers could submit their products for judgment by a carefully selected panel of designers, engineers appropriate to the product.^{15B} Eventually, it became a very popular annual ABC TV program (disguised as entertainment) giving widespread publicity to the winning products.

15A The opening of the first Australian Design Centre in Degraives St, Melbourne, 1964, by the Rt Hon. John McEwen, Minister for Trade and Industry. Fred Ward spoke about the need for better recognition of our design skills in Australia and our need to employ them in raising the standard of design of our exported goods.

Next to Fred is Sir Walter Scott, then Chair of the IDCA, then the Minister for Trade and Industry, Rt Hon. John McEwen MP. On the extreme left is Norman Jones, Managing Director of BHP, while on the extreme right is Councillor Leo Curtis, Lord Mayor of Melbourne. Behind the Design Award 'Planet' lamp (designer Bill Iggulden) is Colin Barrie, the first Design Director of the Council.



15B Panels of judges were assembled, each of whom had some expertise in the assessment of the group of products under consideration. They met in the various cities and judging had to conform to a strict set of criteria, the first of which was that the product had to be designed and made in Australia.

Colin Barrie, Director of the IDCA is seen on the extreme left, Trevor Wilson, standing next to the display unit, Harry Sebel is standing at the back pointing out some aspect of the product, on his left is Leo Port, previously Lord Mayor of Sydney and in front of him is Fred Ward, seated on the Tessa chair. Memory fails on the others.

The Australian Design Council (as it finally became known many years later) approached the huge multifaceted problem of raising Australia's standard of design on many fronts. Fred had a particular interest in the purchasing procedures for furnishing the many Australian diplomatic posts around the world (possibly because of his long friendship and perhaps influence with the Minister for External Affairs, Sir Richard 'Dick' Casey). Fred put forward the view that not only would our overseas posts show to the world that Australia was capable of manufacturing high quality products, but that they would encourage Australian manufacturers to realise the value of design as a potent force in manufacturing which could benefit our economy.

It seems likely that Fred helped his friend 'Dick' to contact the Design Council shortly after the formation of the Council in 1958 because IDCA records indicate that the minister must have formally contacted the council for advice on how it might better equip our overseas posts. Fred subsequently wrote several papers around 1978 about how the Design Council could encourage government purchasing officers to think of good *Australian* design as a fundamental tool in purchasing equipment such as furniture, soft furnishings, glassware, crockery, cutlery and kitchen hardware for our overseas establishments.^{15c, OP}

It was customary in that post-war period for the Department of External Affairs to either buy buildings of appropriate calibre and location in overseas cities or (rarely) to commission architects in Australia to design a building which would do credit to Australia's standing in the world scene.

Such a case happened with the Australian Embassy in Paris, designed by Harry Seidler in 1976, which acquired considerable overseas prestige not only through good architectural design but by Seidler's usual insistence on selecting all the furnishings and accoutrements to suit the architecture (he was renowned for insisting on this 'total' or 'integrated' attitude to design and was an appropriate choice for that commission).

... a process that Fred and I were encouraging within the concept of 'Total Design' at the ANU.

To the best of my knowledge this was probably the first time that the equipping of posts was coordinated in such a holistic fashion. It was more usual practice to allow a very haphazard procedure involving officers of External Affairs (usually with no furnishing skills or experience), Treasury, Department of Works and sometimes the ambassador's wife (often with very subjective and suburban tastes)—a process which had usually proved less than effective and expensive, in which tastes did not always coincide with the actual corporate needs of such establishments).

6
(cont'd) However, monotony can be avoided by varying colour schemes and ornament, and as necessary by modifications required to suit local conditions.

7 Providing for actual needs not individual wishes.
A building interior scheme that proved agreeable to all its changing users is more a goal than a possibility since the users' tastes will vary through a wide range of styles from 'brash contemporary' to 'pretentious suburban', moreover many users will desire the status they associate with expensive mass-produced copies of period styles. This often provides problems beyond the competence of amateurs, even those with good taste and administrative skills

8. Enhance Australia's image abroad
Visitors coming into our buildings in other countries will rightly expect to gain some knowledge of our national skills, taste and competence from



15D Fred was, rightly, the first recipient of the award in 1960, HRH Duke of Edinburgh was the second and Ross Hohnen the third—and last—then I believe it became too expensive to produce and no more were made.

The story goes that the craftsman who made it had nightmares of indecision before setting the lathe at the exact point and angle for boring, as the slightest angular error would be very visible inside with asymmetrical arrises*—it was indeed an extremely high precision, highly skilled operation and its ultimate high cost is quite understandable.

It is an interesting object lesson in perceived value versus required effort.

*An arris is a sharp edge formed by the angular contact of two plane or curved surfaces.

15c Excerpt from the 1978 preliminary notes written by Fred prior to an IDCA recommendation for a design based purchasing procedure to the Minister for External Affairs for the complete furnishing of Australia's overseas posts.

Fred's copy of the final report is available from the author. Many people who have been inside some of the government official residences will recognise the prophetic truth of some of Fred's statements in clause 7.

This particular issue was delegated to the ACT Committee of the IDCA, and Fred took a leading role in these discussions, preparing a report in 1978. But it has to be said that, despite all the negotiations and meetings, the philistine attitude of the status quo seems to have prevailed among the Canberra bureaucracy.

It is not known if any design improvement was made to other overseas posts following the submission of the Design Council's report.

Fred's contribution to the inauguration of the Industrial Design Council was recognised in 1960 by the council presenting him with the highest honour it could bestow—becoming the first recipient of the Essington Lewis Award.^{15D} Designed by Stuart Devlin, the designer of the Australian decimal coins. In 1970 Fred Ward was again recognised for his services to Australian design by the award of an MBE from the Governor General.

Sadly, the Design Council was allowed to slide into obscurity in the early 1980s, mainly through political and/or bureaucratic lack of understanding and support. The council was eventually subsumed by the Standards Association of Australia which only maintained the Design Awards program (the popular public vision of design as 'object'), clear evidence that the Liberal Australian government of the day and its bureaucracy still had little understanding of the fundamental role of design in this important area.

In comparison, the UK has derived enormous value through the improvement of the design quality of its manufactured goods from its Council of Industrial Design since it was established in 1944. Australia's distance from its European markets in the post-war decades made such a need even greater and may well have been a significant factor in the decline in our manufacturing capacity and its quality.

It is quite possible that Whitlam and Button with their trade liberalisation policies around 1973 contributed to the decline of Australia's manufacturing capacity. A reduced search for design quality resulted—when logically the reverse should have been the case.

Philistine: a person who is lacking in, hostile or smugly indifferent to cultural and aesthetic values, and intellectual pursuits.

Visits to Admiralty House in Sydney and to Government House 'Yarralumla' in Canberra in researching this book have confirmed the traditional approaches taken to furnishing some of the official residences in Australia. The results speak volumes about our attitude to 'appropriate' furnishings, exhibiting an official 'cultural cringe' and lack of pride and faith in our capacity to be courageously modern. Australia cannot move forward by looking backward and in this area the lead must come from the top.

Or were they far-sighted enough to realise that the sheer productive capacity of China would eventually overtake anything Australia might do with quality and that our high production costs (aka—our relatively high standard of living) would make it easy to swamp us with lower cost goods of clever novelty irrespective of whether they were well-designed or not?

The case for ‘Good Design’ was not to be silenced however, and after a few modifications Good Design Australia emerged as a successor to the IDCA in 1997.

Fred and his design colleagues often discussed this deep-seated malaise but tracing the causes leading to closure only reinforced the argument for the teaching of design as a core discipline in secondary and tertiary education. The self-perpetuating nature of the misunderstandings about design was a significant root of the problem and should have been tackled at the highest levels. If we had realised the fundamental importance of this aspect in 1958 we might now have bureaucrats capable of understanding the value of design to the community. This is discussed in greater depth in section 17, *Design in Education*, p. 153.

Subsequently, Fred was posthumously inducted into the DIA Hall of Fame in 2010—the highest honour the Design Institute could award—presented to his son Martin in a ceremony at the Sydney Town Hall.

16 Australian Academy of Science

Shortly after I joined Fred at the ANU Design Unit, Ross Hohnen said that Professor Sir Mark Oliphant and Professor Sir John Eccles, both founding academicians of the Australian Academy of Science in Canberra, had asked Vice-Chancellor Sir Leslie Melville if Fred could design all the special furniture for the new academy building to be built near to University House. It was an unusual challenge from start to finish, involving not only the interior furniture but also light fittings in the Fellows Room and external lights at the entry forecourt.

Roy Grounds, well respected for his innovative designs and Fred's lecturing colleague in Melbourne, had won the competition to design the building. His work featured a huge concrete dome 45.75 m in diameter, the largest in Australia at the time, harmonising its external profile with the rolling silhouette of the hills south of Canberra. Inside was a large conference chamber to seat about 150 with a gallery for overflow seating and a large Fellows Room and offices on the outside of an internal circular corridor. This was an appropriate, forward looking solution for a science academy.

Fred and I divided the furniture designing between us. Fred took on the offices and the Fellows Room^{16A,B,C} and I was to design the conference seating^{16D,E,F} being more architectural in nature, and unusually integrated with the air conditioning system through holes in the timber floor. As the chamber floor was saucer shaped relative to the lecture dais, there were no flat areas on which to place seating units, which created several geometrical difficulties in setting out.

Oliphant and Eccles, both academicians on the Building Committee had briefed Roy Grounds and Fred Ward on their wish to have two-seater settee units with the comfort quality equivalent to '... *the back seat of a Humber car*'.

| *A close runner-up to the Rolls Royce in those days...*



16A Council Room secretarial table, 1959. A very elegant table with raised edges on three sides, for secretarial use in the Council room. (The larger Council table was an architectural fixture by Roy Grounds.)



16B Side serving table, Fellows Room. The long 'bellied' top rail was a most unusual departure in Fred's styling, as was the raising of that rail to the same level as the table top. Note the through tenons at the end spreaders.



16c Coffee table in the Fellows Room by Fred Ward. Compare the profile of the table end frame with the tables in Hall of University House.



16D Overall view of the conference chamber from the gallery, showing the relationship of seating units to the rostrum.

Achieving a visual location of the settee units that looked good from every point of view was not easy to achieve on a saucer shaped floor and could only be achieved by visual positioning from the rostrum.



16E Gallery overflow seating. The irregularly spaced vertical battens can be seen around the chamber and under the writing shelf, allowing free access for sound to pass through. The small wood domes on the writing shelf replace the turned metal ashtrays which were originally supplied and subsequently thrown out when smoking indoors was banned. The blue-grey upholstery by eclarté on the settees complements the ash and blackwood timber.



16f The settee armrests were designed to give comfort to two people, and to accommodate multi-language translation equipment which has never been found to be necessary.

The supporting wooden structure is Tasmanian laminated blackwood, integrated with a steel framework for rigidity during transport. Each unit fits over a rectangular ventilation hole in the wooden floor with outlets behind the ankles. The floor was saucer shaped, which required very precise location to ensure visual regularity.

The upholstery fabric, woven specially by Catherine Hardress and Molly Groves at eclarté, Heathcoat, Victoria has given over 50 years service and was double woven to provide the right degree of acoustic absorption.



16g The structure of the settees is more clearly seen. Ventilation holes are underneath the removable seat squab.

Note the visual pattern of the background wall and compare it with the associated photos showing the visual treatment of paint and strings following many complaints of visual disturbance during lectures.

There have never been any complaints about the comfort of the seating.

When the photo was taken in 2011 the seats had given 52 years of service.

The floor and inside front of the unit is carpeted with the floor carpet to reduce any potential noise from the air conditioning and foot noise.

The conference seating had to have writing surfaces and space for multi-language translation outlets for earphones (the latter never eventuated, partly due to lack of money and the dominance of English for conferences).^{16F,G}

Each two-seater unit ended up as a moulded plywood form on a central steel channel frame to provide stability during transportation and handling made by Ricketts and Thorpe, Sydney (no firm in Canberra being big enough to tackle such a large project).

The matching of the supply ventilation holes in the floor with the substructure of the settees was a major exercise partly because of the unusual arrangement of the units and the need for them to present a regular progression of visual offsets. Every location proved to be unique. For a flat bottomed unit to be stable on a spherical floor covered with a fitted carpet, every fixing had to be vertically adjustable once its visual position had been determined. This was done by loosely placing the units on the floor in a measured position and then micro-adjusting them by eye from the lectern to ensure visual regularity from every viewpoint. Then, and only then, could the ventilation holes in the floor be marked and cut to allow unobstructed air movement—and hoping there was no major framing member under the floorboarding (no computers in those days).

The upholstery fabric had to have a high coefficient of sound absorption and was specially woven in wool by Catherine Hardress and Molly Groves, who ran a very successful weaving firm *eclarté* in Heathcote, Victoria. They had previously supplied all the soft furnishings for University House nearby (through Fred).

Being a circular shape the chamber was expected to potentially have well-known acoustic problems similar to those experienced in the Whispering Gallery of St Paul's Dome and most other large circular spaces. The acoustic consultants Bolt, Berenek and Newman from the US had been engaged to advise Roy Grounds and no acoustic problems arose—but *visual* problems did.



16H Batten detail. The dark battens were originally the same colour as the light ones and were painted to recede to a similar visual value as the other spaces which were covered by several tightly stretched strings to permit the sound energy to pass through to be absorbed in the baffle chamber behind.

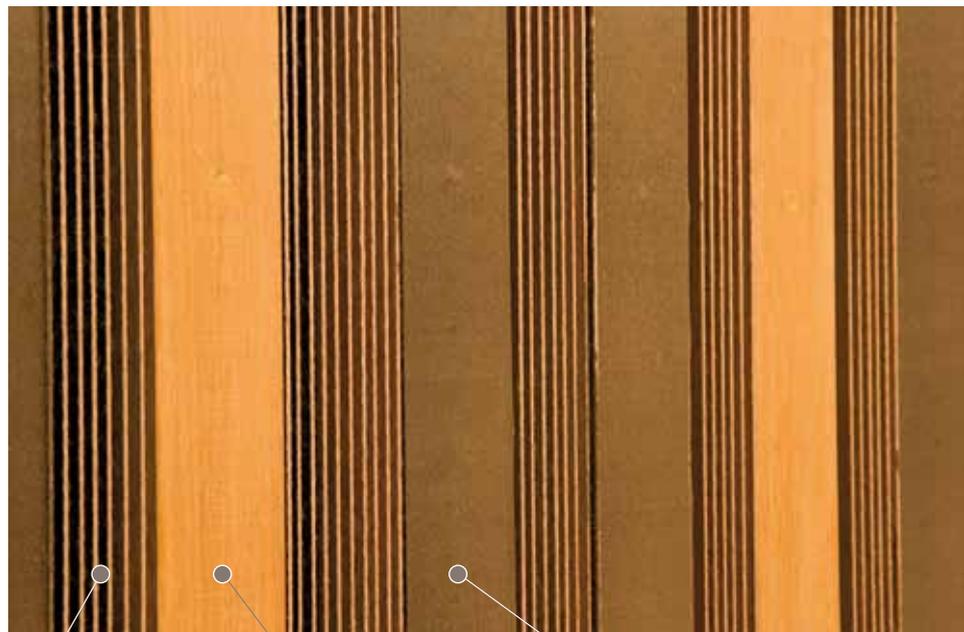
The battens are irregularly spaced for acoustic reasons.

16I The acoustic and visual experiment with the battens.

This treatment eliminated the visual disturbance previously experienced by the audience when making lateral eye movements, without affecting the balance of acoustical absorbency and reflectivity—a good example of the application of aural and visual physics in solving a tricky problem.

Solution by Dr Victor Macfarlane, John Curtin School of Medical Research.

For more detailed information on this successful experiment, see the detailed account of the building and furnishing of the dome, c. 1958–59.



New strings allow sound to pass through to maintain absorption as intended.

Original battens maintain required reflectivity of sound but now show different visual spacing and optical frequency.

Painted battens match colour of the stringed openings to create a different visual frequency but maintain required reflectivity.

The irregularly spaced vertical wood battens forming the circular wall of the conference chamber were of light coloured Victorian ash with open, black spaces between, leading to absorbent chambers behind. This pattern produced an unexpected *visual* disturbance for audience members who concentrated a fixed gaze on a lecturer. This left a firm impression on their retinas and any sideways movement of the eye immediately produced a dazzle effect which actually made some in the audience a bit queasy.

Unfortunately no photo of the original batten spacing seems to be available.

This was a serious visual challenge to a university—Sir John Eccles, being a Nobel Prizewinner for his neuro-physical vision research was very interested in the phenomena. The problem was eventually overcome by Dr Victor Macfarlane, a physiologist, also in the John Curtin School of Medical Research, who suggested an optical change in pattern rhythm and colour contrast, using vertical manilla strings which reduced visual contrast between the light coloured battens and the black openings, allowing the physical sound to pass through. Persistence of vision with the initial spacing of the battens was a major part of the problem so Dr Macfarlane suggested that every second and third batten be painted a colour to match the stringed opening, thus widening the apparent distance between the dominant lighter coloured battens.^{161,2} This solved the problem and over more than 50 years of use the conference chamber has performed extremely well. It stands as a well-integrated merge of different areas of the physical sciences.

Every project is a challenge, but the Academy of Science was special in every respect, showing that furniture and building elements can have close physical and psychological relationships, requiring simultaneous consideration if functional architecture is to be achieved.

The building has been home to many conferences and scientific lectures and is now one of the best recognised architectural icons around the world. It is now known as The Shine Dome, following a significant donation from Professor John Shine AO FAA.

17 Design in education

Throughout his life Fred maintained an interest in the need for design education *at all levels*. Schools can nurture an awareness of design in everyday living—because that is where good design really starts—as a way of thinking rather than as an object to be admired. In the universities, as Fred put it once, *‘any discipline could be rounded off by a dose of design sensitivity’*.

Puss recalled an early statement by John Reed^{PD} that Fred was critical of the stylistic moods of furniture in the 1920s—about there being *‘so much unoriginal, poverty-stricken design that it amounted to lack of national style’*. Copying of overseas designs from magazines was common among manufacturers, who had no understanding of design and had little incentive to be creative. There was no design profession and the words *design* and *style* were most likely synonymous. Design was not understood as an inherent aspect of life and so Australian furniture design tended to be stillborn.

Fred appears to have had a good grounding in ‘drawing’ at the National Gallery School of Art (probably having had Fred McCubbin or William McInnes as his teachers). Puss noted that *‘Fred became an extremely good draughtsman... with dreams of becoming as good as David Low or Dyson, he went in for cartoons and caricatures and got occasional work on the Bulletin...’*^{PD} This skill was to be used to great advantage in his future career, helping to ‘sell’ his furniture ideas to all his clients.

Another of Fred’s early statements about design and the training of designers^{PD} was influenced by his own varied experience in the making of stained glass panels and metalworking and the importance of draftsmanship which were, as Puss reported: *‘the right ones for a new and very efficient kind of designer who would disregard the almost endless copying of the styles of the past (and overseas) and create something fresh and exciting’*. He was to produce more opinions of that kind during his teaching of interior design at Brian Lewis’s School of Architecture at Melbourne University around 1948–52 and in later life in Canberra.

There was no recognised training in *industrial* design anywhere in the world until about the 1920s and 1930s when Walter Gropius founded the Bauhaus school in Germany. I believe the Royal Melbourne Institute of Technology must be credited with the honour of starting the first Department of Industrial Design in Australia under the leadership of Gerard Herbst in 1949.

It is easy to understand Fred's early frustrations in the 1920s about the lack of public understanding about design, but the question of education *in* and *about* design has to be inculcated *at all levels as a way of life*. All of us in the ANU Design Unit believed it to be a vital element of *living effectively—our core business*—totally integrated with our creative thinking, our lives and indeed our *raison d'être* at ANU. Fred believed it to be as basic and as instinctive as breathing—*and as little thought about until something goes wrong*—at which time it is recognised in a negative way as 'bad design'. If it can be recognised in that way then there must surely be 'good design'.

This underlying aspect of effective living is still not recognised by our educational system which remains steeped in traditional thoughts of art, craft (and design, if recognised at all) as being in separate educational boxes with the lids closed. At the secondary level, art is still being taught along fine art lines and industrial 'arts' as practical *skill* techniques, usually restricted to wood, metal and plastics. Somewhere in the middle, 'design' as a holistic *modus operandi* or process which is integral to every educational aim seems to have been ignored.

Fred was very perceptive about this issue and I remember one statement he made many years ago when we were discussing design education—'*Education has made the mistake of following society when its real role is to lead*'. He felt this mindset to be one of the root causes of our emerging environmental problems and until this was recognised and changed we would not be educating our children for a better, sustainable future. The lack of this *understanding* about design, with its analytical processes, has caused a huge vacuum in the collective, public mindset that has been filled by commercial interests in which money and novelty predominate, prostituting design to the lowest and meanest of motivations.

It was in our years together, working on several levels simultaneously—ANU Design Unit, Design Council and secondary education, that Fred and I began to see that education was coming into focus and, in retrospect, we were really looking through microscopes and binoculars at the same time. Both of us were on the Education and Promotion

Committee of the IDCA with me as Chairman having a wide brief of investigating all levels of education from a national perspective. They were exciting years, but we soon realised that brick walls were everywhere.

Throughout our 34-year friendship and design collaboration, a common topic of discussion was how design and society could interact for mutual benefit. We were convinced of the connection but we had one inherent weakness—we were outsiders to the educational system (and part-timers at that, with no funding and even less time). We were designers poking our noses into a system that did not recognise the real meaning of the word ‘design’ and its enormous potential in what could be a stimulating and rewarding curriculum as a basis for education in living.

The Duke of Edinburgh, who lent his name to the Design Council’s Prince Philip Prize, was fond of saying at the Design Award meetings he attended, that ‘...*everything on earth has either been designed by God or by human beings*’.

Be that as it may, Fred and I agreed that every conscious moment of our lives is filled with subconscious questions and resultant decisions made in our brain; most of our thoughts and all our actions consist of *design* decisions, based on the selection of alternatives. For example, at the very moment of waking we have to decide when and how we activate our muscles to get out of bed; what am I going to do today; what is the weather going to be like; what suitable clothes should I wear; should I do this or should I do that and so on for the coming period of awareness.

All of these simple decisions are made by coordinating, assessing, rank ordering, evaluating, weighting the myriad inputs to our receptive brain and coming to some conclusion about what action to take. They are, in essence, a *design process*, albeit at a subconscious level based on learned experience.

Even when asleep in bed our subconscious brain is receiving inputs that determine action. It senses comfort or discomfort which determine immediate action, receives external inputs such as temperature, sounds, light and movements, and it automatically evaluates their disturbance value and our need to respond or not.

The reason Fred and I discussed these fundamentals at our Design Council Education Committee meetings was our puzzlement at why, if the *process of design* is so inherent and so constantly used throughout our daily lives, was it not studied

At one time around the mid-1970s I became Chair of the Board of Narrabundah College and tried to explain my thoughts on ‘education for living’ but the board was more interested in achieving a classical education based on what they thought was a ‘good’ education, rather than experimenting with something they did not understand.

and reinforced in schools as an incredibly useful decision making process? Why was it not accorded its true value in the curriculum alongside mathematics, languages, and history, so long regarded as essential elements of a core education?

Surely, we felt, the very *process* of thinking, of solving problems, of assembling information, sorting facts from opinions and comparing alternatives to come to the best conclusion could be analysed and used in schools at all levels to encourage logical thinking.

But *logical* thinking is not enough: *holistic design* thinking—as a creative art/science must embrace the emotions, the spiritual, the aesthetic senses and other unquantifiable aspects of what constitutes ‘the good life’ for everybody as well as the technical. Reflecting back, it seems we were looking for the design equivalent of a Theory of Everything as were the scientists in their thinking about string theory beyond quantum mechanics.

Design thinking is highly relevant to living a good life and is largely unrecognised at all levels of life and education. As a consequence, Fred and I felt it should be a mandatory subject. Somewhat paradoxically, however, it seems that we all find it much easier to realise the negative consequences or results of *bad* design, a result of not thinking effectively, but even that topic is rarely, if ever, discussed.

Fred was of the opinion that many world problems can be traced to that discrepancy.

We seem to have been shortchanging our children by our lack of perception as to what constitutes a sustainable life of *wellbeing*—a *well-designed* life.

We could only conclude, after many discussions with people within the education sphere that, *firstly*, the education establishment unknowingly practices a form of closed shop where teachers protect their area of expertise to the exclusion of a wider integration with others. Knowledge has become so specialised that we risk losing the benefits of integration and interaction. What does need to be recognised by the educators is that design, on the other hand is not a tightly circumscribed study. It is extremely wide and interactive, a fact which seems hard for other specialists to comprehend. *Secondly*, more fundamental areas of learning leading to *wellbeing* are perhaps ignored on the altar of prestigious advancement of the message bearer. Education, we felt, was a gateway to a sustainably healthy, happy and useful life, not so much an inflexible archive

By sheer coincidence, as I finally review my editor’s comments I have just bought Skidelsky’s book *How Much is Enough*, in which he seems to be saying much the same, but from an economic and philosophic perspective rather than design—I look forward to reading it. ^{HME}

of knowledge which did not seem to recognise the value of design. The current mess of global warming can be squarely laid at the doorstep of inadequate education (ignorant in knowledge and insensitive in applying it—design) and human greed. Hard words perhaps, but nothing compared to the *consequences of not thinking* about such things which has led to the planetary situation we are now having to deal with—and which our grandchildren will deeply regret as profoundly ignorant.

This interest by the IDCA Education Committee in the introduction of design studies in education raised many issues that could not be pursued by Fred and myself on a part-time voluntary basis. Although lectures were given and filmstrips made, with help from some of the enlightened members of the education departments, little progress was made. Some years were to pass before we were able to form the Design in Education Council Australia (DECA) in Canberra.

Fred became frustrated at the slowness of change within the educational system and because of his limiting physical condition in the 1980s became less able to participate. In 2013, half a century later the problem is far from being resolved.

Around 1964 Fred was invited to appear on the ABC's *University of the Air* radio program following his successful completion of the furnishing of the RBA in Sydney. It was an interview conducted by his old colleague Robin Boyd about Fred's experiences as an industrial designer in designing furniture for major Australian buildings. He made a very interesting comment: *'The admirers of tradition seemed to regard the existence of new, straight forward design as a criticism of their own taste, and even as an attack on the social set-up'*. The commission from Walter Bunning to design furniture for the NLA in Canberra quickly followed around 1965 so Fred had little time to spare for voluntary design education matters.

In that year the ANU decided to send me on a world tour of universities to see how design was integrated into the administration of campus development and to attend a course on design methodology at Bristol delivered by Ted Matchett. It was a most enlightening period that reinforced my design outlook.

I visited several universities in the UK, Denmark, Sweden, Netherlands, USA and Japan to see how they integrated design methodology into two broad areas—the applied *administrative* discipline in relation to their university campuses and their teaching methods—as distinct from a more *academic* analysis

The topic of the course, although filtered through the mind of an aeronautical engineer was incredibly relevant to architectural and industrial design practice—but would require another book to explain. It became clear to me that the design process from need to fulfilment was fundamentally similar (although differing in complexity) in designing a 'Concorde' or a kite.

for the teaching of design. I had to conclude that while there was a lot of theory, its disciplined application in practice was thin on the ground. Sadly, in Australia there was not even the theory, but in one field I felt that Fred and the ANU Design Unit were leading the pack.

My overseas tour certainly convinced me that the ANU Design Unit was well advanced in its practice of *integrated* design practice to any of the overseas universities I had visited. Back in Canberra I had renewed enthusiasm, especially with the concept that design had a much bigger role to play in the dawning recognition that all was not well with our *environment*—the elephant we were ignoring was firmly wedged into many living rooms.

During my visit to the School of Environmental Design at the Berkeley Campus of the University of California in San Francisco I found they were aiming to integrate planning and architectural design into a more cohesive and integrative force for better urban development in which the needs of the environment were given prior consideration. The school was examining the *scientific* and rational *methodology* aspects of design, which integrated the thoughts of Michael Farr in London, Ted Matchett in Bristol and George Nelson and Christopher Jones in the US—rather than the more common aesthetic or intuitive approaches. Both have their place depending upon the intended end point, but it should always be remembered that design is an appropriate mixture of art and science. New methods were urgently needed for contemporary realities and, in effect, these thinkers were re-designing design.

On my return I was stimulated by long discussions with Fred about the linking of design with the emerging realisation about the state of the Australian environment and the serendipitous fact that Dr Sam Richardson, Principal of the Canberra College of Advanced Education (CCAЕ) was looking for new schools to establish. This thinking about the ‘totality’ of design clearly reinforced what Fred and I were trying to achieve in the ANU Design Unit and I was convinced the time was ripe for such a discipline to take hold in Australia—and where better than in Canberra.

Just as Fred was urged by Ross Hohnen in 1956 ‘*to do something about the need for a Design Council*’, so I was encouraged by Fred ‘*to do something about a School of Environmental Design*’ in 1966. Although Fred had just concluded his RBA project around 1964–5, he was acting as a design consultant to the CCAЕ, helping Peter Spears set up a fledgling version of the ANU Design Unit

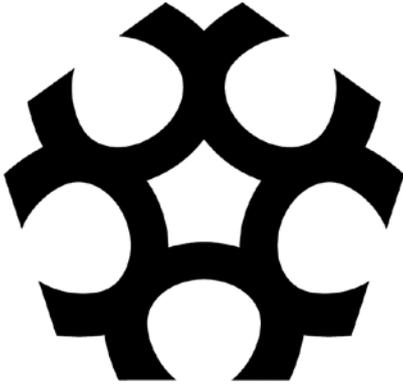
to carry out the same functions for the growing college. Fred was also about to start his new commission for the NLA project around that time and we had many discussions on this at his Braddon house.

Inquiries showed clearly that although the ANU had previously considered forming a School of Architecture prior to 1966, proposed by the Royal Australian Institute of Architects, it had apparently been decided that such a discipline did not fit happily into the ANU pattern—the impression being that it was too commercial, perhaps not fundamental enough. Design was still not understood at all.

Dr Sam Richardson and the Chairman of the College Council, Dr Douglas Waterhouse, were enthusiastic about the concept of *environmental* design, so Fred, Arthur Robinson, David Walker (our ANU Design Unit graphic designer) and John Stevens (our ANU Design Unit landscape architect) with myself as chairman, all willingly put their weight behind the concept and we started to prepare our case to Council.

Our proposal was for an *integrated* school of Architecture, Landscape Architecture, Industrial Design and Graphics to be formed, having common core subjects in design philosophy and practice. This would help the future practitioners to understand each other's field of design activity, so that artificial barriers or boundaries would not stand in the way of more integrated design. We were successful in the initial goal and the school opened its doors to the first students in 1974, although the vision of its creators was not fully realised by the appointed staff—the graphic area had to wait, but came eventually. However, the selected heads of the three schools had their own ideas and the historic boundaries remained. We all thought it was a lost opportunity to overcome the blinkered approach of design disciplines with rigid limitations. The environment knows few boundaries in its elements and our thinking had to echo that holistic entity, where everything is, in some way, connected to everything else and it is in these connections that the future will be able to realise its full potential.

The continuation of old thinking was not an enlightened start, but at least we had achieved a new school of design in Canberra—a logical development in a planned city trying to put such principles into practice. However, only one of the original proposers was invited to sit on an advisory committee—it was an ominous start and our fears were, unfortunately realised. Old thinking can be remarkably resistant to change.



17A CCAE logo designed by Derek Wrigley 1970. The insignia of the CCAE was based on the letter C in two dimensions. It was approved by the College Council in 1970 and was retained as the insignia when the institution changed to the University of Canberra, possibly because the letter U is roughly the same as C.

The members of our steering committee were really disappointed.

I did at least have a consolation prize—I was asked to design the CCAE logo in 1969 which fortunately translated well to the new name of University of Canberra that came along a few years later.^{17A}

Design education also occurred in another area just a few years later—the Furniture Workshop at the ANU School of Art. By this time Fred was in a wheelchair with an iatrogenic illness and although it was most appropriate that an institution with at least 4,000 items of his furniture designs should inaugurate such a design workshop there is no evidence I know of that connects Fred to its inauguration. It was a missed opportunity to recognise the skill that had done so much for Canberra.

The ANU had subsumed the contiguous School of Art in 1982 and the Furniture Workshop emerged as a crucible for new thinking in that field under George Ingham and latterly Rodney Hayward, with graduates now making a living from their design output. Maybe there was some awakening in the academic mind by the later formation of an ANU College of Arts and Social Sciences around the turn of the century with the official website statement that ‘*Such an education promotes original thinking and brings with it life-long communication skills, and skills of criticism and analysis, that are of enduring value in any field of employment*’.

The concept of *design* was beginning to be accepted in the public mind, still somewhat intangible but certainly much closer to that held by practicing designers about the intimate relationship between design and *effective* living.

Fred and I had one or two good allies in the ACT education department in relation to instilling design into education—especially Noeline Naar, an educational consultant and a wonderful art teacher who fully understood our stance on the subject. Others were Judith Parker, Ray Green and Ilona Lasmanis, all enthusiastic teachers in the education system, but who did not seem to have the recognition from their Principals as to the value of design and where it fitted in the curriculum. It was a vague and indeterminate concept to the traditional educational mindset that must be changed for society to flourish.

It is interesting that I chose the word ‘flourish’ in this context as once again the value of design to the goal of human wellbeing becomes evident. The reader will perceive this connection by reading the book of that title by Martin Seligman,^{FLO} an excellent approach to wellbeing.

Sometime in the 1970s and early 1980s, with encouragement from Noeline I gave a series of in-service lectures to art and industrial arts teachers on design as the missing element in secondary education. Fred participated as a guest lecturer to give his particular philosophy. I feel sure the series was well received by the teachers and consultants but whether it translated into effective change in their school or college curricula is problematic. I came to the view that the education system is very stuck in its ways and its direction hard to change.

Nevertheless, with the help of Noeline and other enthusiastic teachers we felt we should make a stand for better recognition of design in the curriculum. Our discussions resulted in the formation of DECA, its main aim being to introduce design into the curriculum as a *fundamental* study with exciting potential for young adults. We organised a successful conference in 1984 and after a year or two in Canberra the organisation of DECA rotated to a group of NSW DECA members in the hope that a national representative organisation might eventuate.

The time was certainly ripe for such an organisation—the environmental movement was just stirring and the public conscience at that time involved many concerns that contained many design issues. But unless its relevance was understood by *existing* teachers in the art, craft and industrial arts *and other* disciplines it had little chance of succeeding in the curriculum in competition with the established subject areas. Judging by the current website it would seem that DECA has been subsumed into a larger organisation—Technical Education Foundation Australia (TEFA) with a big emphasis on technology—and not one word about design on its website. No response has been received to my inquiry. I suspect the usual problems.

| See <<http://www.pa.ash.org.au/tefa/default.htm>>.

Members of the ANU Design Unit understood how design thinking in daily life was basic to improving life—in understanding the nature of problems as they arose daily within an educational institution; establishing priorities, working to a budget and integrating the visual with the physical to a good conclusion and turning vague thoughts about needs into reality.

Fred and I often discussed the designer's dilemma—that *a designer is limited very much by the opportunities made available to him or her* and that these opportunities are determined by people *in a position to make* these opportunities available, ie. people of some maturity and responsibility and in a position to authorise expenditure. Most of these people are of the old school, having little familiarity with the value of design to the community, so consequently their vision of a better future is restricted by their ability to understand their problem and to ask the right questions. At some point this vicious circle must be broken, not by training more designers but *by educating the community*, starting at primary level and right up to the courses in management so that society can come to appreciate that *there are better ways of thinking and doing things*, of questioning our thinking and our decision making techniques. If we do not do this we will all be led by the nose by manufacturers who think they have a good idea but do not have the skills to produce effective products which support wellbeing.

Our experience would lead us to the sad conclusion that those responsible for education do not know what they do not know.

18 Private practice

Fred left ANU in 1961, having been attracted to the challenges and excitement of private practice. He did not talk very much about his private life, but at the age of 61 he must have been aware that his productive life was drawing to a close so I would imagine that the offer of a commission to design furniture and furnishings for the new RBA building being constructed in Martin Place, Sydney would have been impossible to resist.

Not only that, several major buildings in the Parliamentary Triangle were in the offing and Fred must have had some preliminary offer to design the furniture from Walter Bunning and Noel Potter, architects for the NLA. And the High Court and the National Gallery of Australia (NGA) were also in the pipeline, so the future looked promising.

Nevertheless, it came as quite a surprise to all of us in the ANU Design Unit to hear in 1960 that Fred was leaving the ANU, ostensibly for a trip to Europe, with no mention of any ongoing commissions. Bear in mind that Fred and Puss had never been to Europe before, it must have been a 'now or never' time for them.

When Fred was due to leave ANU for his overseas trip a farewell ceremony was organised in the council room in the temporary Administration Building near where the Law Faculty now stands in Fellows Road. I designed a small coffee table^{18A} as a presentation gift and a fond remembrance from his ANU Design Unit colleagues. It was lovingly crafted in blackwood by Hans Pillig (one of the 'Jennings Germans' group of skilled woodworkers from Europe, who was by then a valued member of the Design Unit). The table is now in the possession of Martin Ward, Fred's son, and is shown as an example of his disciple's early work for comparison.

Fred's and Puss visited Italy, Switzerland, Germany, Netherlands, Denmark and the UK with a few commissions to discharge. This was his first and last European trip.

The ANU Design Unit was extremely busy at that time with the SGS science buildings of Physics, Chemistry, Geology and Psychology. The Arts/Economics, Chifley and Menzies libraries and the Coombs building were also under way. We had grown as a design team, with me, Hans Pillig, Arthur Robinson, Jack Low, Scorgie Anderson and two Administrative staff, Marjorie and Pat (?). Gerald Easden and Charles Bastable were to join us a little later. The graphics and landscape areas were also growing rapidly.



18A Coffee table presented to Fred on his retirement from ANU Design Unit in 1961. Made in blackwood by Hans Pillig a senior member of the ANU Design Unit and designed by Derek Wrigley. Presented to Fred by Ross Hohnen, Registrar to the ANU in the old Council Room.

Sir John Overall, Commissioner of the NCDC, had asked Fred to visit art galleries, museums and libraries overseas in Europe to report on latest developments which might prove useful to the design of similar buildings in the future Canberra. (This report^{FR} is available from the archives of the NLA in Canberra.)

Fred was also to attend as the Australian delegate at the General Assembly of the International Council of Societies of Industrial Design to be held in Venice in September 1961 and then at the International Design Congress to be held at the Council of Industrial Design in London. Fred was to be the first delegate from our new Industrial Design Institute of Australia and our IDCA to these overseas gatherings.

While at the Council of Industrial Design, Fred and Puss visited and had discussions with Sir Gordon Russell, its long time Director (and incidentally a world famous furniture designer and manufacturer in the Cotswolds) to discuss the problems both our countries shared in raising standards in manufactured designs. Similarly, in Copenhagen Fred called on the Director of the Danish Design Centre as we were most impressed with the way all the Scandinavian countries had developed such high standards of design in the craft and manufacturing industries. Their high standing in world export markets was undoubtedly based on the benefits of good design. It showed us all what relatively small countries could achieve—but it was clear to Fred, and to me in my similar visit in 1965 that the education system and the craft cultures were significantly more advanced than were those of Australia.

Fred had also arranged to visit Cambridge, UK to discuss the furnishing of residential colleges with Sir John Cockcroft, Master of the very new Churchill College at the request of Sir Mark Oliphant, Director of the Research School of Physical Sciences at ANU and a long time colleague of Sir John Cockcroft in their pioneering days in particle physics in the UK.

Fred supplied some drawings of the dining tables in University House, ANU to give some idea of their scale and construction and Prime Minister Sir Robert Menzies promised a gift of Queensland Walnut from which the dining tables could be made. Although Fred and Puss stayed at Churchill College in 1961 and advised Sir John on the problems of furnishing colleges, there appears to be no documentary evidence that Fred ever designed any furniture for Churchill College.

18b Writing desk and chair, commissioned by Lady Maie Casey c.1965 for use in the Aide's Quarters at Admiralty House, Kirribilli, Sydney.

Blackwood with olive green soft vinyl top to match the chair upholstery. The vinyl material had been used by Fred to great effect in the RBA project he had just finished in Sydney.

Blackwood can vary in colour from very dark brown to cream colour as shown in this case. The framing member on the right-hand side of the drawer was not a well selected piece of timber, but Fred's policy of no staining let it remain.

The drawer shows the open butterbox finger jointing which became so typical of Fred's work. It is a very honest detail and might be seen as a small concession to decoration by Fred. In a similar way the use of a hand-hole for the drawer in lieu of a wooden or metal handle is evidence of Fred's continuing search for simplification.

The chair is a well refined piece of furniture from the ANU Design Unit stable.



18c Detail of the top corner of the writing desks in Admiralty House.

The raised edge adds an unusual, distinctive note to the whole concept, with simplicity and without any meaningless decoration.

Correspondence with the current College Archivist, Natalie Adams, (July 2011) tells me that no Australian walnut ever arrived, and the furniture was designed by Robin Day, a very respected furniture designer in the UK who was to achieve fame in the mid-sixties for the design of the very first polypropylene chair in the world.

Fred returned to start work on the RBA from his small home office in Braddon, ACT, and completed it by the middle 1960s. One major project then occupied most of Fred's time—the prestigious and challenging National Library of Australia in Canberra.

There were a few other smaller commissions such as the P & O Line building in Sydney, and some smaller projects from his friend of the 1920s Lady Maie Casey at Admiralty House in Kirribilli and some tables and chairs for Government House at 'Yarralumla', Canberra, sometime between 1965 and 1969.^{18b,c}

The writing desk^{18b} is a relatively small and delightfully simple item with a small touch of 'functional decoration' in the butter-box finger jointing of the drawer front, shown in more detail in illustration 18c. The accompanying chair from Fred's ANU Design Unit days fits beautifully and completes the setting with matching timber and upholstery colour. There were some bedheads also in that commission, but for some reason they had disappeared from Admiralty House. The wardrobes were still in place. That mystery was resolved when Robert Bell, Senior Curator of the NGA in Canberra showed me one pair of bedheads in their archives that had been donated to the NGA by Lady Casey. Several questions remain unanswered.

In taking a retrospective view of Fred's commissions from Lady Casey and his writings (around 1960) on the problems of furnishing overseas posts for the Australian government I find a rather delicious irony at play here in Canberra, made clear by referring to Fred's handwritten comment No. 7.^{15c, p.142}

The existing styles of furnishings at Yarralumla (faux Georgian Regency—designed by Ruth Lane Poole in 1927 as at Admiralty House) are not exactly compatible with Fred's 'Australian functional Modernism' style of furniture of the 1960s, so it is not really surprising to see that Fred's relatively small contributions are now 'relegated' to secondary functions or a quiet storeroom.^{18d,e}

These items were only discovered through small sketches found in Fred's drawer in the Powerhouse Museum and tracked down eventually through the Government House records until a chance discovery by Andy Botte and HE Mr Michael Bryce at 'Yarralumla' of the large dining table and chairs and side table.^{18d}

It does raise very interesting questions as to who determines the 'taste' of the Official Residences—the incumbents or the 'landlords' in the bureaucracy? Who establishes the 'taste' of our Australian overseas posts? Is faux Georgian Regency an 'Establishment' form of safe snobbery or should we expect our diplomatic ambiances to reflect the forward looking values of a progressive nation?

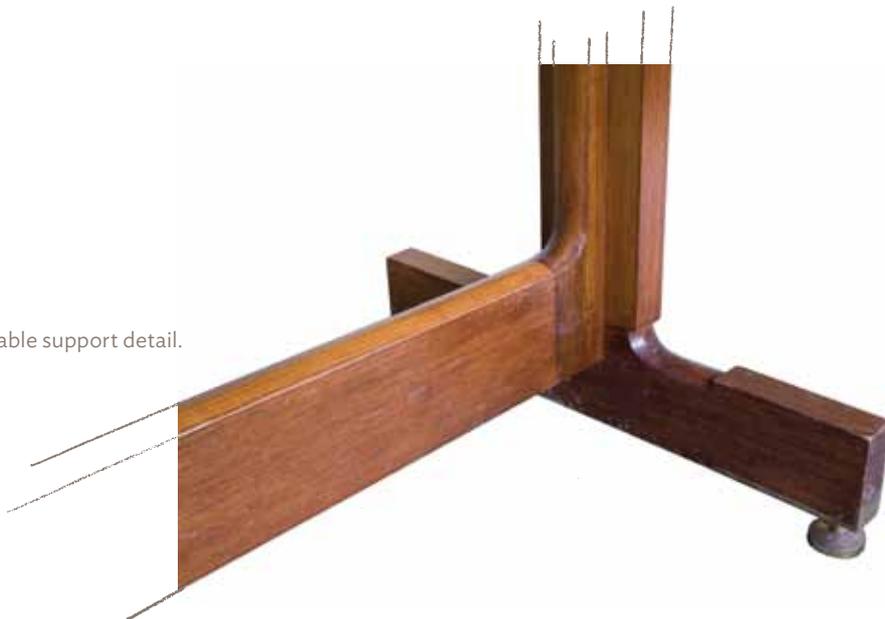


18D Dining table to seat six or eight for Lady Maie Casey for the Official Residence of the Governor-General, Yarralumla, Canberra. The table top is of solid blackwood which has not warped in any way, due entirely to its use of well seasoned timber and the button construction underneath to allow for movement and superb craftsmanship by Kees Westra, Canberra.

It seems likely that the metal adjustment feet were the same as Fred used on the NLA project (completed 1968, so this suite is probably dated toward the end of the Casey vice-regal term, 1965–69).

This suite is in storage at Yarralumla, presumably because it is too modern and out of character with the faux Georgian/Regency existing furniture (Ruth Poole 1927).

18E Table support detail.



The RBA and the NLA commissions were on safer 'taste' grounds and are described in more detail in the following sections. They have proved in retrospect to be the major flowerings of Fred's very productive career, all the more remarkable because he worked alone at home in their small home in Braddon, Canberra on the RBA project.

When working on the NLA building around the mid-1960s Fred attracted one member of the ANU Design Unit team, Arthur Robinson, to assist him, together with an administrator/liaison officer on the NLA staff, George Clarke. Fred worked partly from home and from an office in the new building.

The necessary workaday
furniture...should, of course, be
well made and well proportioned,
but simple to the last degree.
But beside this type of furniture,
there is the kind I should call state
furniture. I mean sideboards,
cabinets, and the like, which we
have quite as much for beauties'
sake as for use.

WILLIAM MORRIS

19 Reserve Bank of Australia

Fred's contribution as a furniture designer might be perceived more clearly by analysing two of his post-ANU commissions, their social context, their place in history and what I feel is his finest and most mature work—the Reserve Bank of Australia, Martin Place, Sydney, constructed in the early 1960s and the National Library of Australia (NLA), Parkes, Canberra, constructed in the late 1960s.

The economics background and the client, the erudite Dr H.C. Coombs were important factors which underlay the RBA commission.

In 1959 the RBA had been established and eventually required a Head Office in Sydney, with subsequent branches in Melbourne, Adelaide, Canberra and Port Moresby with which Fred had some involvement but little evidence has been located. H.C. 'Nugget' Coombs was appointed Governor of the RBA and he was also one of the founding fathers of the ANU immediately after the war, becoming its Chancellor from 1968 to 1976. This association was to have significant consequences for Fred's future career, now in his mid-60s.

As with University House and Fred's work at the ANU, the furniture industry in the early 1960s was mainly tooled up for the domestic market and not ready to offer standard production furniture for a prestigious Sydney building such as the RBA.

High quality *workmanship* and *capacity* to undertake larger quantities was certainly possible from furniture firms such as Edward Hill, Ricketts and Thorpe and Anthony Hordern in Sydney or Latchfords in Melbourne. However, *design* quality and consistent variety sufficient to meet the many different needs (and satisfy a perceptive client such as Dr Coombs, an art connoisseur in his own right), were virtually impossible. Only a person possessing integrative and sensitive design skills could organise the coordinated furnishing of such an organisation as the RBA.

19A Visitors' chair for Directors' offices, black bean. An extremely elegant, simple statement of a basic chair which could be made with or without the upholstered side panels. Its simple angularity is softened by the rounded arrises of all members. There is nothing superfluous in this design and it has a generous width.

It is interesting to note that this chair was copied by the Department of Works to be placed on display to the public in the Prime Minister's suite in Old Parliament House, Canberra.



19B A simple statement of a chair in the public lobby and also as a Committee Room chair. Nothing superfluous.



19c Public lobby writing desk. Fixed marble tables possibly designed by building architect in collaboration with Fred, but chairs are certainly by Fred. Restrained colour scheme, coordinated forms and a very simple statement of simplicity convey a feeling of stability and security, appropriate to Australia's Reserve Bank. Refer also to the egalitarian use of this chair design for the more prestigious committee room upstairs.



19d Committee room. Restrained use of colour throughout, unobtrusive general lighting. Chairs same as in public lobby but covered in wool fabric. This room has been in use for 47 years.

Note the egalitarian use of the same chair frame for public use in the ground floor public lobby.



19e Committee Room table, black bean, showing simple leg structure which leaves ample leg room. Table is made in sections to assist assembly on site. Note colour relationship of table edge to side storage cabinet and doors.

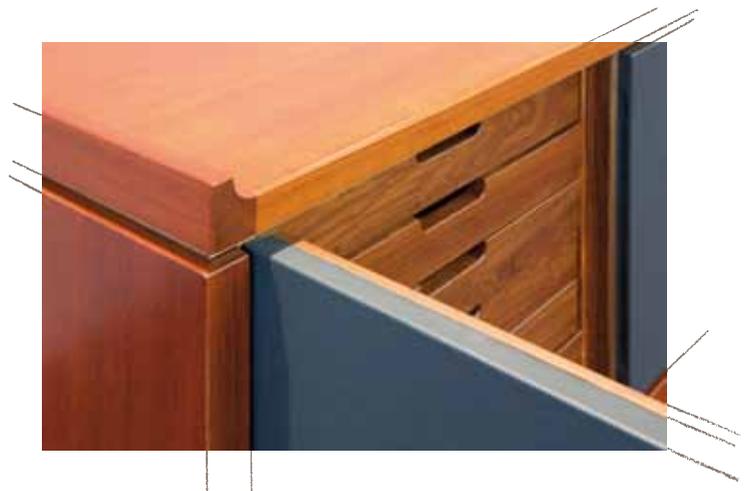


19F Side storage unit for the serving of occasional food, black marble top, dark olive green vinyl covered doors and end panels, black bean. Touch latches behind doors means complete elimination of door handles (soft vinyl not showing finger marks)—achieving a position of sculptural furniture rather than functional domesticity. This is different in detail to the other cabinets but the family resemblance is retained. Refer back to the relevant opening statement to this section by William Morris.

19G Side storage and serving unit in Committee Room. Appropriate scale is a major design factor in large rooms, as is a need to avoid any domestic connotations such as inappropriate handles—in this case by removing them totally—a rather bold move by Fred. Doors open simply by pressing them to release the internal catch. The raised edging around the top gives a sense of containment or relativity to any art work placed on top or perhaps serving dishes for a function.



19H Top corner detail of side storage cupboard. Black bean drawers behind vinyl covered doors with touch latches. This is very simple detailing with complete absence of any hint of useless decoration. Better colour matching of timbers might have been more rigorous in work of this quality, but Fred never allowed staining to match, preferring to accept the natural variabilities of timber colours and grain.





19i Side table with drawers in Committee Room or lobby.

19j Similar corner detail for side serving tables in committee rooms. Black bean with vinyl covered drawer fronts without any handles and matching end rails of a side table in a Committee Room or lobby.

Note the simple alignment of all elements. Raised edge gives a feeling of safe containment of any articles placed on top. There is a better colour matching of timbers than on the unit shown in images 19g & h.





19k Quiet, restrained, dignified RBA boardroom, acoustically excellent for decision making which affects the economy of the whole country. Simple table supports of stainless steel which do not interfere with sitters' legs. Unobtrusive lighting.

Stock chairs from manufacturer's catalogue—compare with the chairs for the NLA boardroom. **206, p.184**

Side storage units are colour related and form a discreet background.



19l Side storage units in boardroom of the RBA. Note family relationship to other types of side storage and serving units in other rooms and colour coordination with wall. The room's quiet ambience instils confidence and quality.



19m Boardroom secretarial table. An unusual interior with walls largely covered by curtains to completely eliminate any possible

echoes and misinterpretation of spoken words by board members.



19n Boardroom occasional side table, black bean, marble top. This shows a departure from Fred's usual style but was no doubt designed to echo the larger leg supports

on the board table—resulting in a very elegant structure. Note how carefully sized it is to fit neatly between the curtains and the carpet without crowding either.

Suitable *commercial* items with any *appropriately integrated* appearance would not have been available in the early 1960s for the specialised functions required of them in this type of project. In institutional projects (*which constituted most of Fred's commissions*) three very important factors ruled out virtually all commercially available furniture—especially in the somewhat deprived years following WW2. These were *appropriate scale, continuity and availability*. All three factors tend to work together as institutional spaces are usually larger than domestic, requiring slightly larger items of furniture, and changing fashions would mean that any future requirements of the same type would not be easily available. Such work required a new, holistic approach for which Fred had an undoubted skill—an ability to think big yet with a skilled regard to the small scale details.

The RBA building itself was regarded, and has remained, an outstanding example of Australian modern architecture. It was a Modernist statement located in the rather stuffy architectural atmosphere of Macquarie Street and showed a clear departure from the architecture of traditional banking—epitomised by the pseudo-classical Commonwealth Bank buildings in Martin Place and George Street.

Dr Coombs had experienced Fred Ward's success in University House and it is reasonable to assume that the RBA commission came directly from Coombs—including, according to the RBA website, some of the other bank buildings in Canberra, Melbourne, Adelaide and Port Moresby.

Such commissions were rare in those days, so Fred must have been somewhat pleased with the honour of receiving them—small wonder he left ANU in 1961 to new pastures.

The reader should bear in mind that in the first half of the 20th century it was common practice for architects to hand over an empty building to a client, leaving them to furnish it as best they could, often with no skill and unfortunate results. What was rarely realised by building owners in those early days was *that furniture and furnishings are the humanising links that make buildings function effectively and it takes a designer's coordinating skill to make it all happen*. Buildings without effective furniture and furnishings just would not work. To realise this very basic fact just imagine the room you are now in without any carpet, curtains, furniture or bookshelves and a bare electric light globe in the centre of the ceiling—a bare room. It would be inhospitable, incomplete and quite unusable—architecture without a soul.

As an inaugural member of ANU Council and as Chancellor he had a reserved flat in University House designed specially by Fred.

The written evidence I have collected supports Fred's involvement with these scattered bank buildings, but no visual design evidence is available.

Fortunately, this attitude has changed since WW2 as building owners have now realised the value of furniture as logical and essential extensions of the architecture.

Sadly the public have no access to the beautiful interiors in the RBA building, other than the public lobby and the exhibition area which have a few of Fred Ward's chairs around. Most of the levels above show the quiet restraint of well-designed interiors, integrating all the elements required for a good working environment. In addition they show most eloquently how an excellent art collection, when judiciously placed with appropriate furniture and fittings, can really demonstrate the value received from careful and perceptive thought.

It would be nice to think that the RBA could honour Nugget Coombs's memory by arranging suitable tours of selected areas of the building so that members of the public could appreciate the quality of the interiors. Charities could perhaps benefit?

20 National Library of Australia

Around 1965 Walter Bunning and Noel Potter, architects of the National Library of Australia (NLA), commissioned Fred to design furniture for the new building which was to be finished in 1968—an offer too good to refuse. This was to prove as much a challenge as the RBA in Sydney. Fred, who was now in his mid-60s, sought help from Arthur Robinson, who had previously worked in the ANU Design Unit in 1963.

They formed a team with an NLA administrative colleague, George Clarke, who acted as Liaison Officer with the NLA, with Fred establishing the overall design philosophy for the project. Arthur organised the planning and scheduling of Fred's designs (as evidenced by the available drawings held in the NLA).

Early in the design period it seemed necessary to give some detailed attention in certain areas such as in the large reading rooms where tables needed to be aligned together in groups. Whether vertical adjustment^{20a} proved to be necessary in such a high class, strictly supervised project has not been proven, but in the past, if a table rocked on the floor it was assumed (somewhat humorously) to be automatically the fault of the floor constructors—cabinet makers normally worked to very fine tolerances, *'so it couldn't possibly be their fault'*. These are now very arguable matters, especially as concrete floors can be skimmed to very fine tolerances these days, but it still remains important for groups of tables to present a level, usable top surface for practical and aesthetic reasons. The choice of a brass micro-height adjuster gave a most effective bright gleam of gold among the black bean timber, adding a rather prestigious quality. The table structures are distinguishable by the cruciform table leg sections which can be seen in the same photograph and are unique to this project. I am not aware of Fred using this stylistic technique on any other project.



20A Adjustable height feet to reading tables where they are often placed in groups and moved around to suit differing arrangements. The adjustable feet enable table tops to be accurately aligned for user convenience, without tools and of solid appearance.

The cruciform character of the table leg can be seen.



20B The adjustable feet are necessary to reduce any stresses in the timber structure of the catalog drawer units which might be induced by an uneven floor, creating distortion over time and prevent the free running of the drawers. When placed in groups they also enable accurate alignment of units. Fred benefitted from the research that the ANU Design Unit carried out around 1961–2 for improved catalog drawers for the R.G. Menzies Library (opened 1963). They had to be very precise units to give maintenance-free service over many years.

Similar height adjustment feet are used on the catalogue drawer units with even greater justification.^{20b} Drawers need a rigid framework in which to work smoothly, any distortion having the potential to create problems such as jamming. When we were designing similar units for the R.G. Menzies Library of the ANU we went to a lot of trouble to minimise any ‘racking’ problems and Fred was able to take advantage of our design research on this type of unit. It resulted in new types of drawer card mechanisms and much reduced framework, but when computerised cataloguing arrived some 15 years later all this iterative design work became redundant.

It would seem that the gift of foresight would be a wonderful benefit for designers and their advisers to have in these days of rapid change.

One design feature that Fred used to great effect in the NLA was a centre panel of stretch vinyl over the working area of a desk top, using natural wood end panels. This technique was evident in his early presentation sketch.^{20c} It also enabled the easy introduction of subtle colours which became available in an excellent range of standard vinyl colours at that time—an interesting move by a manufacturer listening at last to *what its customers wanted* in the way of more subtle and varied colours. Fred made good use of this commercial change.

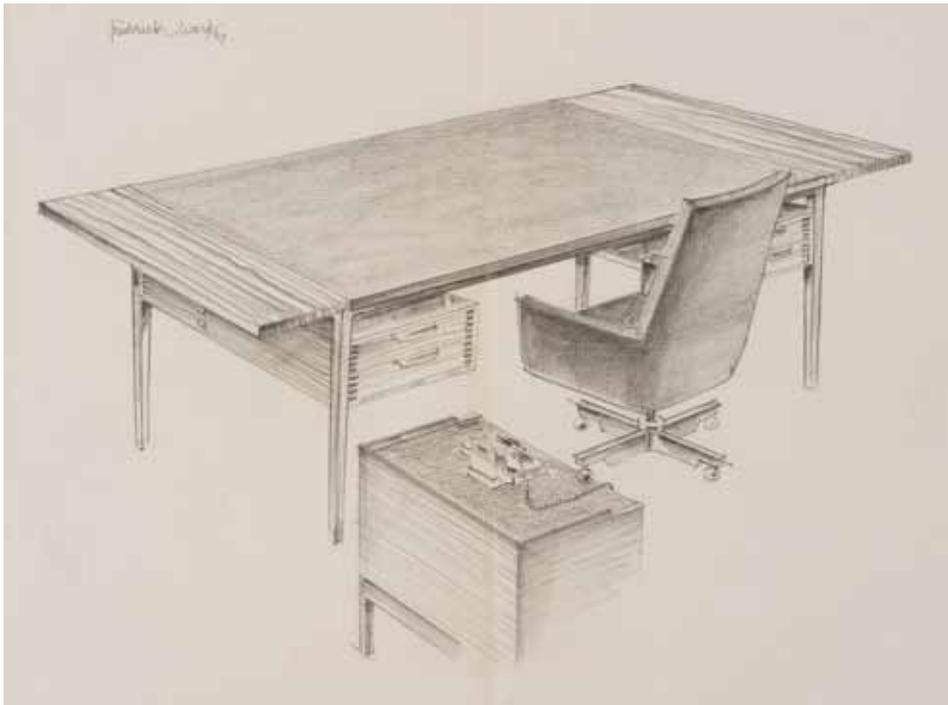
The Director-General’s desk arrangement is extremely pleasant, (helped by the vinyl colour), perhaps one of the best groupings designed by Fred and has been rightly preserved by the NLA administration.^{20d,e,f}

The NLA Board Room has some really elegant furniture in the large board table, discreet chairs and a stationery cabinet, all reduced to a high degree of simplicity, devoid of fussy details so often found in commercial furniture striving for effect. When wrapped over a rounded arris the vinyl topping adds a softness to hard edges which can be more clearly seen in the drop in vinyl panels to the table.^{20g,h,i}

The stationery cabinet is an important element to the visual unity of the room with the ceramic vase providing a small but essential focus.^{20j}

The Asian Collection section of the NLA is designed with a different, lighter coloured timber with a furniture style which is almost identical to the general style but with a slight hint of Asian characteristics such as turned up table edges, reminiscent of the turned up sprocketed eaves on oriental buildings.^{20k,l,m}

I remember when we were designing the furniture for the R.G. Menzies Library in 1962 I asked Jack Graneek, the University Librarian, how computerisation of records (already mooted in the scientific press) would affect the cataloguing of books. We were instructed to design the very expensive cataloguing drawer units as computerisation was thought to be a long way off. It would have saved a lot of time and money as catalogue drawer units are unarguably the most expensive pieces of library furniture on a comparative basis. Feineman has been quoted as saying ‘Reality must always take precedence over public relations’.



20c Presentation sketch of the desk proposed for the Director-General of the NLA, Sir Harold White, 1967.

Note open finger jointed corners of the drawers and exposed tenons of joint between longitudinal rail and end rails—small concessions toward honest decoration arising from the reality of joints. Compare with the reality of the photographs...



20d Director-General's office desk and chairs, Queensland walnut.

A very restrained office setting. Identical chairs put the visitor at ease.

Centre section of desk top is vinyl covered.

The grace of the original sketch seems to have been diminished in reality—the exposed tenons in the end panels have been deleted.



20E Director-General's office desk, occupant's side. Compare with sketch.

20F Desk drawer unit of the Director-General's desk in Queensland walnut. Typical details used by Fred in his Myer days (30 years before the NLA project). The top pull handle is for a slide panel for putting papers aside temporarily from the desk top.

The open butter-box finger jointing to the drawer fronts are his only concession to decoration—but primarily a functional element, honestly revealed. An exquisite detail.

William Morris's lecture in 1881 was relevant to this detail:

You may be sure that any decoration is futile, and has fallen into at least the first stage of degradation, when it does not remind you of something beyond itself, of something of which it is but a visible symbol.



20g A beautifully restrained boardroom with table and chairs, simply stated without the status symbols that commercial board room chairs tend to have become (compare it to the RBA boardroom^{19k, p.176}). This room has a rather homely, less formal quality about it, due mainly to the smaller domestic quality of the chairs. Note how the storage cabinet against the wall^{20j} provides a quiet visual end-stop to the table, being compatible in form, size and colour.

For a detail of the drop-in table top panels see illustration 20i, below.



20h The Board Room table shows a very simple cross-leg structure giving a good overhang of the table top for ample leg room. The vinyl covered drop in panels to the table top, with their beautifully rounded arrises and corners provide just that degree of softness²⁰ⁱ which complements the hard rectangularity of the table.

The assembly problem of placing such a large table through restricted openings

such as internal doors and corridors has been neatly overcome by using unitary construction, having partial assemblies of door size with final assembly on site—hence the drop-in panels for the table top. The structural design of this table is a masterpiece, creating stability and visual lightness with minimum materials, avoiding a heavy, cumbersome appearance.



20i A well-made detail of the table top jointing and the fitting of the vinyl panels.

How was the large top constructed? How was it put in place? It must have been a masterful on-site operation.

It was most unusual for Fred to use a 'leather grain' vinyl. He despised dishonesty of this kind—what happened? Clerical error?





20j This stationery cupboard in the National Library of Australia boardroom serves a number of roles in the usefulness and quality of this important room.

Made from black bean timber, its severe simplicity of appearance, especially without door handles, lifts this unit out of a domestic ambience to play its part in this room's decorative unity.

The cupboard doors are covered in vinyl, a technique used successfully in the RBA, recently completed by Fred in Sydney. The lack of handles takes functionalism to a new height when looking at the

unit from a convenience viewpoint. When seen in this way, any confusion as to which way the doors open becomes insignificant.

The ceramic vase provides an excellent focus for the axial formality of this very simple, unpretentious yet dignified room—a quality quite different from that of the RBA boardroom. **19f, p.174**

Cruciform legs are used as in the reading rooms, but there is no real need for height adjustment in this situation. The colour restraint matches the main board table and recedes into the background.



20k Reference tables in the Asian Collection area. The 'dropped' table edge near the chairs is interesting as enquiries to the staff seem to indicate that it has no function. As the back edge of the table top has an unusual appearance, **20l** perhaps the front edge is an aesthetic balancing feature?

A raised perimeter edge is not unknown in Fred's work—compare this to the raised edges of the secretarial table in the Academy of Science Council Room. **16A, P.146**

The tables and chairs are all in silver ash to give some distinction from the darker timbers used in other areas. (This helps to prevent the furniture from migrating into other areas—a problem in large institutions such as this.) It seems to have been successful.

This chair is the only one which shows any evidence of 'redundancy'—a structural item which serves no functional purpose—see if you can spot it. Note that the same chair frame has a different backrest in different areas within the library. **20R, S, T**



20l Reference tables in the Asian Collection in the National Library of Australia

The edge detail is reminiscent of Asian roofing details where the lower part of the roof is curved upward at the gutter.

Note the exposed feather detail between the edge lipping and the table top—in keeping with Fred's honesty in detailing.

The Reference Reading area shows a slightly different stylistic genre. There are several choices of formal table/chair relationships, single and grouped, private and more public and informal groupings of relaxed reading, all playing out the dichotomy of being beholden to the human scale yet in their grouped form appropriate to the large volume of space they inhabit.^{20M,N,O,P}

Fred's love of natural wicker baskets (seen earlier in University House) found similar expressive opportunity in the waste paper bins in natural wood frames^{20Q} placed around the library building. Amid all the rectangularity of the furniture they add a gentle touch of craft work to soften the interiors—a reminder perhaps that among all this display of discreet quality there is still room for the self-effacing yet very effective example of primitive, environmentally appropriate, hand made functionalism.

It is interesting to look at the various chairs that Fred designed for similar uses around the library; how he used the same framing but with aesthetic modifications of detail to claim some geographic territory without detracting from its inherent usefulness.^{20R,S,T,U}

It was a very egalitarian approach to use similar chairs for the Director-General's desk and for the students and readers in the reference areas and it is interesting to compare the Board Room chairs of the NLA with the Board Room chairs selected for the RBA. Was Fred making a comment on status? Was he having a William Morris 'moment' about socialism and egalitarianism in the commonality of the NLA chairs?

As with his work in University House, the NLA furniture has served its purpose well for over 43 years and should last another 100, not only from a functional point of view, but by its maintenance of visual appropriateness—a quality of timelessness—a stabilising factor in short supply in today's world of rapidly changing fashions and consumerism.

The building has a changing variety of monumental spaces and once again Fred displayed the art of designing appropriately scaled furniture without forgetting the very basic needs of humanity.

Although Fred fitted in some other small projects into a busy decade, the NLA became his last major work—a fitting tribute to his quiet contribution to Australian design and to its society.



20m Periodicals reading and new books area. The panelled reading desks serve to divide off the Periodicals section from the large Reference Reading area.

It is intriguing to see that the chairs for the public are identical to those around the NLA boardroom table—an egalitarian statement by Fred?

Note the very quietly spoken 'New Books' sign, which is easily read, yet harmonises with its background.



20n Vinyl covered tables in quiet corners of the Reference Reading area for those who prefer seclusion in such a large reading room. Cruciform legs in black bean with height adjusters. (There is nothing worse than a rocking table to a serious student and temporary packings of folded paper can look totally out of place in such spaces as this.)

Chairs are the same as in the boardroom.

20o Reference reading area. Easy chairs are designed as units for ease of regrouping. The panelled fronts to the reference desks serve as a divider to break up the large spaces in the reading room into more discrete areas.



20p End view of large reading table in Reference Reading area showing cruciform legs with brass adjustable feet, flush open tenons of internal longitudinal rails support large top, covered by soft vinyl. Black bean timber.



20q Wicker waste paper basket in black bean supports. The wooden support frame not only raises the height of the basket to reduce the view of the deposited items, but it raises its status as a most important item of furniture, reminding us perhaps of the need to recycle paper.

It is a delightfully whimsical item to place in a very serious kind of public institution and it reminds us once again that handmade craftwork can still have a place in the design of buildings and their equipment. Did Fred intend this to be a slightly humorous note?

It is a delightful flashback to the value of handmade craft work among the many examples of machine production—but spoiled by subsequent cleaning regulations in the use of plastic bin liners wrapped over the top edges (not shown here). How does a designer protest at such inappropriate modifications in carefully considered interiors? Surely some member of staff has the responsibility of maintaining an interior to its designed standard of quality? Has the plastic bin liner proved to be really essential?

The same basic chair frame has been used throughout the building—from the office of the Director-General to the boardroom and the public reading areas—with changes of timbers to denote functional areas and changes of backrest detail. An economical and egalitarian approach.



20r Board and reference reading room, in black bean. Note that this chair has no rail under the back of the seat as do the other two wooden chairs shown in this group, so the rails shown in this position must be regarded as redundant. There is no explanation for this, unless Fred thought the appearance of some chairs required it. This is most unusual for Fred who usually worked to the principle of simplicity and economy.



20s Asian Collection readers' chairs in silver ash.



20t Director-General's desk chair, visitor's chair and other senior administrative office chairs in black bean.



20u General administrative chairs with simple metal tube framing, showing Fred's versatility when appropriateness is required.

21 Fred’s design philosophy

Perhaps because of his ‘wide views on everything’ the whole of Fred’s adult life story shows a constant, but evolving *design* thread which provides a strong directional warp of designing appropriate answers to the furniture of sitting and working but at the same time weaving in a few social wefts—organisations, didactic explanations and social innovations to the fabric of this book.

Design has been, as I have mentioned before (probably *ad nauseam*) continues to remain a very misunderstood word in Australian society, being as much *about* society in the 20th century as it is about Fred as a *designer* and his creative output. Prior to WW2 design was only vaguely thought to be a kind of aesthetic veneer applied to manufactured articles which were often determined solely on an *engineering* basis.

During Fred’s later decades, partly because of his (and others) efforts after the war, there was a growing shift in public perception as *industrial* design gradually became recognised as a powerful tool by a few industries. Australia owes much to Fred’s awareness and persistence in not only designing good, honest furniture but pointing out a need for recognition of *design as a social need*.

Fred’s efforts helped to put a different perspective on some of the misconceptions which distorted society’s appreciation of design in the environment we live in and the items we use. There is a great similarity between what Fred was doing in this area and the mid-19th century actions and writings of William Morris,^{EP} some of whose sayings have been scattered around this book to remind us perhaps that many things relevant to design and society have not changed over the last century. Fred’s initiation of the IDCA in 1956 is one instance of how design is relevant as a social issue (discussed elsewhere).

Before reading this section, those of you who started this book at the beginning may care to remind yourselves about what Joan Lindsay had to say about Freddie in his earlier days—some 50 years before (see section 4, The formative years, p. 27).

21A This chair form by Gerrit Rietveld (1917) was influenced by the Dutch de Stijl movement in which J.J.P. Oud, Mart Stam and Piet Mondrian explored the two-dimensional relationships between brightly coloured lines and planes in painting between 1917 and 1923.

In this iconic chair the visual pattern of black lines and primary colours appears to have been the starting point, making it more a three-dimensional art work or sculpture than a chair, where the search for comfort might be expected to prevail if it is to be regarded as a chair. It is a completely opposite approach to chair design when compared to any of

Fred Ward's chairs. Rietveld believed there was a greater goal for the furniture designer than just physical comfort—the wellbeing and comfort of the spirit—an aim which, I feel sure, may have caused Fred Ward to say:

What if the 'comfort of the spirit' reduces the chair's physical comfort?

Surely a chair (as a functional object) must satisfy its function first to the best of its ability—and then, secondarily, look as graceful as possible without detracting from its original purpose?

Rietveld's 'chair' is a stimulating sculpture, but a somewhat dysfunctional chair.



21B Designed for the Hill House at Helensburgh near Glasgow in Scotland, these chairs and stool by Charles Rennie Mackintosh (1902) clearly form part of the design pattern of the room. Mackintosh must have felt that the chairs needed to have a vertical emphasis in that room and this determined their form and colour more than their need to be physically comfortable. The strong horizontal emphasis of the ladder-back rails does, however, modify that form.

Although their degree of comfort has been compromised in the process the chairs are a more satisfactory solution to the problem of being a chair and a sculpture than was reached by Rietveld.^{21A}

The stool is a superbly rational and graceful structure with its sculptural beauty arising directly from its special sitting function. It makes no pretence at being a chair, but its structure harmonises well with the chairs. It is a stool that functions well and is an elegant form as well.

In retrospect it clearly emerges that the philosophical aspects of *design* emerged early in Fred's life—and he was a creative person, head, heart and hands for over half a century from the 1920s to the 1980s. Although his major expression was as an innovator in furniture design, it was also in *social design*, his ideas for public betterment originating from basic human needs. His *Patterncraft* concept immediately after WW2 was clearly such an endeavour, creating *socially useful* furniture that was an appropriate answer to the needs of that particular time. It can clearly be recognised in retrospect as creating its own style from its very simple functional role.

Should Fred be regarded as a Modernist? Unquestionably, if we accept the following definitions from Wikipedia which briefly describes Modernism as:

... emphasising the materials used; simplicity and clarity of form; and the absence of clutter; rejecting decorative motifs, in relation to objects,
[and]
emphasising; modern thought, character, or practice in relation to the more social aspects ...

Certainly, those Modernist descriptors would apply to Fred's quite consistent output over about 60 years of creative endeavour. But a deeper analysis of his work indicates other characteristics which separate his work from the work of others of that period such as Gerrit Rietveld in the Netherlands (1888–1964) and Charles Mackintosh in England (1868–1928), both architects who designed chairs which have been included under the label of Modernism—but *perhaps should not have been, based on those definitions?*

It is interesting that the definitions are concerned largely with *visual* aspects and do not specifically mention anything about *function*—the satisfying of the basic *raison d'être*—of *enabling comfortable sitting for specific purposes*—a big, vital factor in Fred's work.

In both Rietveldt and Mackintosh's chairs^{21A,B} the *intentions or starting points* were quite different from the purposeful *honesty* inherent in all Fred's chairs. These two designers started out with the *intention* of *imposing* a particular style *onto* a chair, and in the process *compromised* the characteristics of a chair's essential function. Their search for form *preceded* and *superseded* a chair's real function which is not in the true spirit of design, having an illogical start for a very functional object—a form of dishonesty which Fred would not accept.



21c Fred Ward's Casey chair, completely devoid of any vertical arris; a most elegant and comfortable chair, c. 1956, blackwood.

The arms of the Casey chair could have been straight sticks from back post to front leg, but the subtle curves (seen from above) and the way the front legs sweep outwards at the top impart a softer, more welcoming feel to the chair. The front and side seat rails below echo those curves, imparting a more generous width to the seat.

None of the leg faces are vertical, implying a sculptural approach to the appearance of the chair.

In addition, looking at the side elevation of the chair, the vertical thickness of the arm rest is 3 mm higher where it meets the back post than where it meets the front leg—a subtle change having a rather more sculptural origin than functional.

The original sketch^{21d} shows a close relationship between concept and reality.



21d Sketch for the Casey chair by Fred Ward.

It cannot be said that any chair created by Fred had its *origin* in any Australian style or was *based* on any proscriptive or prescriptive geometry, such as were obvious in the chairs by Rietveld and Mackintosh—both of which were *intended* to have a particular conceptual appearance which was not derived from the logic of designing a chair to sit on comfortably.

But even these had different origins; Rietveld was influenced by the *de Stijl* movement in the Netherlands (around 1917) and there are distinct similarities with Mondrian's paintings. Mackintosh's work, however, had a more personal vision of a particular sculptural form and applied it to a functional object, to some extent distorting or compromising its true function. Fred, on the other hand, was not copying any other specific style or form. He let the form arise from its function as a chair or a table or a storage unit. It became a unique 'Fredwardian' style as an end result, typified here by the chair he designed in 1956 for Sir Richard Casey, then Minister for External Affairs.^{21c} (See also background comment on this chair in section 23, *Designing and making*, p. 209.)

I just couldn't resist that play on words!

Rietveld went even further with his Red and Blue chair, implying that there is more to chair design than simply providing somewhere to sit—contending that psychological, even *spiritual* comfort and sculptural form were also necessary. Fred would, I feel, have agreed with this but would have regarded it as an *outcome* arising from its functional purpose rather than as a starting point—a significant distinction, depending upon the final location of the chair—be it the Master's chair at high table or a stool in the mens' locker room.

Fred rarely showed his spiritual, political and emotional feelings, so the only recourse we have is to judge him by his works.

If we compare Fred's chairs with Rietveld's chair I would contend that Fred was certainly more successful in a holistic sense by creating a functional item with *appropriate* style than Rietveld who made a style fit a chair. The difference was in the initial intention and the degree to which a stylistic appearance determined *or even superseded* function.

Similarly, but not to the same degree, Mackintosh's chair for the Hill house also made the sculptural form dominate the functional need. It may satisfy the aesthetic soul by its sacrifice of comfort to comply with the room's geometry, but then it becomes sculpture rather than a functional chair and its final form as a chair is on somewhat shaky philosophical ground. *A chair is essentially a chair first* and its function should not be compromised by the imposition of a sculptural form which diminishes that function and that is where design honesty begins.

Refer back to the craft definitions in section 13, Craftsmanship and the ANU, p. 113, on the value of consistency in the craft process.

All of Fred's designs were consistently honest from the first preliminary sketch, unquestionably being derived from an understanding of their specific ergonomic functions, followed by a strict discipline of reductionism in the number of essential parts; their location; their unique contribution to the whole structure; their attitude or position in space; their sizes; the way in which they are joined together in relation to the stresses they have to resist; their organic visual relationships restrained by the economics of repetitive machining and minimisation of waste. In short, they show a highly disciplined approach to the design of a chair which in a sense designs itself from a number of strict functional considerations which are essentially melded with intangible feelings of form.

These qualities are exhibited well in the chair that Fred designed for Sir Richard Casey^{21c} around 1956, producing a *functionally determined form* in the truest sense. This in turn resulted almost automatically in a 'style' which is quintessentially Fred Ward in relation to his 'stick' chairs, which can be seen as aesthetically very satisfying *and complete sculptures* in their own right in which form really results from function—plus a judicious bit of subjective, aesthetic refinement.

I would not like to imply and nor, I feel sure, would Fred, that there is *no room* for aesthetic modification or 'sculpting' of a 'functional' part. Note the captioned qualities relating to Casey's chair. They are small nuances perhaps, but it is these subtleties that turn a very comfortable chair into a successful work of *'functional art'*—a merging of art and science into a well coordinated sculptural form. In essence, the Casey chair started out in Fred's mind as a functional chair and it finished as both a chair and a sculpture—looking not only functional but well balanced. It straddles both philosophical fields and, goes back to what Sir Lawrence Wackett said to Fred about the sculpting of an aircraft empennage (see section 8, *The war years*, p. 27).

This discussion is bordering on 'art' which the OED defines as—*'human skill as a result of knowledge and practice ... the application of skill to subjects of taste ...'* 'Design' however, is more of a—*'...purpose, aim, intention, the conception of an idea...to be carried into effect by action, the pre-requisite to a work of art...'* Neither of these definitions mentions the type of knowledge that in most cases seem to be required—the many involved sciences and technologies which can be very objective, measurable and precise and those that have to be blended in, as and when appropriate, such as aesthetics, philosophy, psychology, sociology—are usually very subjective, woolly and unquantifiable areas of thought.

That, very briefly, gives a glimpse of how broad the thinking of a designer has to be if the outcome of his brief is to be successful with the minimum of unfortunate consequences.

Fred's chair designs may be used to help us to understand the best definition of 'good design' I have ever found, put forward in a course on *Design Methodology* I attended in Bristol in 1965 by Ted Matchett (an aeronautical engineer, incidentally):

Good design is always the optimal result of the sum of the true needs in a particular set of circumstances.

[THE BOLD ITALICS ARE MINE, STRESSING THE VITAL ELEMENTS OF THE STATEMENT]

'Needs' are critical factors and include aesthetic as well as physical needs, which can become highly subjective and unquantifiable—almost into the realm of 'feelings'. Design might then be seen as a blending of science and art (in that order of precedence) to fulfil a specific need.

To fully appreciate Fred's *early* designs around 1930 they should be seen against a background of what were the 'particular set of circumstances' at that time. Any evaluation by the public would label him a Modernist, but it is doubtful if he would have categorised himself as such, based purely on *visual* style.

Fred's 'style' was not derived *from* Modernism. Modernism as defined previously was the *resultant* which came *from* a number of artists/designers who thought along similar lines.

Fred's thinking really went much deeper, however, to a very practical level which was the opposite of much commercial practice of the early 1930s. He used only carefully selected good quality Australian timbers (avoiding staining commonly used in commercial furniture of that era to achieve a false uniformity of colour to disguise cheaper timbers). He specified low-gloss clear surface finishes which allowed the natural grain structure to show to advantage (eliminating unnatural high gloss finishes which impose a visually disturbing barrier of reflective highlights). In effect his 'style' was a reaction against dishonesty, deceit or pretence that some aspects of commercial designs were not what they appeared to be.

I have tried to produce goods
which are genuine as far as their
mere substances are concerned,
and should have on that account
the primary beauty in them
which belongs to naturally
treated substances...

WILLIAM MORRIS
INTERVIEW IN *THE CLARION*
1892

Fred's design ethic was *aesthetic honesty*, rather than 'stylish' or imposed. He created his own designs which *are still*, after more than half a century, unique to Australia, based on functional need, carefully selected materials, requiring only commonly available machining techniques (necessary for competitive tendering for contracts) and simplicity of appearance and construction.

It is these somewhat intangible factors that have contributed to the appeal of his furniture. Seen in this way, design historians will almost certainly regard Fred's philosophy and resulting designs as fresh thinking about furniture design in Australian industry—so in his era he was in essence a Modernist—in the true sense of what it means to be modern.

His creative output of furniture undoubtedly contributed to the emerging visual aesthetic of the 1920s and 1930s as he was viewed by many of his contemporaries as breaking away from the traditional furniture forms of the day which were often uncritical copies taken from overseas magazines. In retrospect, Fred, as an Australian, was ahead of his time—he was 'bucking the trend'. So it is not surprising that his ideas were only recognised by a small percentage of the community. 'Design' as we now understand it was not part of everyday language in his time, other than as a pattern or decoration *superimposed* on a commercial object, rather than arising inherently from its very purpose and logical structure.

Any comparisons or attributions can probably be traced to the Cotswold cottage industries of chair making in the mid- to late 19th century—to Morris, Barnsley and Gimson, as it is quite plausible for two designers 12,000 miles apart to arrive at similar aesthetic styles, having very similar starting points and practical/philosophical goals. Fred's design approach from the very beginning of his venture into furniture in the 1920s was basic, devoid of any pretentiousness, and that alone differentiated his work from the prevailing eclecticism of the Australian Victorian and Edwardian eras. Some of the media accounts of the day and Puss's diary indicate that Fred's style was appreciated by a public searching for simplicity, and tired of unnecessary, non-functional ornamentation.

Fred's furniture, judged from his very first efforts in the late 1920s^{6D,E, P.44} and throughout his life, demonstrated that *design* was not something to be applied as a secondary afterthought, but came from a very fundamental need to be practical, arising logically from real needs and having an inherent honesty of purpose. In retrospect, Fred's furniture should be credited for

extending the *scope of real Modernism* from its more generally accepted aesthetic area of paintings and sculpture to the practical world of 3-dimensional furniture design. He clearly demonstrated that this is where simple function and usefulness were the starting points, rather than *stylistic* origins as seen above in Rietveld's and Mackintosh's chairs.

Furniture is fundamentally and essentially *useful* as it is *the vital connecting link between architecture and human beings*. Empty buildings without furniture are virtually useless and it is the scale and humanising *design* of the linking furniture and associated furnishings that makes life comfortable within buildings. *Design* is the practical art that unifies the functional with the aesthetic to a more satisfying extent than was current in the Australian 1920s and 1930s—and Fred Ward was, in retrospect, the man for the moment.

In the early days of the Industrial Design Council many of our discussions about its direction required us to clarify words which different people used in different ways. The critical word *design*, we debated, did seem to have various meanings in the public mind—compared to the meaning ascribed to it by practitioners. Designers would generally agree that its essence lies in the verb '*to design*', as an *activity* which precedes almost everything else in the creative world. To consumers however, it seems to be more usually accepted as *the thing itself; the end product*, becoming a noun—'*a design*'—a largely visual quality which relates to a particular concept such as a chair or table or a knife and fork within a room, having differing qualities of human satisfaction—aesthetic, functional and appropriateness to location and circumstances.

Fred was of the opinion that through furniture, individuals could more easily extend their appreciation of the role of design in daily life. But it was (and still is) an area of design taken so much for granted, as if it fades into the background—always there but never consciously perceived in any way.

Therein lies the power of Fred's quiet, restrained, mature designs, mainly in the late 1930s and post-war. They have withstood many decades of technological and aesthetic changes without in any way becoming 'old fashioned'. They are still sound, acceptable and useful, whereas 'fashionable' designs have come and gone, relying on eccentric novelty, often exaggerated and easily forgotten, often expensive and not easily available to many people. The peaks and troughs of modern commercialism are not to be confused with the steady, reliable

and constant iterative improvements to be seen in the work of Fred Ward.^{14B,C,D, PP.126-7}

Fred was fortunate in that his commissions kept him occupied right up to his retirement from ill-health in the late 1970s. His simple, elegant style had ready appeal to many people and this continues unabated in the second-hand ‘antique’ shops, especially around Canberra and Melbourne and, to some extent, Sydney.

Part of this appeal came from the fact that Fred had a deep and lifelong love of the nuances of different woods, letting them speak for themselves with their inherent grain patterns and colour, accepting their variabilities of colour without any corrective stain to disguise or high gloss to deflect the eye from their revealed qualities—quite contrary to commercial furniture of his time which was often stained to give an even appearance to less well selected sticks which kept costs low.

Function was, rightly, a strong determinant of his finished forms which were then only modified within small limits by his aesthetic eye to give a subtle curve or taper to soften any perceived mechanical form. There were no redundant components, as every rail, splat or leg was an essential structural part of the whole—take any one part away and the whole would be incomplete, physically and aesthetically.

This approach served Fred well throughout his career epitomising the ‘less is more’ statement by Mies van der Rohe. This philosophy reached its climax in his Reserve Bank and National Library projects and deserves to be better known among the design fraternity as a model of excellence in Australian design history.

In the 1920s and 1930s, and even now, to many people ‘architecture’ meant buildings—and ‘furniture’ was simply a collective noun for those objects we sit on or work at inside the buildings. Their philosophical relationships as ‘designed’ objects with strong relationships to the people who will use them and to the spaces in which they will be placed is not generally appreciated. Furniture is usually taken for granted, seen as background items of some use, but rarely as sculptural entities with relationships to the space which they occupy.

Fred impressed upon us in the Design Unit coffee breaks that furniture makes architecture relevant to humans, softens and rescues architecture, being physically closer to the human body. Furniture is in intimate and personal contact with the human

Strictly speaking that is not true—I have found one redundant rail in one of Fred’s chairs, but I feel I should let you search for it yourself (have a look on p. 190). The answer can be found on p. 258.

21E Globus chairs by STUA, Spain. Individual chairs remain functionally uni-symmetrical because of their intimate relationship with the symmetrical human frame. Architecture, on the other hand has much greater freedom to experiment.

These simple chairs with their stainless steel frames and polypropylene seats and backs clearly abide by this ergonomic rule, even when chosen for one of the world's most asymmetrical buildings, the Guggenheim Museum, Fifth Avenue, New York.



frame and its appendages and their functions, provide a tactile as well as a visual and aural aesthetic—all culminating in that quality which to this day has largely eluded human attempts to measure and quantify—*comfort*. Furniture is thus required to work within much more restricted limits, based largely on the symmetry of the human body and an imposed personal pride of place and function.

Fred was fully aware of this situation and accepting of the fact that architecture has a greater freedom of expression than furniture. Architecture is not so intimately personal—its ergonomic relationship to the human form is not so close. Furniture is largely experienced through the closer visual and *tactile* senses—more specifically hands, bottoms, backs, arms and lower legs.

Nor is modern architecture so intimately dominated by the functional determinant of the ‘front/back axial symmetry’ of the human form, so obvious in chairs. New materials and new thinking have released architecture from its rigid, historical symmetry in which aesthetics dominated rational planning. Asymmetrical architectural form is now much more acceptable in modern buildings, being more rational, more interesting and often more convenient.

Furniture, on the other hand, remains largely fixed within a unidirectional symmetry—look at most chairs or tables—with significant logic *and* all over the world. This is clearly seen in the photo of the symmetrical Stua chairs shown in relation to the asymmetrical New York Guggenheim Museum.^{21E} Both have their own logic based on function.

So do drawers. Visualise any geometrical form other than a rectangular prism that would function so effectively. Look at Fred’s storage unit^{20J, P.185} with its drawers,^{19H, P.174} which to me is a complete and highly rational merging of centuries-old thinking that enables usable space to move from a protective storage condition to an accessible position with a minimum of effort due to the constancy of parallel planes. Couple that marvellous efficiency with a reductionist design approach of eliminating handles on drawers and doors, and you have a modern classic. It shows beautiful restraint as a furniture element in a specific setting.

The OED struggles to define the word ‘comfort’ in relation to furniture, and indeed the Furniture Industry Research Association in the UK has found it difficult to quantify. In general it seems that a chair is comfortable if it is not uncomfortable, and from my own experience if it allows a variety of posture positions to enable a sitter to change, having reached a limit of discomfort (wriggle room). Highly unscientific, but useful.

In the last half century, many objects have acquired *mature* forms, and designers in many fields have experimented with new forms made possible by new materials and new techniques. However in furniture, vehicles and aircraft this functional, primitive symmetry prevails.

‘Mature’ forms perhaps needs some elucidation. I take it to mean a 3D form which, over a period of time and numerous iterations has reached an irreducible minimum.

For example, the private car has reached an irreducible minimum of a compartment to seat humans in comfort, protection from the weather and in reasonable safety with windows to see out of for driving safety and enjoyment and three or four wheels for manoeuvrability and an engine which can propel the total form forward and backward with economic efficiency.

That generic description still allows for countless variations of detail to occur such as materials, form, relative disposition of components, colours, and so on.

Has a chair reached an irreducible minimum?

22 Fred on ‘design in Australia’

When I started to write this book, my research led me to believe that Fred had given a radio interview on the ABC program *University of the Air* sometime in the 1960s in which he talked about his experiences as a designer, but I was unable to locate it, either at the ABC or the National Film and Sound Archive in Canberra.

However, I received a typescript written by Fred from the Powerhouse Museum in Sydney with the title of *Design in Australia*, which may well be it. I include it here in full as it gives us a clear picture of his thinking after his trip to Europe in 1961 and sometime during his National Library project.

Interestingly, at the top of the title page, in Fred’s handwriting is a comment ‘*F.W. with Robin Boyd*’. Boyd, a Melbourne architect, who often talked on radio and was a long time colleague of Fred. He wrote several books on the poor standard of design and architecture in Australia.

The typescript would seem to be a mixture of Fred’s speaking notes and some interviewer’s questions, containing one or two handwritten comments by Fred which I have included in the typescript, as follows overleaf.

University of the Air

(with Fred's pencilled comment '...FW with Robin Boyd')

Design in Australia

Mr. Frederick Ward

1964?

[BOYD] **WHAT DO YOU THINK OF AUSTRALIAN TASTE IN FURNITURE?**

[WARD] I think Australia hasn't yet developed a taste! I think to develop a taste it's necessary to take an interest, and make an effort to develop likes and dislikes—and to understand one's *reasons* for these preferences.

Only very few Australians make this effort, and this seems a pity because there is so much pleasure to be got from knowing about qualities of design and workmanship, and from using handsome and well-made pieces of furniture.

The Danes, for instance, do take an interest in furniture design, and this national interest promotes a national taste; critical of proportion and finish, and intolerant of the over-clever. And so the Danes have a generally good level of furniture (design), some of excellent standard; and in all a national style known to the whole world.

What is unfortunate about Australian taste in furniture is the preference shown for smart *styling* in place of *thoughtful design*; for the ingenious and the novel instead of beautiful proportion and fine finish and good workmanship.

This endless striving for novelty in furniture design is, either consciously or unconsciously, aimed at promoting obsolescence—things must be in the latest style today in order that they may become out-of-style by tomorrow—and so necessitate fresh purchases and fresh profits. This is a basic belief of an affluent society.

Australians might welcome a better standard of furniture if it was available; but I doubt if they would be willing to pay a little extra for it.

Whilst good design—proportion and shape—don't add to cost in themselves, they are usually associated with good materials and finish, and—unfortunately—these things do cost more.

A nation's culture is judged not only by its contribution to the arts, but also by the standard of things that people are happy to use and have around them in daily life. (in Denmark it is hard to find a badly designed domestic article).

Australia has produced great singers, painters, sportsmen. It is not too much to hope that her interest may be aroused and she may yet take a place in the field of design.

[BOYD] **HOW DID IT FEEL? TO BE A PIONEER OF SIMPLE DESIGN?**

[WARD] I had no idea I was one! I didn't set out on a crusade. I'd always liked designing and making furniture and naturally I designed or made it to my own liking—which was for Australian timbers in their natural colours with only a soft wax finish. I tried to get the feeling I wanted from simple shapes and careful proportion.

It's hard to believe now that in these days almost all furniture aped some past period, and was stained almost black, or polished to a shiny red, in a bogus attempt to make it look like oak or mahogany.

[PENCILLED NOTE] *...and this at a time when local cedar, walnut, silky oak, black bean, blackwood were plentiful and cheap, it was even possible to get blackwood in long planks with beautiful 'fiddle-back' grain... such timbers if used were disguised with stain or polish to conceal their true qualities.*

Of course there has to be not only someone who designs and makes things but someone *for whom* the things are made.

Fortunately for me there were a number of people then who felt as I did about furniture and understood the 'modern' style.

I gained some sympathetic and enthusiastic supporters.

But there was a reverse side to the picture.

For some reason, whilst one group of people welcomed my designs, others resented them in a very odd way. The admirers of tradition seemed to regard the existence of new, straight forward design as a criticism of their own taste, and even as an attack on the social set-up. Their attitude was ‘He who is not with us is against us’.

Critics of the ‘modern movement’ were of two classes:

The private citizens with a *vested* interest in taste and tradition to be seen in their existing possessions. And the commercial people, the traders with an *invested* interest in styles of furniture that they knew and could make and promote for which there was an existing market.

But even though it was all rather bewildering—enthusiasm on the one hand and criticism on the other—it seems to me, looking back, a most exciting time!

We all felt so strongly and it all seemed so important. Many of my firm friends date from these days. Supporters and critics too.

It was a difficult time, but I wouldn’t have missed it for anything.

Fred Ward

There you have, in one short interview, the essence of Fred, from the man himself—a sort of reluctant pioneer—a quiet, reserved man with a strong opinion on the wrongs and rights of modern furniture in a world which held different values.

Listening to him in my recollective mind’s eye from a distance of almost half a century, his words still ring true but I believe there has been a significant change in commercial furniture. There is now more honesty of purpose, less cloying applied decoration and a simpler approach, but the fascinating thing to my mind is that Fred’s furniture, especially his mature style, would *still* stand out from the pack with its qualities of timelessness, good proportion and with no need to shout to be heard.

23 Designing and making

DIFFERENT SIDES OF THE CREATIVE COIN

When I joined Fred and the ANU Design Unit in 1957 I became very interested in Fred's philosophy and quickly had my architectural outlook expanded about the various capability skills among woodworkers.

I was aware of the accepted skill differences between carpenters, joiners and cabinet makers, but I had not recognised the more rarefied skills of the *chairmaker*. Fred had come to regard these latter craftsmen as being on the pinnacle of the skill pyramid. That became very clear as soon as he introduced me to the intricacies of designing 'stick' chairs at full-size on paper—something I had never done before. It was a revealing and valuable phase in my design education which I have only fully appreciated since carrying out the research for this book.

Chairmaking, to which, on the hierarchy of skills, might be added the making of helical staircases, should be regarded as very highly skilled woodworking trades simply because the risk factor is much higher: a topic rarely considered by those unfamiliar with the intricacies of the trade and the higher potential for making mistakes.^{NAW}

To carpenters, joiners and cabinet makers—and designers—the 90° right angle is *the* fundamental element that makes most structures work well and economically. Verticals and horizontals are easier to draw, measure and convey through drawings to the maker. Most of our manufactured materials and woodworking machines also work conveniently, more accurately and more economically in straight lines and right angles. Any departure from this simple understanding of the right angle implies inconvenience, extra time, more waste and hence extra costs. The visual rewards can be significant and justifiable within the context of human culture but the results are predictable and often dull. Designing comfortable well-proportioned chairs is a rigorous discipline that tests these skills to the limit. When its separate members are a few degrees off an expected vertical or horizontal, the effect can be subtle, challenging, stimulating, and very satisfying.

For everything made by man's hands has a form, which must either be beautiful or ugly; beautiful if it be in accord with Nature, and helps her; ugly if it is discordant with Nature, and thwarts her; it cannot be indifferent.

WILLIAM MORRIS

Hold fast to distinct form in art.
Don't think too much of style,
but set yourself to get out of you
what you think beautiful, and
express it, as cautiously as you
please, but quite distinctly, and
without vagueness. You must
see it before you can draw it,
whether the design be of your
own invention or nature's.
Remember always, form before
colour, and outline, silhouette,
before modelling; not because
the latter are of less importance,
but because they can't be right if
the first are wrong.

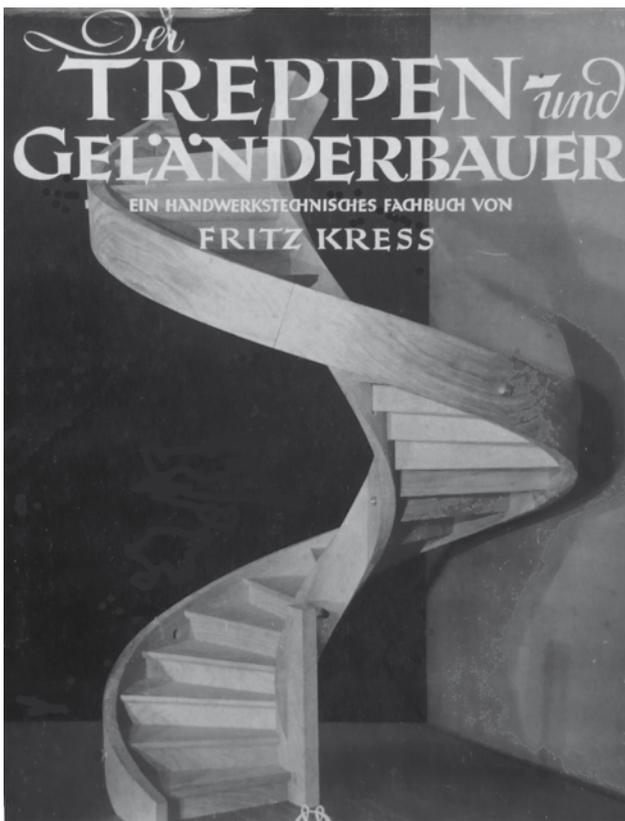
WILLIAM MORRIS

The skill in this area of ‘applied sculpture’ automatically becomes an aesthetically functional art form similar to useful ceramics and architecture.

Fred was extremely adept at determining the curves (sweeps) on chair arms or back legs and they can be very complex, often being variable and non-geometric. They are often curved in three dimensions making them very hard to conceive, draw and to machine. They are extremely subtle. I came to understand that some curves can be seen as ‘beautiful’ while others are ‘ugly’ when finally seen in three dimensions, both being totally indefinable except perhaps by a mathematician/sculptor.

To illustrate this point, Fred introduced me to Charlie Frommel, a stairmaker in Queanbeyan of European lineage who was extraordinarily skilled in making wooden ‘spiral’ staircases. We debated their inclusion in the category of furniture and whether or not they were helical or spiral (we agreed they were included and that they were undoubtedly *helical*), but the real point of our discussion was that a stairmaker’s skill should be extremely highly regarded. Not only is the complexity of the work high but the *risk factor is really very high.*^{NAW} The *slightest* miscalculation is visually very obvious, showing up in the lack of continuity of curves. Every tread, every riser has to have an identical measure for safety and visual regularity and the fluid curves of the stringers and handrails need to be very accurate if they are to instil a feeling of safety and, most importantly, look smooth, elegant and inspire confidence. Such an item forms an unusual compound of simplicity and yet complex geometry—and can be exquisitely beautiful, remarkably similar to the DNA molecule. It would require a complete book to do it justice,^{23A} so I will stick to recording my admiration for the chairmaker’s skill.^{DTG}

Drawing a curve which is tangential to two straight lines, which are often a degree or two off vertical in three dimensions in chair design, eg. the sweep of the back legs of a chair seen from the side, can be very tedious with any accuracy using compasses. Fred introduced me to a very simple device^{23B} from his days in the aircraft industry which made the task much easier. He called it a bowstring—a ridiculously simple piece of flexible wooden lath about 15 mm × 5 mm × about a metre long. It had sharp, smooth edges and a string tied to one end which was used to draw the shallow long-radius curves found on aircraft—and chairs.



23A Helical wooden or metal staircases can be exquisite structures in any building but the risk factor is invariably very high and precision in manufacture must be of a very high order. Dimensional errors show up very clearly in any irregularity of the flow of smooth curves and the regularity of treads and risers has to be exactly right, otherwise they can be dangerous to users. As the 'inside' is just as visible as the 'outside' every surface is open to critical view and has to be perfect—in much the same way as a 'stick' chair technique as practiced by Fred.

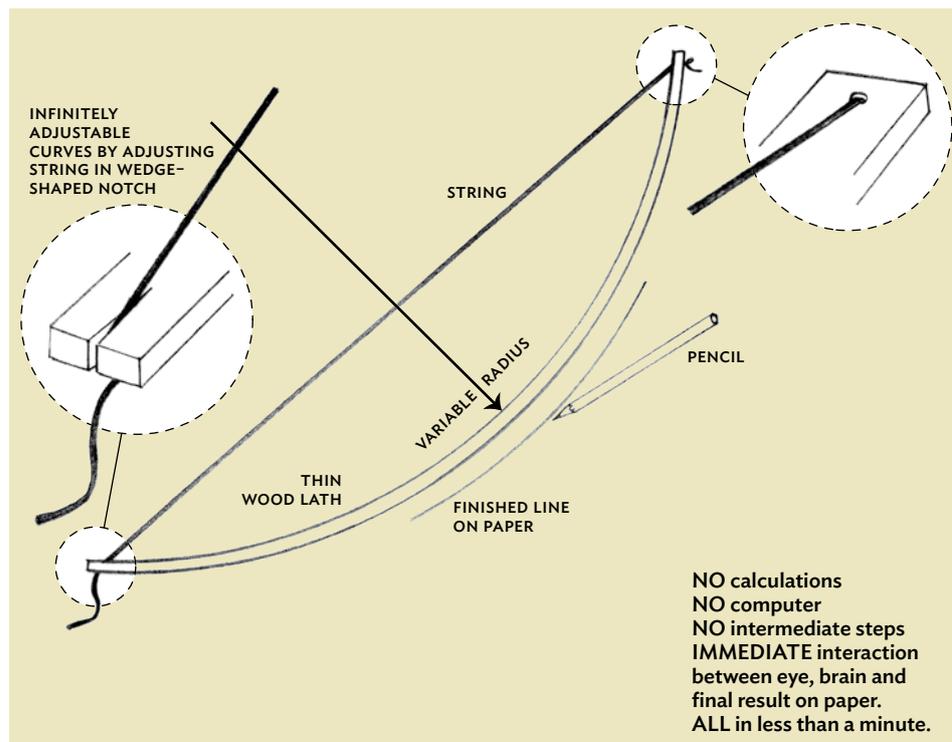
The possibility of vertical sag in a staircase such as this illustration is due to its own weight, and humidity changes in the atmosphere and timber are very real.

Let me take this opportunity to correct a common error: this is not a 'spiral' staircase; it is a 'helical' staircase. The radius of any particular curve is constant about its central point throughout its height (as with a machine screw thread). A spiral curve, however, has a constantly changing radius (as with a nautilus shell). **DTG**

23B The bowstring is a device brought over from Fred's days at Department of Aircraft Production during WW2, and was extremely useful for drawing smooth curves on the drawing board when it was inconvenient or impossible to find a centre.

This extremely simple technique was mainly used on full-size chair drawings, being easily adjustable, within limits, for drawing a curved line between two straight lines. The curves it produced were not mathematically accurate, indeed, there was never any need for such precision as it either looked right or it did not.

The ANU Design Unit did not have computers during the 1950s–80s and for many reasons they would have been useless for designing chairs.



By means of a wedge cut at the other end the bow could be easily bent and held to a desired curvature to achieve an accurate curved line on the large full-size drawings of chairs we were designing. The drawing then became a full-size template from which the chair maker could create his own plywood templates to transfer the curve easily to the many pieces of wood he was shaping. It is a fascinating technique that is impossible to replicate on a computer because no screen is big enough to show the curve *in context* and only by seeing a full-size profile on paper can one judge its scale, its curvature and, most importantly its position in 3-dimensional space and its relativity to the whole chair—no mathematics, no centres, just simple gracefulness.

I still find it remarkable that such an unbelievably simple device could produce such effective accuracy in the transference of visual sensitivity from the mind of the designer to the maker—and even more significantly, that the computer is unable to emulate it in any practical way with such profound elegance, speed and simplicity—at least without extremely complicated and expensive numerical control technology! Being always drawn full size, its actual geometry is of no real consequence as it is used to produce a copied curve for a plywood template—a very simple and effective measure. I would not be at all surprised if the ancient Greeks made use of it in designing and building the Parthenon.

Designing ‘stick’ chairs is a profound topic and one of many that I learned from Fred. Esoteric words like organic, relevance, balance, and appropriateness came into play, their subtleties and nuances in relation to chairs being meaningless to most people. Making the translation from one person’s brain to 3D reality is a process of understanding all the necessary skills for a convenient and foolproof process from paper to timber.

Such problems of translation from concepts to reality call for humility, tolerance and compromise at the moment of truth when the designer is asked to approve or otherwise a prototype for a new design. This also requires the exercise of all the designer’s sculptural skills of relationships of parts, jointing subtleties, soft or hard junctions, symmetrical or asymmetrical balance, symmetry—all in three dimensions and extremely hard to evaluate or put into words. It goes deep into the realm of intangible feelings!

The rapid development of computer-aided design (CAD) and computer-aided manufacturing may well have overtaken the chair design industry. However, bows and arrows are still useful, even in the 21st century.

Every work of man which has beauty in it must have some meaning also; that the presence of any beauty in a piece of handicraft implies that the mind of the man who made it was more or less excited at the time, was lifted somewhat above the commonplace, that he had something to communicate to his fellows which they did not know or feel before, and which they would never have known or felt if he had not been there to force them to it.

WILLIAM MORRIS

One interesting fact is that a really good looking chair featuring a pleasant balance and relativity of parts often has very few (if any) vertical and horizontal lines. Most are just a degree or two off vertical or horizontal, being *sensed* by the designer rather than *measured*. In many of Fred's chairs the only true horizontals were often the front spreader rails (if any), or the seat rails.^{23c} These were all subtleties which gave visual elegance to a chair; adjusted perspective or compensated for a 'normal' standing eye level and which tend to be missing in some modern, hyper-economical, straight-up-and-down chairs with parallel framing. Such 'unsubtle' chairs might be lower in cost and geared to automatic machine production (in economic volumes), but their 'perspective' looks wrong and often lacks the grace of a warm invitation to sit or confirm comfort once seated. Does economic reductionism *have* to cast aside some of the subtleties learned from experience? Is this what we regard as progress? When does striving for simplicity become 'dumbing down'?

Jointing timbers at 90° is simple, easy and economical wherever rectangularity rules (such as in drawers and doors), but in chair design—which is an extension of the multi-angular human body—the results can often be dull and predictable! Change it to a subtle 89° or 88°, which is likely in sensitive chair-making, and everything becomes that much more intriguing and human—perhaps a visual form of ergonomics. It is a bit harder and more complicated, requiring more care and alertness in cutting. But it is usually worthwhile when the aware person sees the final result.

These subtleties can be seen from the side view of the CA 104 chair being just that bit off vertical for a balanced appearance or 'stance'. This chair has an organic, sculptural feel, where the parts meld together to form a satisfying whole, requiring precision on the part of the delineating designer and an equal skill on the part of the chairmaker. Designers and makers are both necessary to create such a work of functional art.

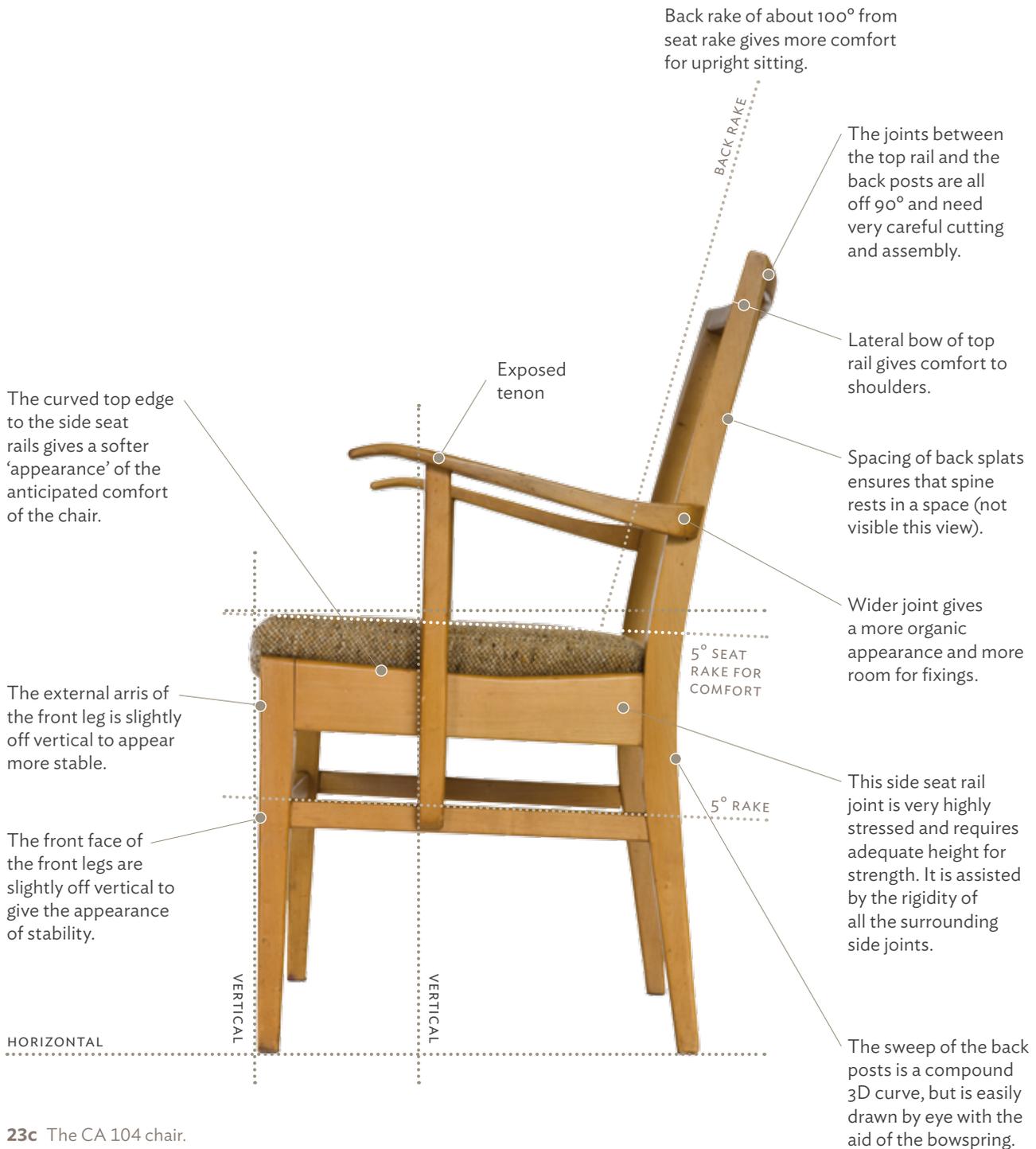
Such chairs, when seen in groups, as when around a compatible dining table^{23d,e} illustrate (in a visual way) the difference (in an aural way) between a solo singer and a choir—the repetition of the units adding an extra layer of enjoyment. Refer back to illustrations of University House Hall^{12b, p.101, 12d, p.105} to see this effect on a larger scale.

The 'tyranny of the tee-square' has been understood by designers for a long time, taking very perceptive strength of will to depart from the pragmatic horizontals and verticals made so easy by tee-squares and setsquares. Architectural design in the mid-20th century was relatively easy compared to chair

Analysis of the ANU general purpose light arm chair CA 104

Its companion chair (without arms) is the CST 119.

Designed by Fred Ward
c.1956



23c The CA 104 chair.



23D The CA 104 chair is the ‘complete’ chair—with arms (carver chair). The $\frac{3}{4}$ view shows the concavity of the saddle seat, which not only looks softer but actually *is*. The even number of back splats ensures that a space is available for the sitter’s spine—it being too uncomfortable to have a central splat. This also fitted the Greek architectural tradition of an even number of columns along the sides of a temple, so that any central door would be between two columns. There would seem to be no connection between the two theories other than being based on similar, practical logic.

23E CST 119 chairs grouped around one of Fred’s simple tables. The table top has outward bowed sides and bowed in ends (see left-hand end). This subtlety echoes the top rails of the chairs, giving the group a closer family relationship and a measure of softness. It is a very functional and successful group.

To be really conventional one of the end chairs would have been a CA 104—a carver chair with arms.

The curved edges to the table, especially those with rounded corners, were to become more difficult when solid tops gave way to plywood or particle board tops which made edge beading essential to hide the ‘revealed ugliness’ of the structural core.



Try to get the most out of your material, but always in such a way as honours it most...This is the very raison d'être of decorative art...to make stone look like ironwork, or wood like silk, or pottery like stone is the last resource of the decrepitude of art.

WILLIAM MORRIS
SOME HINTS ON PATTERN DESIGNING
1881

design for that singular reason—and those absolutes suited the rectangularity and economy of human living, processed building materials and working spaces very well. The logic of 90° is irrefutable from a practical point of view, but we have to learn to bend the rules with aesthetic subtleties when it comes to the visual joys of *useful* sculpture—of which chairs (and Greek columns) are wonderful examples.

Even Mies van der Rohe, that icon of Modernism, is reputed to have said in 1930:

The chair is a very difficult object. Everyone who has ever tried to make one knows that. There are endless possibilities and many problems—the chair has to be light, it has to be strong, it has to be comfortable. It is almost easier to build a skyscraper than a chair.

It would be much more difficult to design a chair on a computer. All our work at the ANU Design Unit was, in the pre-computer age (before the 1980s) and I feel even now that trying to draw a compound curve on a computer screen is quite difficult unless the designer has the enormous facilities of architect Frank Gehry with a computer program sophisticated and powerful enough to be able to compute—and make with numerically controlled forming—the Bilbao Guggenheim Museum.

Mention of the Guggenheim raises another interesting point about honesty that Fred's chairs illustrate—'truth' in almost every detail. Their structure, jointing methods and total form is WYSIWYG (computer jargon, somewhat ironically)—*what you see is what you get*—the 'outside' and the 'inside' being inseparable and working harmoniously together—presenting a unified, perfectly related 'interior/exterior, in the same way as the helical staircase.

Compare the relationship of a chair's elements with the Bilbao Museum and the National Museum of Australia in Canberra or the Federation Square buildings in Melbourne and we see external sculptures which bear little relationship to the forms of the interior spaces—outside and inside forms are *two different and apparently unrelated entities*.

Has 'truth' in architecture become the collateral damage of technological conceit? Is some modern architecture guilty of design dishonesty?

*It is rather sad that, due mainly to quantity production, most items of furniture do not carry any mark as to **who** made them. It should almost be mandatory in high skilled furniture industries for every item to be labelled indelibly with the manufacturing company's name, the craftsperson's name, the item name or number and the date. This would make the archivist's and the historian's job so much easier and accurate. I am not holding my breath of this coming about because too many craft workers are involved with any one item—it has always been this way from the days of specialisation in the simple chairs of the Cotswolds—another story.*

In comparison, most of Fred's 'stick' chairs are undoubtedly honest works of art, seamlessly combining form and function, inside and out. They epitomise modesty, economy and elegance and should be seen in that way, rather than regarded as just somewhere to park your bottom.

The CA 104 chair just mentioned^{23c,d,e}—has stood the test of time in numerous ANU buildings. Many of the early ones are still in use at the ANU and must now be almost 60 years old.

The companion chair to the CA 104 (Chair with Arms) is the CST 119^{23e} (the same Chair Standard, without arms). These two chairs have no vertical arrises—every arris is either a few degrees off vertical or curved, giving much more subtlety and humanity. This chair, more than any other has been the subject of several iterations or variations to improve its *sculptural* appearance, an aesthetic rather than a physical need—but its honesty and integrity remain intact.

Fred's 'stick' chairs contain innumerable subtleties, arising from a perceptive eye and from simple manufacturing techniques. These were well understood by the competent craftsmen who were available in Canberra and the chairs could be produced in batches at very reasonable cost for the ANU. Those qualities fit in very well with Matchett's description of 'good design' and were critical to our creation of good furniture for a continuing series of buildings in a growing academic institution. A contributing and very important factor was that the ANU Design Unit was not at the whim of commercial pressures, of satisfying a somewhat conservative public in the hope of making sales. We were there as part of the educative process; of creating a learning environment which had *self-imposed* standards to meet; of *educating by doing*, inculcating a high standard of design in the daily cycle of learning—in the halls of residence, the lecture theatres, the laboratories, the offices and libraries—in the hope that some of the 'flavour of good design' would rub off on everybody's sub-consciousness for future benefit. This is virtually impossible to assess, but to some extent this goal may well have been achieved, judging by the comments I have heard. Now, half a century later I have been privileged to witness that most of the second-hand furniture shops around the ACT actively seek any Fred Ward furniture, if only because the public seem willing to pay somewhat higher prices for his imprint. On the reverse side of the coin, instances are now emerging of dealers claiming they have 'Fred Ward' furniture for sale. On investigation most of these claims have been false.

One thing did surprise me in Fred's practice—the confident way in which he would often call tenders for a quantity of furniture of a new design that he had never produced before, without even having a prototype made to test its appearance 'in the round'. It was often difficult to spend time and money on making a prototype 'just to make sure', especially for such small quantities. One reason for this confidence was the fact that chairs were always drawn full-size, so their all-important *scale* could be much more easily assessed by pinning the drawing on the wall and viewing it from standing and a sitting eye levels. Simplicity again and iteration based on feelings and instinct.

There would be full-size plan views and sometimes two or three at different levels of front, side and back sectional elevations so that the woodworker could trace off an accurate 'sweep' or curve to make a thin plywood template. Creating such drawings called for a deep understanding of 3-dimensional space and where a point in space on one drawing *really* is on associated drawings. Such is the essential skill of the chair designer and equally so of the interpretive skill of the craftsman handling the reality of cutting many identical pieces of timber. This is not easy when there are few verticals or horizontals useable as data for measurements—some chairs not even having any at all. A vertical arris on a front leg served this purpose, which is why a chair with no verticals is so much more difficult to construct (refer to Mies van der Rohe's statement earlier).

The art of communicating this difficult geometry to a disparate group of chairmakers for the purpose of obtaining comparative tenders was a skill of a similar but different order. Fred always made full-size drawings of chairs, but he always provided a 3-dimensional sketch on the same drawing so that the maker had a mental picture of what the final 'sculpture' looked like. These were vital clues to the 'totality'.

In our many discussions over coffee Fred instilled into our minds that it was a minor miracle that a skilled woodworker with a set of templates (which a full-size drawing made easier), sticks of 'blocked out' selected timber, a band saw, thicknesser, spokeshave and chisel could accurately produce a quantity of *identical* chairs. And what is rather sad is the mental barrier of many people who seem to regard chairs only as something convenient to sit on without a thought spared for the love and the skill of those who provided it.

Designing, however, is only the first half of the creative equation, but it is of no avail if there is no equivalent force beyond the drawing board that can *transform* that creativity into reality. The men (rarely, if ever, women then—now changing) on the bench are the unsung heroes and it is long overdue that their skills as makers are recognised. The growth in population and demand has, however, meant the growth of industrialisation to meet the demand—but the numbers of bespoke craft makers who can produce small quantities seem to be diminishing rapidly.

One of those serendipitous, historical coincidences brought some highly skilled European cabinet and chairmakers to Canberra at just the right time to make their valuable contributions to the growth of the Australian National University.

There were three significant importations of woodworking skills taking place just after WW2—the Snowy Mountains Hydro-Electricity Authority (SMHEA 1949–74); the ‘*Dunera*’ boys (interned in England and Australia during WW2)^{F1} and lastly, what became known as ‘Jennings Germans’, in 1951.^{J6}

The presence of these small groups of men, mainly from Germany, Austria and Italy and one from Switzerland, some of whom settled in the Canberra-Queanbeyan area has gone largely unrecognised. Their arrival, the growth of Canberra and the ANU Design Unit are beautifully linked in a timely, symbiotic way. Men well trained in the traditional European ways of converting good timber into good quality furniture were drawn to the Canberra region, firstly after serving their time in the SMHEA around 1950 and secondly by Albert Jennings, a Canberra builder who, in conjunction with the Department of Immigration succeeded in attracting about 150 skilled German and Austrian woodworkers to build 1,800 houses in Canberra, many of which are still standing today.^{J6}

Many stayed in Canberra and set up workshops as joiners, cabinet makers and chairmakers—skills which Fred was eagerly seeking for the furnishing of the growing ANU, starting with University House in the early 1950s. This influx of skills was an incredible stroke of luck in its nature and timing.

European names like Alfons Stuetz, Oswald Paseka, Con Tobler, Heinz Frank, Tony Urban, Kees Westra, Klaus Tschorn and Hans Pillig all contributed their skills to the ACT community or they were employed directly by the ANU Medical School, Physics or Mount Stromlo workshops, not only as woodworkers and metalworkers, but as laboratory glass and lens makers. The ANU thus played a significant role in recognising and keeping their skills alive. Hans Pillig was an especially skilled and valued member of the ANU Design Unit, having been co-opted as a cabinet maker from the Medical School workshop before my time. He carried on the unit after I retired in 1977, but it finally expired about three years after me, so he became the longest serving member. At least seven of these skilled migrants are still living in the Canberra area. Fred and I were most grateful for their essential presence in the ACT.

Almost all of Fred's commissions largely required *bespoke* furniture, where the *real needs* of the users were satisfied, rather than making the users modify their needs to suit the *supposed* needs assumed by a manufacturer to suit *his* concept of need and *his* existing production processes—and mainly for the domestic market. This was particularly so in the cases of the ANU, the Reserve Bank of Australia and the National Library of Australia to ensure consistency of design, quality and appropriateness to need and location throughout large multi-storey buildings with one occupier. Such projects have more than justified the commissioning of total design contracts to a competent designer achieving quiet, purposeful continuity of functions and appearance to their users. Fred was an outstanding exponent of this design niche.

Commercial 'off the peg' furniture, on the other hand, is now increasingly being manufactured in factories in large quantities from a relatively small range of materials (compared to architecture)—commonly using timber (of decreasing variety and quality), steel, plastics, aluminium and fabrics with variations of design form, fibre, colour and upholsteries. While this should promote research and has the potential to lower unit costs, it does create problems for the *interior* design consultant in selecting compatible items from a variety of manufacturers, each of whom have only a relatively limited range of products to choose from. This is especially difficult when 'repeatability' is required by the client in future years—the need for more similar items to ensure some cohesion of appearance in a particular room. This can be very difficult, as the manufacturer will most likely have moved on in its range of products, superseding old models with new ones—or has gone out of business.

It is a sad fact that chairmaking and cabinetmaking were trade skills that were not recognised by the Apprenticeship Board in Canberra. Fred and I appeared before the Board around 1959 in the hope that these rare skills (in Canberra) could be recognized as skilled trades worthy of having apprenticeships. Unfortunately, the Board would not recognise them as specific skills in their own right—'they're really only carpenters and joiners' was one amazing retort I remember from the meeting. That statement was a setback for the establishment of a vital trade skill in Canberra. However, the establishment of the Wood Workshop in the ANU School of Art by George Ingham in 1982 helped to redress that loss of skills.

Fred, having been on the manufacturing and retail side at Myer in Melbourne was very conscious of these limitations. Most of his clients from 1950 onward were spending public money requiring the calling of tenders, and this fitted in well with the detailed documentation of his designs, ensuring an equitable process of spreading the work around the trade and obtaining the best possible prices for his clients. The profits of middlemen and retailers were eliminated. The quantities being relatively small enabled the small manufacturers to share in consumer demand.

The questions of quality of workmanship and capacity to complete on time often arose as not all manufacturers were equal in all these important aspects of procurement. Fred had built up a good knowledge of the trade, of who was competent, had the appropriate number of skilled staff capable of completing a project at reasonable prices and who usually delivered on time. Mutual respect between all players became important and the process of selective tendering enabled the lowest prices to be obtained within an accepted protocol, ensuring that justice was done—and importantly—appeared to be done.

In retrospect, considering these risks, it is quite surprising that chairs such as the light armchair^{16B, p.146} could be produced in the early 1960s in small batches of about 20–30 for about £20 each (roughly \$40 equivalent then), making them very competitive with commercially available domestic chairs with the inherent problems I have mentioned before.

There are many other nuances within this process of ensuring appropriate design at acceptable cost within a required time and it is greatly to Fred's credit that his tender documentation and procedures were well respected by the many skilled craftsmen in Canberra, Sydney and Melbourne—and, more to the point, the delivered results were invariably of good quality and good value for money.

Canberra and Queanbeyan readers may be interested in the appended list of local manufacturers (p. 248) who served our community well in the second half of the 20th century.

24 Environmental influences on ANU Design Unit design

It must have been around the late 1960s that we in the ANU Design Unit felt that, being part of an enlightened university, we had some responsibility to set some standards of environmental awareness in our design methods. The dots of environmental concerns were beginning to join up to something serious that could affect us and our work within ANU. Ethical issues began to make their presence felt!

Up until the late 1950s solid table tops had a shrinkage/warping problem requiring specific design measures to allow for the moisture movement of timber—especially in the drier Canberra climate. The quality and supply of solid timbers of generous sizes was beginning to diminish while population growth and demand for resources were rising. ANU Design Unit’s switch from solid timber table tops to veneered or plastic laminated particle boards and the way in which we reduced waste in the sweeps of chair back legs indicated that we were reconsidering our design thinking.

Greater population and institutional growth required more furniture. Trees were being felled at a greater rate and the necessary seasoning to reduce moisture content changed essentially to the quicker kiln drying as demand could not wait for the much slower, traditional air seasoning.

Although Fred’s work up to the end of the 1950s was in solid timber, he was flexible enough in his thinking to embrace the need for tube steel framing during the late 1950s and 1960s as a practical and economic alternative to the solid cabinet timbers we were consuming. This was almost a necessity because of the addition of the School of General Studies to the ANU in 1960 but it meant that we had to seek out manufacturers in Sydney and Melbourne as there were none in Canberra. Bruce Hall was our first venture into steel framed furniture.

Aristoc Industries in Melbourne were undoubtedly producing the best designed steel framed chairs, designed by Grant

In 1957, when I joined ANU Design Unit, the population of the ACT was around 35,000. As I write in 2011 it is around 350,000—10 times bigger in 54 years, or about 18 per cent per annum growth—possibly the highest in Australia.

Featherston. Ian Howard, their CEO, was flexible enough to accept some of our minor modifications for ANU projects.

These new alternative materials were not environmentally better than cutting down trees at the time. We just did not have the evidence then. It is now quite clear that the energy investment and pollution produced in the manufacture of steel far outweighs that of timber and many other factors favour the use of timber—except for the loss in carbon sequestration, a factor we were just beginning to comprehend. There is now more evidence and community awareness that our forests serve an important function of absorbing and sequestering carbon dioxide and producing oxygen whereas the new processed materials do the opposite. The jury is still out on the final balance, but availability presents a different picture. If suitable timber cannot be grown fast enough and is not available as a commercial product then the alternatives have to be used.

The technique of veneering over lower grade wood was used by the Egyptians about 3.5 millennia ago, partly because they also had the same problem—a scarcity of good timbers.

Fred was aware even in the first half of the 20th century of the *commercial* development of plywood as an economical use of second quality timbers, using quality veneers as the final, visible layer.

He was able to use it during his Myer years as it gave a dimensional stability that solid wood could never offer. He had been using plywood economically in drawer bottoms and backs of wardrobes and cabinets.

Plywood of table top thickness was not particularly cheap, however, and required separate edge mouldings and selected veneering on both sides, all of which added to cost—but it did have the very important qualities of strength and dimensional stability. The necessary edge mouldings needed to be mitred at the corners to give a consistent visual appearance which required more precise fitting, but incurred extra labour cost. It also had the effect of making all table tops rectangular as the mouldings could not be used on radiused corners. Fred's elegantly curved edge table tops were thus to become a casualty of environmental thinking.^{23E, p.217}

Particle boards with veneered faces became increasingly common, offering a convenient answer to the shrinkage and warping of solid timber, but veneered edges were rather fragile for general use and the appearance of a *veneered* side grain on all four sides was a *dishonesty* we could not accept so we adopted solid beading instead. We had our standards—rightly or wrongly.

Edge beading with mitred corners was fine, but the trade went further by introducing butt-jointed corners which to us seemed to be a cheap and nasty solution. They were so ‘honest’ as to go well beyond that philosophy and were no better than a packing case technique. We were not prepared to accept that reduction in quality. Packing cases are admirable solutions to their *particular* needs and *circumstances*, but in a Council Room? Matchett again.

Plywood was followed by other forms of processed wood in the latter half of the 20th century following (and probably stimulated by) WW2. We saw the development of a series of manufactured boards—hardboards, particle board, then medium density fibreboard, all of which necessitated design changes. To the purist, the application of a thin, scarce, increasingly prestigious wood veneer was dishonest, but to the pragmatist it spelt the end of all the problems associated with solid timber—colour and grain matching, warping, shrinking, cracking and, to some extent, weight and increasing cost. Table tops were no longer a problem—unless the surface veneer was damaged in any way, often making replacement of the whole top the only answer. Solid timber at least could be run through the thicknesser and refinished without any edging problems as the tables in University House will attest to.

The arrival of melamine laminates in the 30s—Laminex and Formica—were a practical answer to the problems of surface finishes to plywood and particle board table tops, presenting a multitude of plain colours, patterns, *but*, to the purist—a completely dishonest range of photographically produced *timber grains* of all the favourite timbers was completely unacceptable.

Fred had used a discreet laminex on the tops of the chests of drawers in the study-bedrooms in University House in the early 1950s—tan linen being one of the least objectionable.^{12H, p.108} As a top surface, subject to all kinds of abrasive actions, they have lasted for over 55 years, exceptionally good value for money.

The Prewood range was the next development, which had an unbelievable *physical texture*. Even though they were indistinguishable from the real thing Fred and I could not bring ourselves to employ such deceit—it was dishonest, *pretending* to be timber—we could not use it in all conscience. Strictly speaking, even wood veneers are dishonest, but their saving grace was that they were an economic use of valuable timber on a base of lower grade timbers in another form, so more of a white lie than an outright deception.

Morals have a role to play in the achievement of good design but how far you can bend the rules is a somewhat indeterminate philosophy and is, in reality, a behavioural art/science.

The early particle boards were, unfortunately, coarse grained and insufficiently strong in tension for use as table tops and shelving. It was not until a finer grained particle board in medium density fibreboard became commercially available in the 1970s that we found a sheet material that was really suited to our needs. It was stable, strong and could be veneered and machined—although the latter characteristic was no big advantage to our simple style of design.

At least the era of warped table tops due to the use of badly seasoned wood had gone.

Glued up, laminated boards or panels using precisely machined, combed or finger-jointed strips (21st century) are now common as a logical development of an increasingly scarce resource. These can be made to any size, having a different visual character which is at least quite decorative in its own way when used for table tops.

What is interesting with this technique is the fact that the sizes of the panel are only limited by the presses, and our ability to manufacture and handle it safely. It can in theory be made any size we want.

This ability coincided somewhat symbiotically with the dramatic upsurge of computer furniture and ‘ergonomic’ chairs in the 1980s and 1990s. (Our ANU Design Unit furniture had been ergonomic for 30 years!) Computers required (or so the commercial spin told us) vertically adjustable tables and chairs, demanding new techniques only suited to large scale quantity production. These imposed, in turn, a more widespread sameness of appearance—rather like cars and aircraft which have achieved a very high degree of ‘*ultimate form*’.

Each technical change seemed to produce its own aesthetic and we were simply experiencing our particular change from small scale hand production with a large variety of forms to larger scale, repetitive machine production. We had to accept the consequences of *sustainable economics* imposed by our increasing population and the consequent resource changes.

While definitive eras have lasted thousands or hundreds of years in the past, they may now be down to decades and Fred’s

particular era of solid, stick furniture was certainly changing—we were becoming a statistic.

Fred's designs were suited to low quantities which could be handled by small factories using a small amount of mechanised equipment for transforming wood, making the tendering process feasible. However, as the furniture industry became more and more industrialised (a function of increasing population growth) the ANU Design Unit was slowly becoming more a selector of increasing quality of manufactured goods—with all the problems previously outlined.

Clearly then, environmental factors were having their effect on our designs and our design methodology, but advances in chair design were only to occur by reason of new materials and new, associated manufacturing techniques—but tradition takes time to break down.

One such change in chair design occurred around 1963. Robin Day designed his highly successful polypropylene stacking chair with a steel tube base for Hille in the UK.^{25A} It was cheap, stackable, weatherproof and seemed the answer to many chair situations, being particularly good for institutional use and virtually indestructible. Although the steel mould cost a fortune (£200,000 in 1962) it could produce 4,000 chair shells per annum. Australian chair manufacturers quickly produced their own versions in differing sizes and colours.

The fact that its shell was an oil-based thermo-plastic material and the tubular steel frame was also highly energy intensive did not seem to matter much in the 1960s and purchasing officers for schools thought it was the answer to all their problems—as indeed it was until its environmental cost was considered.

Wooden chairs, Fred's forté, were another example of this philosophical collision between the environment and good practice. The first indication of trouble came in the 1960s with the form of the back legs of the larger, easy chairs that were usually cut from a fairly solid piece of carefully selected timber. This action probably wasted about half its original volume to achieve the sweeps necessary for stability and rake for back comfort. In the 21st century this must be regarded as unreasonable and an unsustainable waste. It is small wonder that a lot of modern chairs have been designed with vertical back legs and usually in the cheaper, faster growing timbers such as Victorian ash or pine to keep the cost down. This is a logical and rational outcome of the need to reduce waste, machining effort and energy, but the use of pine is questionable as it is a soft



25A This injection moulded polypropylene chair took the design world by storm in 1963. It was designed by Robin Day, a well-known UK industrial designer and sold multi-million units in the last half of the 20th century. It was the image of the 20th century in materials and technology, but relied on mass production to justify the cost of the extremely expensive moulds.

It is stackable, weatherproof, virtually indestructible in use and cheap—very suitable for versatile use in schools. It has been copied in many countries, but as it is produced from oil, it could well be subject to rising cost when the decline in oil production becomes more evident.

timber and does not achieve long lasting rigid jointing. It would be interesting to know what Fred would have produced under these environmental circumstances.

To take another aspect of the effect the environment is having on design—nature has a bountiful variety of trees, each with different characteristics that we value for differing reasons. To nature they are simply trees—inherent elements of the biosphere and the results of different conditions of soils, nutrients and climates—whereas economic value, aesthetics and pretentiousness are purely applied human values. But all are inextricably linked in the concept of sustainability which is now loading a heavy price on our concept of elegance. Designers are consequently having to rethink their concepts of comfort and elegance in relation to their preferred materials—which is as it should be to a really aware and conscientious designer. *We cannot ignore the circumstances within which we operate.* Fred and I tried to live up to that ideal in our work at the ANU Design Unit, being relatively free of commercial considerations, but even then it was a hard taskmaster and not always achievable.

Many attempts have been made around the world to use recycled or waste materials for new furniture. In 1972, Frank Gehry (famous for his Bilbao Guggenheim Museum) experimented with the use of cardboard for his ‘Wriggle’ chair with several interesting solutions. Waste timber when ground or chipped can be pressed or moulded into strong and useful forms and such experimental work must be supported as usual resources become scarce. Such research is essential and should not be scorned as being radical, but if it is to be regarded as good furniture it has in the final analysis to fit within certain parameters of usefulness, economy and practicality without being *dominated* by a desire to create ‘sculptural’ forms.

Fred’s life and his particular timeless expression through furniture design were quintessentially 20th century, but I feel sure that if he were still practicing design he would be accepting the inevitability of change due to circumstances. Opportunity and financial backing are, of course, essential, but not always available and research ‘on the run’ can be risky. Consequently, most designers have to play safe or await a supportive client.

The ANU arms bear the motto ‘*Naturam primum cognoscere rerum*’ which translates as ‘*First to learn the nature of things*’. It perhaps has a message for all designers as well as ANU students and researchers—after all, if we take a moment to reflect on how we and all the things we take for granted are totally dependent upon our planet Earth, then infinite growth

on a finite planet is a physical impossibility. We have to change our unsustainable ways if human beings and civilisation are to survive.

What we were witnessing in our small way in the ANU Design Unit was the beginning of necessary change in detail for the greater good; of reducing our demands on natural resources, energy and our contribution to global warming—terms that were not in the public’s mindset in those days. Now that we are all more *aware* of the consequences of our actions we have a moral obligation to minimise any resultant deterioration of the environment. Indeed, if we are to be truly sustainable, this requirement must be paramount in the list of Matchett’s ‘... *particular set of circumstances*’.

There was one instance where the ANU Design Unit tried to put this into practice. The ANU had quite a large housing program of building houses for its staff under the control of a Housing Officer, Dorothy Harvey.

Sometime around 1969 I put forward a proposal that the ANU should (and could) make a research contribution to saving energy in the ANU houses that were still being built. This would be by building one experimental/liveable house that would make maximum use of free solar energy, conserving that energy diurnally from the warm period for use over the cold period and by creating and conserving hot water. Such a house could be a *living* experiment and a demonstration model with full monitoring of its thermal performance followed by a published paper. A site was set aside in Kambah; I designed the house with enthusiastic input from my colleagues in the engineering section of Property and Plans—Lou Parker, Eddie Simmonds and Ken Harrison. For some reason which has never been clear, the proposal did not receive approval from higher up the chain of command and a timely proposal which could have contributed an enormous amount of useful data was consigned to the filing drawer. What a lost opportunity.

Looking back with hindsight we can realise that our degraded environment is now making its presence felt quite forcibly and that universities should set the example in good community behaviour through better design. I feel sure that Fred would be the first to agree.

Nevertheless, the design time invested in that solar proposal was not wasted—it was to surface as a dominant element of my life beyond ANU, but that is another story.

FOOTNOTE BY AUTHOR

I feel this discussion is getting beyond the limits of the book's brief, but it is, nevertheless an important topic when seen in relation to the world's environmental problems.

In spite of its relative freedom, architecture has not always produced good design, especially where the eventual form has been derived more from the freedom to play with highly plastic sculptural materials than from the more disciplined logic of say, thermal dynamics and solar utilisation.

The Bilbao Guggenheim^{BG} and the Melbourne Federation Square (reportedly \$200 million over budget) projects while seen as initially exciting are really examples of ego-driven irrationalities, raising serious questions as to where architecture is going and what is a reasonable cost per unit of function.

I can almost feel Fred cringing at the thought of being commissioned to design furniture for such buildings—a chair to him was fundamentally a means of sitting in comfort (51 per cent), with elegance and stable structure being of almost equal value (49 per cent). It would have been anathema to him to derive a chair form solely from a sculpturally dominating viewpoint which diminished its function.

As E.M. Schumacher said in the 1960s, 'The West has never learned when enough is enough', which is now highly relevant considering the environmental problems we are facing. And yet, experimentation is in our blood and the thought that there may be a better way of doing things drives creative human beings onward—but it requires flexible, analytical thinking coupled with some rigid parameters determined by ecological limits.

This is an enormous topic, worthy of a UN top priority investigation into the rational use of global capital when there are so many world issues of human misery demanding attention, which might sound strange in the context of this book.

The concept of 'enoughness' is now highly relevant in all fields of design and in the light of global warming and climate changes. The urgent need for sensible design in all fields imposes tremendous responsibility upon those of us who design our built environment.

This topic is an exciting one and would, I feel, have been a welcome exercise in design logic for Fred to engage his mind. The 'design' of the human frame and its furniture extension in relation to its surrounding architecture is a topic of great potential for another book—if only I had the time.

25 The end of a few eras

I have not failed to be conscious that the art I have been helping to produce would fall with the death of a few of us who really care about it, that a reform in art which is founded on individualism must perish with the individuals who have set it going. Both my historical studies and my practical conflict with the philistinism of modern society have forced on me the conviction that art cannot have a real life and growth under the present system of commercialism and profit-mongering.

WILLIAM MORRIS
LETTER TO ANDREAS SCHEU
1883

This statement by Morris is appropriate to Fred’s story in the sense that a transition from the 20th to the 21st century has highlighted the global need for a significant shift from an era of profligacy to an era of realisation that it cannot continue. Schumaker made it perfectly clear that *‘The west has never learned when enough is enough’*.

Although Fred showed few signs of being *overtly* ‘green’ during his life, his design philosophy and his lifestyle indicated an honesty and simplicity in design which was pointing to a better way of designing furniture in contrast to current trends.

Undoubtedly Fred played a significant, leading role in Australia at a critical time in Australian history—his Eaglemont furniture in the late 1920s, the shop in Collins Street and his Design Studio in the Myer Emporium from the early 1930s. It would be unreasonable to give Fred all the credit for such changes because there were several other factors at play, but he had an uncanny knack of knowing what the public needed before it knew itself; a valuable asset to any retailer and in researching this book one fact seems to stand out—his design proposals and the finished products seemed to meet with approval from his clients. At ANU I cannot recall any incident where his aesthetic decisions required him to go ‘back to the drawing board’ for lack of client approval. His designs were appropriate to the situation and he was able to gently lead his clients into something that little bit better than they expected without scaring them with the shock of the avant-garde.

His life span from 1900 to 1990 coincided well with the 20th century. In this time Fred witnessed rapid changes in many fields, mainly in technology (improved ways of cutting or jointing timber or new timber products), and others in fashionable trends, which did not really interest him. Fred's furniture design style was always consistently and quietly progressive from the late 1920s to the time he finally laid down his pencil in the late 1970s.

If produced today his mature style would still be very acceptable to those who appreciate well designed furniture. This in itself would be a remarkable achievement in a world of rapid fashion changes.

Fred's quiet style and the fact that his mature work was almost entirely bespoke and rarely advertised for public sale as Ward designs did nothing to earn him a place in the public mindset. As a consequence his name was not well known to the general public.

This was compounded by the fact that, with the exception of his *Patterncraft* venture Fred's *social design* achievements were known only to a very few colleagues and friends.

Let me briefly summarise and remind the reader of Fred's social design contributions:

- › He initiated the beginnings of the design profession in Australia in Melbourne shortly after returning from his war service around 1946 and continued to advise when the SDI was transformed into the Industrial Design Institute of Australia in 1958 (see section 9, *A new design age dawns*, p. 63).
- › He established the first (and most likely the *only*) in-house university Design Unit in the world, which eventually established design as a major integrating factor in the growth of campus design, architecture, furniture and furnishings, landscape design, graphic design (see section 11, *Early days in Canberra*, p. 89, and section 14, *ANU Design Unit*, p. 121).
- › He initiated the formation of the IDCA to assist industry meet the challenges of competition in overseas markets with over 26 years of voluntary service (see section 15, *Design Council*, p. 135).

- › He supported his design colleagues in Canberra in their initiation of a proposal for a School of Environmental Design in 1966 at what is now the University of Canberra. The school opened in 1974 (see section 17, *Design in education*, p. 153).
- › He and his colleagues investigated the lack of appreciation of the value of design in the school education system in the ACT, resulting in the formation of the Design in Education Council Australia around (see section 17, *Design in education*, p. 153).
- › His initiation (even on a small royalty basis) of the *Patterncraft* system to assist returning servicemen to create their own low-cost, well-designed furniture must be seen as a significant social design gesture (see section 9, *A new design age dawns*, p. 63).

That era of arousing design awareness in the mind of the public can be seen in retrospect as having been stimulated by Fred and his design colleagues during the 20th century.

But—and it is a big ‘but’—the popularisation of the word ‘design’ by the media has only been in the last two decades at most, and has often treated it in a superficial way as the end product rather than the process. The real benefit of an understanding of the *process of design* by the public would be manifest by better decision making in almost every sphere of human endeavour. It must start in schools to be effective—which, as I have explained before, is a hard nut to crack (see section 17, *Design in education*, p. 153).

This new era in the design education of Australia must be carried on by the current crop of designers with a greater down-to-earth realism of design in the service of the community. The *ecological imperative* provides a new and really quite exciting stimulus that we as designers are especially sensitive to and cannot afford to develop because the consequences of failure cannot be even contemplated. We have to learn to live on a finite planet in the face of many life and death dilemmas; of burgeoning demands on its resources by ever increasing numbers of people; of increasingly complex technologies which exceed the capacity of the average person to understand and which will not function if electrons cease to flow from a plug in the wall. Designers are needed who can deflect unreasonable *wants* into reasonably achievable *needs* for survival, not to turn corporate greed into conspicuous and unsustainable consumption.

Design as a process is a key function which can help to unlock the door to sustainability—as a *holistic means of maintaining ecological balance*—but do those who commission the design process understand this fundamental aspect? Therein lies the real problem. My study of Fred tells me that he instinctively understood this simple relationship, but was trapped in a system which thought in 20th century terms. *This is why design in education is so important.* It is also why the Industrial Design Council was so important to Australia and became its downfall because of a lack of understanding of its real value by those with the decision-making power.

The future of the industry which was Fred's life, however, seems likely to falter for environmental reasons due to the lack of farsighted investment in the future—the desirable trees being of a kind which can take several hundred years to mature and thus not as profitable in today's commercial ethos of quick returns on investment.

A projection of these changes, especially with the the likely demand from an increasing population, would seem to signal the slow demise of the larger bespoke design commissions where *significant* quantities of *consistent* quality Australian timbers might be involved. That profligate era is almost over for Australia and is only possible by continuing the rape of similar timbers from overseas. This era is finishing and I know that Fred had pangs of conscience about the part he unconsciously played.

Through his bespoke commissions he was able to show that a simple design approach can satisfy very particular needs that industry did not at that time satisfy. Although born in Victorian times with its prejudices, visual complexities, love of decoration and surrounded in his formative years by Edwardian stylisms such as Arts Nouveau—Fred's early ventures into furniture design can be seen as a quiet protest against the prevailing commercial trend, pointing toward a future era of honesty and simplicity.

The opportunities made available to him at Myer and later at University House and the ANU enabled him to establish his own distinctive Australian style which he was able to continue in a very consistent way for most of his long productive life.

A further collateral benefit was that Fred's designs required only traditional woodworking techniques which were familiar to all good woodworkers and produced very reasonable prices by way of the tender process. This spread the work around the trade, creating employment in Canberra, Sydney and Melbourne.

However, the nature of his commissions had the converse effect of limiting his creativity because the small quantities did not enable him to experiment with any radical techniques such as Thonet's steam-bent timber designs of the Victorian era.^{26A,B,C} This highly recognisable café chair (also known as the Vienna chair), literally sold over fifty million items before 1914. Fred's production runs were more usually under 50 and he never had the research funds or the large quantities to investigate better ways—it was risky research on the run, and it is this very factor that marks Fred out as a remarkably skilled and sensitive designer. I am not aware of any design failures on his part.

Because of these significant limitations, Fred's designs were limited to satisfying the needs of his immediate clients rather than becoming available for public consumption by way of research and development, production and commercial advertising. In retrospect, this was a loss to society as a whole, to Fred himself (financially) and, inadvertently, a reason for the writing of this book.

It was the stimulus of WW2 that produced a new era of thinking into new materials and techniques and it is somewhat ironic that Fred's experiences with aircraft design in that period could well have tempted him to think along new lines in his future beyond the Myer Studio.

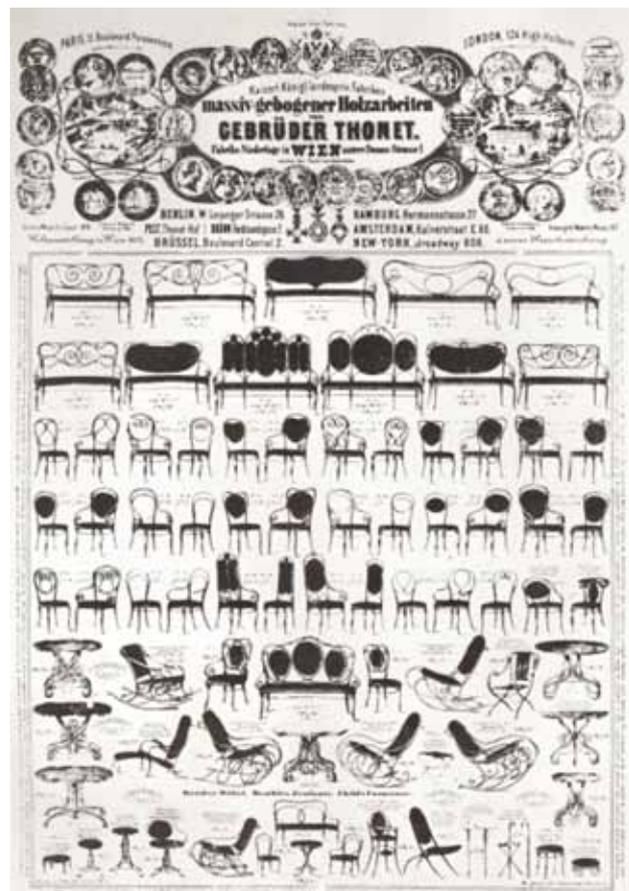
His return to Myer after WW2 may have been an opportunity to break new ground in Myer productions, but it would seem that he only had limited time; also, being mainly retailers the Myer milieu did not seem to be sensitive to the need for research and development work. His Heritage range around 1946 is the only slender evidence of his post-war Myer work I have been able to find. Melbourne seems to have been a fairly conservative society and the realities of his Myer design commissions in the immediate post-war years did not give Fred any research freedom arising from new materials or new machining techniques. That may have been a lost opportunity—we may never know, but it may have caused Fred to search for a life outside Myer. Certainly the other members of the Myer Design studio looked elsewhere and it could well be that the ANU offer to design furniture for University House in Canberra was a timely and pragmatic opportunity for Fred, having a family to support. From a historical perspective, 1952 was the beginning of a new era for Australia and for Fred and Puss.

Seen in historical sequence the exciting new materials of injection moulded plastics, composites such as fibreglass and polyester resin and moulded laminated ply forms were still in the future and not readily available to Fred. It was to take Fred Lowen (at Tessa) another two decades to develop and market his very elegant Tessa T4 laminated chairs in Melbourne and Robin Day in the UK only released his polypropylene shell chair in 1963—even later in Australia. These mass-produced chairs created a class of use of their own, not dissimilar to the Thonet Café chair of 1850, fulfilling a role which Fred's furniture material and style could not easily emulate.



26A,B Thonet chair No 14, known more popularly as the Vienna chair or the Café chair. Designed by Michael Thonet, 50 million were sold between 1859 and 1930 and this model is still in production today.

This, and the rocker chair No 10 have become classics of the bentwood style, loved today for their exuberance and characteristic style rather than for their comfort.



26c Both the chair No 14 and the rocker chair No 10 can be found on this old Thonet poster catalog dated 1875.

A significant factor in Fred's favour was that his clean, simple designs were already well ahead of the commercial market and produced very acceptable prices without middlemen profits for his clients. Fred kept within these *circumstances* which suited everybody concerned, but we will never know what might have happened had he the opportunity of large scale experimentation and commercial sales which were beginning to open up. Fred's one contribution around 1946 was his *Patterncraft* concept—brilliant, timely, economical, socially beneficial and evidence of a problem-solving mind—but it had an inherent sunset clause. It was only appropriate for that small window of opportunity, but he was undoubtedly the man for the moment. The furniture industry, however, was to have other ideas.

1946 was undoubtedly the beginning of a new era for Australia—the population was fed up with WW2 and expected a progressively better lifestyle.

Several designers in Sydney and Melbourne were to make their mark of injecting design into industry on a wider range of products—Doug Snelling, Charles Furey and Grant Featherston produced new industrially based furniture designs for their niche markets. Adrian Knaap, Ted Healy, Ron Rosenfeldt, Frances Burke, Carl Neilsen, Don Goodwin, Ted Worsley, George Kral and others such as Michael Bryce in Brisbane, were slowly breaking through the ice for design in Australian society and creating the strength to make it the responsible profession it is today. The Society of Designers for industry was up and running in Melbourne by the time Fred left for Canberra. His circumstances, however, chose a different route for him and a completely different era emerged.

Canberra was at last showing signs of becoming Australia's capital city, but had a different character and purpose to the commercial and industrial hurly-burly of Sydney and Melbourne. Fred found a different set of receptive and influential colleagues who were to further his design career.

Working from a Canberra base and being involved in bespoke work, however, did not attract the publicity of commercial competition Fred might have received in the other cities. It could be also that Fred, being a more reticent person, was happier in a smaller setting and his quiet design style was what attracted the attention of his Canberra clients.

What is remarkable in an era of rapid change is that from the beginning of his creative period in the late 1920s, Fred's style was well in advance of the current fashions and he steadfastly maintained a discreet, elegantly simple style throughout his more mature years from 1950 to the late 1970s. His last big commission for the National Library of Australia in Canberra should be regarded as his final contribution to elegant 20th century furniture design, displaying a consistency of design approach which ranks among the world's best, an appropriate finish to an era of significant Australian design.

Fred's successes were the result of circumstances he had learned to understand. The closure of two of his initiatives (IDCA and ANU Design Unit in the 1980s) should not be seen as failures, but rather the result of the narrow thinking of forces based largely on money and lack of understanding of the power of *good* design by those in commerce, industry and governments *rather than social benefit*—bringing us right back to the failure of education, which Fred and his colleagues also tried to change.

What is significant is that there is a residual recurring call for some form of national body to guide and foster better design in Australia. Was Fred 50 years ahead of his time?

I can almost see him smiling...somewhat wistfully. He did his best to show the way to his vision of a better world.

References

AA Arthur James Arnot (1865–1946),

Wikipedia entry, <http://en.wikipedia.org/wiki/Arthur_James_Arnot>.

An Australian electrical engineer and inventor, best known for patenting the world's first electric drill in 1898.

ANU *The Making of the Australian National University 1946–1996* by Foster and Varghese (1996), Allen and Unwin.

A general description of the genesis and development of the university. The role of Fred Ward receives scant mention, giving some indication as to the general public awareness of the role played by design in the overall responsibilities of an academic institution toward its students and staff.

AP A biographical note by Anne Purves (1956).

Biographical notes written for the opening of the Australian Galleries in which she describes the start of *Patterncraft* furniture, designed by Fred Ward and organised by her and her husband Tam, c. 1946. Private paper held by Caroline Purves, <www.australiangalleries.com.au>.

BG Bilboa Guggenheim—Construction details and costs.

<http://www.arch.ethz.ch/pmeyer/Infos/Pollalis/case_Guggenheim.pdf>

BP *Blueprint to Patterncraft*, paper by Nanette Carter.

Describes *Timber Pack*, *Blueprint* and *Plycraft* ventures.
Email: ncarter@swin.edu.au

BRG Paper from Beaufort Restoration Group, Melbourne.

This paper gives some background to the conditions under which Fred worked during the war.
<http://www.beaufortrestoration.com.au/Pages/RestorationChild/Stories/Story_PubDAP002.html>
By permission of Tony Clark, Secretary, Beaufort Restoration Group, Melbourne.
Email: tclark@melbpc.org.au

DA *Designing Australia: Readings in the history of design*, ed. by Michael Bogle (2002), Pluto Press.

Enlightening essays about design and society in the 20th century.

DD *Design this Day* by Walter Dorwin Teague (1947), Studio Publications.

Teague talks at length about the role of art/design in industry and refers to Sheldon Cheney's 1936 book *Art and the machine* (USA) and Herbert Read's 1935 book *Art and Industry* (UK) as sources giving the need for industry to think beyond cost and efficiency to concepts of form, appearance and quality—industrial design. Louis Sullivan's famous dictum of 'form following function' is discussed.

DIA Design Institute of Australia website, <<http://www.dia.org.au/>>

A detailed history of the formation of the Society of Designers for Industry, 1948.

The *Industrial Design Institute of Australia*, 1956 and the subsequent *Design Institute of Australia* has been written by Ronald Rosenfeldt, long-time colleague and friend of Fred Ward and Derek Wrigley.

Tel: 1300 888 056

Tel: +61 3 9662 2345 (intl)

Email: dmin@design.org.au

www.design.org.au

DHM Testing of the de Haviland Mosquito

<http://www.beaufortrestoration.com.au/Pages/RestorationChild/Stories/Story_PubDAPoo2.html>
This web available paper describes the unique testing during WW2 of the wooden wing structure of the de Haviland Mosquito, a significant event recognised by world authorities. Fred Ward may well have had some input into this procedure.

DTG *Der Treppen und Geländerbauer* by Fritz Kress (1949), Otto Maier Verlag. [IN GERMAN]

Technical handbook about the construction of wooden 'spiral' staircases.

EP *The Earthly Paradise of William Morris*, ed. by Claire Gibson (1999), Grange Books.

A kindred soul who proselytised about industrialisation and its resultant ugliness during the latter half of the 19th century in England. Many of his comments have relevance to today.

FD *Fundamentals of Design*.

A filmstrip and commentary by Derek F. Wrigley purchased by the NSW Department of Education for circulation to schools, c. 1969.

FL *Fred Lowen: Dunera Boy, Furniture Designer, Artist* by Fred Lowen (2000), Prendergast Publishing.

Personal reminiscences with fine descriptions of the formation and growth of FLER furniture manufacturers and the formation of TWEN and TESSA furniture.

FLO *Flourish* by Martin Seligman (2011), Heinemann.

A book on the nature of wellbeing and happiness that is very relevant in a really sustainable world.

FN *Fred's notes*.

Written about 1924 when batching with John Reed. Four pages giving some insights into life in Melbourne and his views on furniture.

FR *Fred's Report to the National Capital Development Commission*.

From his 1961 tour of Europe to visit design centres, libraries, museums and galleries to gather material for the NCDC. It is available in the National Library, Bib.ID 733509, UApamf143, Main Reading Room.

FTC *Fred's Furniture Type Chart*.

Fred's abbreviated nomenclature for every type of furniture in common use, Simple and easily understood, it was, I believe, conceived in his Myer years and he used it for the rest of his life for all his projects.

FW *Fred Ward: A selection of furniture and drawings* by Nancy Sever (1996), ANU Drill Hall Gallery, Canberra.

Booklet accompanying an exhibition of Ward's ANU furniture, curated by Derek F. Wrigley in 1996. Chapter on *Life before Canberra* by Judith O'Calloghan.

HG *The Heart Garden* by Janine Burke (2005), Vintage.

The story of John and Sunday Reed and 'Heide' in the early 20 century at Templestowe, just outside Melbourne.

HME *How much is Enough? Money and the Good Life* by Robert and Edward Skidelsky (2012), Other Press.**HSD *History of the Society of Designers for Industry* by Ronald Rosenfeldt, <www.dia.org.au>.**

One of Fred's early colleagues who played a significant role in the formation of the SDI, IDIA and the IDCA.

JG *History of the Jennings' Germans* by Alfons Stuetz (1986), self-published.

An account of the way in which 150 German, Austrian woodworkers and other housing trade migrants were attracted to Canberra by Sir Albert Jennings just after WW2 to fill a housing construction crisis.

JR *Letters of John Reed*, ed. by Barrett Reid and Nancy Underhill (2001), Viking.**LT *The Leafy Tree* by Sir Daryl Lindsay (1965), F.W. Cheshire.**

Autobiography with few references to Fred Ward, but an interesting description of life in Melbourne during Fred's time.

MC Melbourne Savage Club

Established in 1894, this is an important surviving bohemian club, whose members include many outstanding Australians. Artists Fred McCubbin, Tom Roberts and Arthur Streeton from the Heidelberg School were members, as well as political figures Sir Robert Menzies and Joseph Lyons. The club is of social and historical importance for its associations with the Yorick Club and the T-Square Club, both of which brought together members from various artistic professions. Since at least the 1930s the Savage Club clubhouse has been used as a venue for the T-Square Club—a dining club for artists and architects who met for lunch there about every two months. At times during its history almost all T-Square members were also Savages, so it was almost a club within a club.

<<http://www.onmydoorstep.com.au/heritage-listing/697/melbourne-savage-club>>

MP Mosquito photo.

Courtesy of Alan Perry and also helpful comment from Geoff. Follett, De Havilland Gazette, De Havilland Museum, UK.
Email: DHGazette@dehavillandmuseum.co.uk

NAW *Nature of Art and Workmanship* by David Pye (1968), Cambridge University.

An excellent book for those wishing to understand the aspects of risk and those of certainty. Also a very good analysis of the problems of high-gloss finishes to table tops (p. 51).

NC *The Nichols Collection in the National Library*, <<http://www.nla.gov.au/pub/nlanews/2007/may07/story-2.pdf>>.

A rich source of the Griffin's drawings collected over many years. For location of other heritage listed houses in the Glenard estate, see <<http://www.onmydoorstep.com.au/heritage-listing/31263/lippincott-house>>.

ND *The Nature of Design* by David Pye (1964), Studio Vista.

This book is recommended for an understanding of the complexities inherent in the design process.

NM *Letter from Norman Myer to all members of staff who served in the armed forces during WW2.*

Found in a search of the Myer Archives in the State Library of Victoria by the author, but could not be traced when needed.

Contact <GGerrand@slv.vic.gov.au>

OP *Overseas posts—draft report* by Fred Ward.

Recommends the need for action on the appropriate furnishing of overseas posts. In collection of author.

PD *Puss's Diary* by Elinor Ward.

Originally thought to be written in the 1950s and transcribed by Robin Ward at a later date, it is an unpublished document of 23 pages describing Fred and Puss' lives from 1900 to about 1955. Unfortunately, there are very few dates in the document, but it nevertheless gives a colourful account of activities not mentioned by other biographers. Email: martin.ward@netspeed.com.au

PG *The Pearly Griffin: The Story of the Old Griffin Centre* ed. by Liz Murphy and Sarah St Vincent Welch (2006), ACT Department of Disability, Housing and Community Services, Canberra.

A historical summary of the cultural clubs of Canberra, including how they survived the demolition of a group of separate cultural clubs at the Riverside huts in Barton, ACT. Representatives of the clubs prepared a report for the NCDC in the early 1960s under the chairmanship of Derek Wrigley which resulted in the NCDC offering what became the Griffin Centre in Bunda Street (now demolished). The various clubs eventually grew strong enough to survive on their own in separate locations around Canberra.

PML *A Pattern for modern life: Furniture patterns and packs in the post-war era*, paper by Nanette Carter.

This paper on the rise of *Patterncraft* by Fred Ward and *Australian Home Beautiful* provides more background descriptions than I could afford in this book. It complemented my own researches on the topic and served the purpose of correcting some of the misinformation I had previously relied on. See **RS** below and also **BP**, p. 255.

RS Roy Simmonds (d. 1951)

The very sympathetic editor of *Australian Home Beautiful*, who was the link between Fred (designer of *Patterncraft*) and Tam and Anne Purves (makers of the *Patterncraft* paper patterns and the subsequent *Timberpack* components).

SL *Savage Luxury: Modernist Designing in Melbourne in 1930–1939* by Nanette Carter (2007), Heide Museum of Modern Art, Melbourne.

Catalogue for exhibition held at the Heide Museum of Modern Art in Melbourne from 14 July to 4 November 2007, curated by Nanette Carter. It brought to public attention the emergence of architectural and design modernism, patronage, reception and its retailing within the context of economic, social and political forces in Australia during the 1930s.

<http://www.heide.com.au/exhibitions/savage_luxury?exhib=18>

TWC *Time without Clocks* by Joan Lindsay (1962), F.W. Cheshire.

In the book the author describes Ward (p. 11) as ‘...Freddie, a friend of my student days, a slim eager young man, foaming at the mouth with original ideas on every subject under the sun which later sorted themselves out when Frederick Ward became a vital force in Australian industrial design’.

UC *The Unknown Craftsman* by Sōetsu Yanagi (1972), Kodansha International.

An excellent description of the philosophy of Japanese folkcraftsmanship. Translated by Bernard Leach.

UH *University House: As they Experienced it: A History 1954–2004* by Jill Waterhouse (2004), ANU, Canberra.

Refers to arrival of the Wards in Canberra and has many reminiscences of the design, construction and early days of the postgraduate residence and its furnishing.

WAI *Who am I* by Richard Precht (2011), Scribe.

An analysis of the neurosciences. ‘Freud contended that about 90% of human decisions are unconsciously motivated.’

WM *William Morris and the Arts and Crafts Home* by Pamela Todd (2012), Thames and Hudson, London.

A good analysis of Morris and Co. showing their integration of architecture and interiors in the late 19th century. Excellent text and photos.

YSM *Your Store Myer* by Stella M. Barber (2008), Focus.

The story of Australia’s leading department store but has no reference to Fred Ward or to the Myer/Ward role in producing good Modernist furniture during the early 20th century.

Creative works by Fred Ward in Melbourne, Sydney and Canberra

* Illustrations appear in this book.

MELBOURNE

1920?	* Linocut, 'Hyacinths' [p. 29]
	* 'Hut in the trees'? [p. 29]
1920?	Linocut, 'Leon Gordon'
1926/1929	* Linocut, 'Pavlova' [p. 51]
1925–29	* Pastel, 'Pierrot' [p. 28]
1925–26	Worked under Jock Frater on stained glass designs at Yencken's Glass works, Melbourne.
1926	Contributed caricatures of theatre players to <i>Table Talk</i> , <i>Graphic</i> and other <i>Herald</i> papers.
1926–29	Worked for Charles Marshall, structural iron works on construction of metal lift enclosures, Windsor Hotel, Atheneum Club, and Melbourne Club. Fixing the finial to the steeple of St Paul's Cathedral, Melbourne.
1929	Employed full-time as caricaturist/cartoonist by <i>Herald and Weekly Times</i> .
1930	* Cartoon, 'T-Square Club members' [p. 52]
1929–30	Started designing and making furniture for new house in Eaglemont Estate.
	* Chest of drawers, dovetailed corners, sloping fronts to drawers [p. 46]
	* 'Leisure' rocking chair [p. 44]
1932+?	* 'Unit Range' armchair, Myer Emporium [p. 48]
1932+?	2 drawer cupboard. 'Heritage'?
1932+?	Single bed, solid wood frame
1932+?	2 drawer cupboard, painted doors
1930–49	* Sketches made at Myer Emporium. Tables, chairs, etc. [p. 30, p. 50]
1947+	* <i>Patterncraft</i> and <i>Blueprint</i> series of patterns for homemade furniture for returning service personnel, divan, coffee table, easy chairs with and without arms, stool, table lamp etc. [p. 72–3]
1947+	* Myer Heritage Range of furniture (no evidence available from Myer). [p. 76]
1946–47	* FLER DC 1 chair, turned seat, legs and rails. [p. 66]
1947–48?	Victorian Railway livery, carriage design, egg incubator, gas stove.
1947–50	* Teaching illustration for School of Architecture, University of Melbourne. [p. 74]

SYDNEY

1962–64	* Reserve Bank of Australia, Martin Place, Sydney. Furniture for all offices and ancillary rooms on all floors and some interiors. [pp. 172–6]
1963	P & O Building, Hunter St, Sydney. Chairman's suite and many functioning offices and ancillary rooms on all floors.

CANBERRA

1948–54?	* University House, Canberra, complete furnishing of all rooms and interiors. [pp. 99–112]
1952–53	* Canberra University College, Council Room tables and chairs. [p. 92]
1954–	* ANU Design Unit all furniture for all ANU buildings up to 1960. 1961–77 by Derek Wrigley and ANU Design Unit team with expanded brief. [pp. 121–134]
1956	Commonwealth Club, preliminary furniture while at ANU Staff Centre. Later in permanent building, Yarralumla.
1956	Goodwin Homes, Ainslie
1957–	* Australian Government gift of desk to Malaysian Government. [p. 94]
1958	Furnishing for all rooms in Wright College, University of New England, Armidale, NSW.
1959	* Australian Academy of Science, conference chamber seating, side tables, settees etc. Fellows Room and offices. [pp. 145–51]
1959?	IDCA office furniture. No records, but from ANU Design Unit stock designs, Qld walnut.
1961	Fred Ward now in private practice.
1962	Report on overseas galleries, libraries and museums to NCDC.
1962?	CCAЕ advice on establishment of similar Design Unit, Ward and Wrigley.
1964–68	* National Library of Australia, Canberra, furnishings on all floors, public rooms and offices. [pp. 179–90]
1966	Desk for Baron ‘Dick’ Casey from Padouk wood given by Gen. Wavell. Made by Kees Westra, Canberra (in possession of Martin Ward, Canberra).
1966	Government House, Port Moresby, miscellaneous items, chairs. * Reserve Bank of Australia, Sydney, Port Moresby, Darwin, Perth, Adelaide, Melbourne. [pp. 172–6]
1967	* Admiralty House, Sydney. Writing desks, chairs, dining table, beds, wardrobes etc., requested by Lady Casey. [p. 166] * Dining table, side tables, chairs for Government House, Canberra, requested by Lady Casey. [p. 168]
1971	Australian Industrial Development Corporation, furniture for chairman, Canberra.
1968+?	Sydney University Union, chairs, tables. Some chairs around Canberra bought Union sale c. 2000.
1968+?	Churchill House, Canberra, board room table, chairs. Miscellaneous furniture for private residences around Canberra.

I have managed to collect drawings and photographs on CDs of many of the above items for reference by others.

Derek Wrigley, <dwrigley@internode.on.net>, Tel: 02 6286 6134.

Public collections of Fred Ward drawings, sketches and furniture

ANU The Australian National University

Acton, Canberra

Selected display of Fred Ward furniture in the Drill Hall Gallery, Kingsley Street, Acton. Open to the public.

Furniture in use in the R.G. Menzies Building of the ANU Library foyer and McDonald room on the ground floor. Mixture of Ward and Wrigley furniture designs.

Maggie Shapley, Archivist,
tel: 02 6125 9602

Amy Guthrie, Heritage Sustainability Officer,
tel: 02 6125 8794

NGA National Gallery of Australia

Parkes, Canberra

Small collection of furniture from Admiralty House, Sydney

Misc. papers and linocuts.

Robert Bell, Senior Curator, NGA

NGV National Gallery of Victoria

St Kilda Road, Melbourne

Misc papers, linocuts. DC1 chair, Unit chair and a storage unit in store.

NLA National Library of Australia

Parkes, Canberra

Fred Ward furniture on display in all public reading rooms and some furniture in the Council Room and Director-General's office.

NCDC report 1961 (on call) by Fred Ward on Design centres, libraries and galleries overseas.

OPH Old Parliament House

(now Museum of Australian Democracy)

Parkes, Canberra

Visitors chairs in Prime Minister's suite and in store (originally designed for the Reserve Bank of Australia, Sydney).

PHM Powerhouse Museum

Ultimo, Sydney

Mainly drawings from various sources and misc. papers, Bermagui sketch.

RMIT Royal Melbourne Institute of Technology

Swanston Street, Melbourne

Collection of early magazines with articles on Fred Ward etc. held by Professor Harriet Edquist, Professor of Architectural History and Director of RMIT Design Archives, tel: 03 9925 9979

SLV State Library of Victoria

Swanston Street, Melbourne

Nothing about Fred Ward except T Square Club cartoon.

Greg Gerrand, Myer Archives, tel: 03 8664 7480

Many other Fred Ward designs are scattered around private collections or in government buildings, mainly in Canberra, which are not generally available to the visiting public. For further guidance from the author, tel: 02 6286 6134.

Skilled wood craft makers who turned Fred’s designs into reality

A number of local craft makers provided the high level of skill for many of Fred Ward’s projects in the Canberra region. My apologies to any I may have forgotten or whom are unknown to me. *Derek Wrigley*

[IN ALPHABETICAL SURNAME ORDER
AND ESTABLISHED IN THE CANBERRA REGION]

Karl Cloos
Konrad Dimpel
Heinz Frank
Kurt Kloska
Oswald Paseka
Hans Pillig
Klaus Scharrer
Alfons Stuetz
Tony Suban
Con Tobler
Klaus Tschorn
Kees Westra

The Chief Minister of the ACT Katy Gallagher MLA, represented by her Minister for Education Dr Chris Bourke MLA, awarded Certificates of Appreciation to these local craft makers at the launch of this book on 1 June 2013 as records of their significant contributions to the development of Canberra during the second half of the 20th century.

In hindsight:

Due to their love of wood and the very high degree of skill, these woodworkers were able to consistently contribute to the development of the many buildings in the ANU—and beyond. But for them, the designs of Fred Ward and his colleagues in the ANU Design Unit could not have been realised.

It should be stated for the record that probably 90 per cent of the above list would have been post-WW2 migrants, as indeed were most of the designers in the ANU Design Unit. They all played a significant role in the quality development of Canberra. Refer to section 23, *Designing and making*, p. 209.

But for the lack of vision of the ACT Apprenticeship Board in the early 1960s, the skills of most of the highly trained European craftsmen could have been passed on to Australian apprentices. That opportunity has now been all but lost.

It is to the credit of the ANU that it took up the slack in 1982 by establishing the Furniture Workshop within the ANU School of Art. Under the guidance of George Ingham and Dr Rodney Hayward it has now trained a few designer/makers who have subsequently established their own commercial workshops in the Canberra region. The current incumbent since 2012 is Ashley Eriksmoen.

The now well-established association between Canberra and fine furniture that Fred Ward helped to start in 1952 is set to continue.

Other organisations and individuals who have helped along the way

I am most grateful for the various kinds of assistance from many sources.

The then Vice-Chancellor of the Australian National University, Professor Ian Chubb AC generously provided a grant which enabled me to start my research.

The Sidney Myer Fund in Melbourne quickly responded to my need for financial support in travelling around Sydney, Canberra and Melbourne with my son Ben to capture most of the visual evidence.

[IN ALPHABETICAL SURNAME ORDER]

Sonya Abbey, Fine Art Adviser,
The Australiana Fund, Sydney

Sharon Abrahams, Publications Manager,
Australian Academy of Science, Canberra

Natalie Adams, Senior Archivist, Churchill Archives
Centre, Churchill College, Cambridge, UK

Avi Amesbury, Communications Manager,
ACT Craft and Design Centre, Canberra

Marie-Louise Ayres, Director, Manuscripts,
National Library of Australia, Canberra

Jaynie Anderson, Professor of Fine Arts,
University of Melbourne

Grant Beaumont, Commonwealth Aircraft
Corporation, Fishermans Bend, Melbourne

Robert Bell, Senior Curator, National Gallery of
Australia, Canberra

Gilles Bernardoff, antique collector, Braidwood

Margaret Betteridge, Furniture conservator

Caroline Boehme, President, Australian Decorative
and Fine Arts Society, Melbourne

Andy Botto, Government House, Canberra

HE Michael Bryce AM AE, formerly Past President,
Design Institute of Australia, Canberra (pro-tem
Government House Canberra and Brisbane)

Ann Byrne, Composites Australia, Melbourne

Hilary Cadman, Editor

Louise Caine, *Currency* Editor,
Reserve Bank of Australia, Sydney

Tony Carey, Operations Manager,
University House, ANU

Nanette Carter, Lecturer, Design, Society and Culture,
Swinburne University of Technology, Melbourne

Ian Chubb AC, Chief Scientist, (prev. Vice-Chancellor,
Australian National University), Canberra

Lee Christofis, Curator of Dance,
National Library of Australia, Canberra

Tony Clark, Secretary,
Beaufort Restoration Group, Melbourne

Freya Clawley, Archivist, Museum of Australian
Democracy, Old Parliament House, Canberra

Humphrey Clegg, Curator,
National Gallery of Victoria, Melbourne

- James Collet**, former ANU Heritage Officer, left position 2012. Since succeeded by Amy Guthrie.
- Caroline Cooper-Sande**, Executive Assistant to the Governor-General, Canberra
- Gillian Cosgrove**, graphic designer, Canberra
- Robert Crompton**, physicist, ANU
- Dianne Dahlitz**, Development Office, National Library of Australia, Canberra
- Louise Davidson**, (formerly) National Library of Australia, Canberra
- Paul Donnelly**, Curator of Contemporary Furniture Power, House Museum, Sydney
- Philip Dulhunty**, The Catalina Flying Memorial Ltd, Macquarie Park, NSW
- Harriet Edquist**, Professor of Architectural History, Royal Melbourne Institute of Technology, Melbourne
- Lance Fellows**, collector of Fred Ward furniture, Canberra
- Geoff Follett**, de Havilland Gazette, de Havilland Museum, UK
- Jan Fullerton**, (then) Director-General, National Library of Australia, Canberra
- Susanna Fergusson**, Neville Keating Pictures, London, UK
- Geoff Fitzpatrick**, Director-National Strategy, Design Institute of Australia, Melbourne
- Martin Gascoigne**, and Mary Eagle, collectors of Ward furniture (from Ben and Rosalie Gascoigne), Forrest, Canberra
- Greg Gerrand**, Archivist, State Library of Victoria, Melbourne
- William (Bill) Hamilton**, Previously ANU Bursar, Canberra
- Rodney Hayward**, retired Head, Furniture Workshop, ANU School of Art, Canberra
- Iwona Hetherington**, Rights and Permissions Officer, Powerhouse Museum, Sydney
- Juliana Hooper**, ADFSA
- Sally Hopman**, National Library of Australia, Canberra
- Ian Jenkin**, Secretary, Victorian Railways Historical Society, Melbourne
- Caroline Jenkins**, Secretary, Australian Decorative and Fine Arts Society, Melbourne
- Alison Joseph**, collector, Ward furniture
- Shirley Kral**, critic extraordinaire, Pearce, ACT
- Amy Kerr**, Communications and Program Manager, Craft ACT, Canberra
- Valerie Kirk**, Head, Textile Workshop, ANU School of Art
- Terence Lane**, formerly Curator, National Gallery of Victoria, Melbourne
- Sarah Lethbridge**, Manager, Noel Butlin Archives, R.G. Menzies Building, ANU, Canberra
- Brendan Lepschi**, Furniture dealer, Canberra
- Graham Lewis**, Secretary, GAFFERS, (former Government Aircraft Factory employees), Melbourne
- Sally Lindsay**, Sidney Myer's granddaughter, Melbourne
- Phil Lomas**, Reserve Bank of Australia, Sydney
- Ted Matchett**, West of England Engineering Employers Association, Bristol
- Marion Mapham**, Bruce Hall, ANU, Canberra
- Mark McConnell**, formerly Manager, Household Operations, Government House, Canberra
- Barbara McConchie**, Business Manager, ANU School of Art, Canberra
- Virginia MacDonald**, Senior Archivist, Reserve Bank of Australia, Sydney
- Tempe McGowan**, landscape architect, Sydney
- John McPhee**, formerly Senior Curator, National Gallery of Australia, Canberra
- Keith Meggs**, Pres. Aviation Historical Society of Australia, Melbourne
- Jill Miller**, Editor, Canberra
- Debra Morgan**, Sidney Myer Fund, Melbourne
- Nick Nicholson**, Rights and Permissions Officer, National Gallery of Australia, Canberra
- Jeff Newman**, former Director, IDCA Design Centre, Victoria
- Lynne North**, Boffins Manager, University House, ANU
- Renata Osborne**, Manager, R.G. Menzies Library, ANU, Canberra

- Ruth Parker**, furniture dealer, Canberra
- Penny Pemberton**, ANU Archives, Canberra
- Colin Plowman**, Registrar, CUC and also Assistant Vice-Chancellor, ANU, Canberra
- Caroline Purves**, Director Archives, Australian Galleries, Melbourne
- John Richards**, Master, University House, ANU, Canberra
- Alan Roberts**, author, Australian Academy of Science book, Canberra
- Pen Roberts**, PhD student (eclarté), Canberra
- David Robertson**, President, Design Institute of Australia, Melbourne
- Ernest Rodeck**, formerly Director, FLER, Melbourne
- Beryl Rosenfeldt**, wife of the late Ronald Rosenfeldt, Melbourne
- Peter Rosenfeldt**, son of the late Ronald Rosenfeldt, Melbourne
- Philippa Rossiter**, Reference Librarian, Powerhouse Museum, Sydney
- Anne Rowland**, Registrar, Art Gallery of Ballarat, NSW
- Nancy Sever**, Director, ANU Art Collection, Canberra
- Andrew Schapiro**, Fine art auctioneer, Sydney
- Maggie Shapley**, University Archivist, ANU, Canberra
- Eileen Scollay**, (late), wife of first ANU Architect John Scollay, Bermagui
- Moira Scollay**, daughter of John and Eileen Scollay, Bermagui
- Kate Shelmerdine**, Myer family member, Melbourne
- Jenifer Simmonds**, daughter of Roy Simmonds, Australian Home Beautiful, Art Publishing, Castlemaine, Victoria
- John Sinclair**, Scottish National Trust, Scotland
- Robin Stanton**, Deputy Vice-Chancellor, ANU, Canberra
- Colin Steele**, retired ANU Librarian, advisor
- Alfons Stuetz**, Canberra Furniture Manufacturers, Canberra
- David Terry**, formerly Director, Industrial Design Council of Australia, Melbourne
- Jeff Newman**, Director, Victorian Design Centre, Melbourne
- Martin Ward**, son of Fred and Puss Ward, Canberra
- Robin Ward**, daughter in law of Fred and Puss Ward, Canberra
- Jill Waterhouse**, author, Canberra
- Tim Wilmot**, Secretary, The Furniture History Society, Melbourne
- Tom Worthington**, author, eBook specialist
- Ben Wrigley**, Photohub, architectural photographer
- David Yencken**, architect, related to Yencken Glass, Melbourne
- Helen Yoxall**, Archives Manager, Powerhouse Museum, Sydney (Ret.)

Members of the ANU Design Unit, 1954–c. 1980

The ANU Design Unit was fortunate to attract some first class designers of various kinds to its ranks at various times.

Scorgie Anderson

A furniture designer who worked with Fred at Myer before WW2

Charles Bastable

A High Wycombe trained furniture designer from the UK

George Chalmers

Administrative assistant

Stephen Cole

Graphic designer

Kathy Davies

Furniture draftswoman

Margaret O'Donoghoe

Architecture/furniture student in the early days

Gerald Easden

A UK-trained furniture designer from Melbourne

Singe Lange

Furniture draftsman from Sri Lanka

Jack Low

Furniture maker and draftsman

Roger Mann

Landscape architect

Marie Penhaligon

Secretary to ANU Design Unit

Hans Pillig

Furniture designer/cabinet maker from Munich

John Reid

Graphic designer

Arthur Robinson

Furniture designer

John Stevens

Landscape architect

Margaret Sublet

Furniture student

Pertti Tukkiainen

Finnish landscape architect

David Walker

Graphic designer and silversmith

Fred Ward

Furniture designer, University Designer 1954–1961

Derek Wrigley

Architect, industrial designer, graphic designer
University Architect/Designer 1957–1977

Adrian Young

Graphic designer

...plus a few others whose full names escape me, such as the ANU Design Unit secretaries, Marjorie and Pat.

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The passage of time, copyright laws, unknown owners and unobtainable visuals can make an author's task very difficult in some instances, so please accept my apologies if I have unwittingly gone beyond that line in the sand. I hope that the greater educational good is achieved by showing what little visual evidence I have been able to find. Should there be any person who feels treated unfairly in this way please let me know and I will correct any omission in the best way I can—hopefully in future editions.

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FRONT COVER, 2A Three chairs: refer to permissions for images **7B, 9E, 20R**. Working drawing of chair CA 10 chair: refer to permissions for image **14C**.

MELBOURNE YEARS TITLE PAGE Courtesy Caroline Purves.s

4A Courtesy Australian National University Archives, Canberra.

4B Courtesy National Library of Australia, Canberra.

4C *Hyacinths* linocut, 9/15, 18 × 11.5 cm. Gift of Edward and Maree Heffernan, 1982. Courtesy Art Gallery of Ballarat, Victoria.

4D *The hut in the trees* linocut, 9/20, 14.5 × 13.8 cm, undated but probably late 1920s. Courtesy National Gallery of Australia and Martin Ward, Trustee of the Estate of Fred Ward.

4E *Against the light* linocut, 8/20, 18.0 × 14.1 cm, undated but probably late 1920s. Courtesy National Gallery of Australia and Martin Ward, Trustee of the Estate of Fred Ward.

4F, G Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.

4H Photo: Martin Ward

6A Chart: Derek F. Wrigley & Gillian Cosgrove

6B Photo: Derek F. Wrigley

6C Photo: Nick Carson

6D–F Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.

The author acknowledges the kind assistance and permission provided by ANU for photographs to be taken on ANU premises.

Photographs of Fred Ward furniture in the National Library of Australia were taken with the kind permission of the former Director-General, Ms Jan Fullerton.

Martin and Robin Ward offered generous assistance in allowing photographs to be taken of items in their collection.

7A Courtesy Susanna Fergusson/Neville Keating, London on behalf of the Sam Atyeo Estate. By permission of the National Gallery of Australia.

7B Photo: Ben Wrigley, Photohub. Courtesy Martin & Robin Ward.

7C, D Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.

7E *Pavlova* linocut, hand coloured, 6/20, 19.0 × 16.6 cm. Courtesy Art Gallery of Ballarat, Victoria, purchased 1982.

7F Photo: Ben Wrigley, Photohub. Courtesy Martin & Robin Ward.

7G Courtesy State Library of Victoria, Melbourne.

7H Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.

7I, 8A Courtesy Peter Rosenfeldt by permission of the estate of Ronald Rosenfeldt.

8B Courtesy F. Dicken Pty Ltd 1946, contractor to De Havillands.

8C Courtesy Alan Perry.

9A–C Courtesy Caroline Purves.

9D Photo: Ben Wrigley, Photohub. By permission of Nanette Carter.

9E Courtesy National Gallery of Victoria. Image restored by Ben Wrigley.

9F, H, I Collection of the Australian Gallery Archives, courtesy Caroline Purves.

9J, K, L, M, N, R, S Photos: Ben Wrigley, Photohub. By permission of Martin & Robin Ward.

9G, O, P, Q Photo: Ben Wrigley, Photohub. Collection of and courtesy Peter and Anna Rosenfeldt.

10A Courtesy Martin & Robin Ward.

CANBERRA YEARS TITLE PAGE Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.

11A–F Photo: Ben Wrigley, Photohub. Courtesy Australian National University.

11G Courtesy of National Archives of Australia, Canberra.

11H Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection. Gifted by Martin Ward.

11I Diagram by Derek F. Wrigley, redrawn by Gillian Cosgrove.

12A Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.

12B Photo: Ben Wrigley, Photohub. Courtesy Australian National University. Architect: Professor Brian Lewis, Furniture and interior: Fred Ward.

12C–E Photos: Ben Wrigley, Photohub. Courtesy Australian National University. Manufacturer: Canberra Furniture Manufacturers Pty Ltd.

12F Photo: Ben Wrigley, Photohub. Courtesy Australian National University. By permission of Trustee of the estate of Ron Rosenfeldt.

12G Photo: Ben Wrigley, Photohub. Courtesy Australian National University. Architect: Professor Brian Lewis, Interior Design Consultant: Fred Ward.

12H Photo: Ben Wrigley, Photohub. Courtesy University House, Australian National University.

- 12i** Courtesy Australian National University Archives.
- 12j,k** Photo: Ben Wrigley, Photohub. Courtesy University House, Australian National University.
- 13a** By permission of Leonard French and the Australian National University. Photographer unknown.
- 13b** Photo: Belinda Pratten. By permission of Ken Unsworth and the Australian National University.
- 14a** Courtesy Australian National University Archives.
- 14b** Photo: Ben Wrigley, Photohub. Courtesy Australian National University.
- 14c** Courtesy Australian National University Faculties and Services.
- 14d** Photo: Ben Wrigley, Photohub. Courtesy Australian National University.
- 14e** Courtesy Australian National University Archives.
- 14f** Photo: Bob Cooper. Courtesy Australian National University Archives.
- 14g** Courtesy Australian National University Archives. Photographer unknown.
- 15a,b** Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.
- 15c** Photo: Ben Wrigley, Photohub. Courtesy Derek F. Wrigley, private collection.
- 15d** Photo: Ben Wrigley, Photohub. By permission of Martin & Robin Ward. Design: Stuart Devlin.
- 16a,b,c** Photo: Ben Wrigley, Photohub. Courtesy Australian Academy of Science.
- 16d** Photo: Ben Wrigley, Photohub. Courtesy Australian Academy of Science. Conference Seating Designers: Derek F. Wrigley & Fred Ward. Manufacturer: Ricketts & Thorpe, Sydney.
- 16e** Photo: Ben Wrigley, Photohub. Courtesy Australian Academy of Science.
- 16f** Photo: Ben Wrigley, Photohub. Courtesy Australian Academy of Science. Settee designer: Derek F. Wrigley, ANU Design Unit, Manufacturer: Ricketts & Thorpe, Sydney.
- 16g,h,i** Photo: Ben Wrigley, Photohub. Courtesy Australian Academy of Science.
- 17a** Logo designer: Derek F. Wrigley. Courtesy Derek F. Wrigley.
- 18a** Photo: Ben Wrigley, Photohub. By permission of Martin & Robin Ward.
- 18b,c** Photo: Ben Wrigley, Photohub. By permission of Admiralty House, Kirribilli, Sydney.
- 18d,e** Photo: Ben Wrigley, Photohub. By permission of the Office of Official Government Residences. Manufacturer: Kees Westra, Canberra.
- 19a-n** Photos: Ben Wrigley, Photohub. By permission of Virginia McDonald.
- 20a,b,d-u** Photos: Ben Wrigley, Photohub. By permission of the former Director-General of the National Library of Australia, Ms Jan Fullerton.
- 20c** Courtesy Powerhouse Museum, Ultimo. Fred Ward Archive Collection.
- 21a** Sourced online from <http://commons.wikimedia.org/wiki/File:Rietveld_chair_1b.jpg>. Photo: User:Ellywa, with permission of the owner of the chair. Permission under the GNU Free Documentation License.
- 21b** Photo from a commercial postcard (now lost) obtained at the Hill House, Helensburg, near Glasgow 1965. Photographer unknown. By permission of the National Trust of Scotland.
- 21c** Photo: Ben Wrigley, Photohub. Courtesy Derek F. Wrigley, private collection.
- 21d** Photo: Ben Wrigley, Photohub. Courtesy Martin & Robin Ward.
- 21e** By permission of STUA, Astigarraga, Spain. Photographer unknown. Designer: Jesus Gasca, <www.stua.com>.
- 23a** Photo: Derek F. Wrigley. Permission has been sought from the publishers, but has not been received so far. Cover of book, published in 1949.
- 23b** Diagram by Derek F. Wrigley, redrawn by Gillian Cosgrove.
- 23c-e** Photos: Ben Wrigley, Photohub. Courtesy Australian National University.
- 24a** Courtesy Hille Educational Products Ltd, Ebbw Vale, Gwent, Wales, <www.hille.co.uk>, photographer unknown.
- 25a,b** By permission of Thonet Australia Pty Ltd, photographer unknown.
- 25c** By permission of Thonet Australia Pty Ltd, reproduced from *The Roots of Modern Design: Functional Tradition in the 19th Century* by Herwin Schaefer (1970), Studio Vista, London, p. 152, (courtesy Gebr. Thonet, Vienna).
- p.255** Photo of Puss (Elinor) Ward: Derek F. Wrigley, c. 1980.
- BACK COVER** Photo of Fred Ward: Ben Wrigley, taken from an existing photo held by Martin Ward, by permission of Martin & Robin Ward. Photo of Derek F. Wrigley: Ben Wrigley, Photohub.

‘Puss’ Ward—author of *Puss’s Diary*



Puss was Fred Ward’s partner from 1925 to 1989. They were married at St John’s Church, Toorak. Her maiden name was Elinor Roper Martin, her surname being handed down to their only child Martin in 1938.

Puss and Fred were described as ‘a lively couple’ in Janine Burke’s book *The Heart Garden*, the story of Heide, the home and now famous art gallery at Templestowe, near Melbourne, started by Sunday and John Reed in the 1920s.

Puss’s unusual nickname seemingly arose from her very early days when she curled up on the hearth rug in front of the fire, pretending to be a pussy-cat—somehow, the name followed her for the rest of her life.

She was enthusiastic about Fred’s philosophy throughout his career, following him through the trying times of the Depression around 1930—described in her unpublished diary—and writing articles about home design and furnishing in the *Australian Home Beautiful*, *Vogue* and other periodicals of the 1920s and 1930s, right up to the 1960s.

Her diary is quite descriptive about their exploits in the days of the Depression, particularly those she and Fred spent with Bill, her brother, on a soldier settlement block in the bush at Anuello, western Victoria. Lack of money at that time caused Fred to experiment with making his first furniture designs for their home at Eaglemont, a now famous suburb north east of Melbourne designed by Walter Burley Griffin.

Puss goes on to describe how Fred's enthusiasm for simple, graceful furniture secured his inaugural position with the Myer Emporium; his later experiences during WW2 in the production of the timber framed Mosquito fighter-bombers at Fishermans Bend in Melbourne.

Her Diary opens a small window into both their creative lives in the Modernist period as it revealed itself in Australia, well describing a 'lively couple'.

Fred and Puss became firm friends to my family and design was our common bond for 33 years. We were frequent visitors until their deaths around 1989–90.

Maxine and I have maintained our friendship with their son Martin and his wife Robin as very near neighbours in Mawson—a bit of serendipity which played a significant role in the writing of this book.

Interested readers wishing to read Puss's Diary are invited to contact Martin and Robin Ward:

Email: <martin.ward@netspeed.com.au>

Tel: 02 6286 2956

A last word
by William Morris

I began printing books with the hope of producing some which would have a definite claim to beauty, while at the same time would be easy to read and should not dazzle the eye, or trouble the intellect of the reader by eccentricity of forming the letters.

And it was the essence of my undertaking to produce books which it would be a pleasure to look upon as pieces of printing and arrangements of type.

**A NOTE BY WILLIAM MORRIS
ON HIS AIMS IN FOUNDING
THE KELMSCOTT PRESS**

The question of redundancy

See p. 201. | A comment on the question of redundant components in Fred's work, raised in section 21, *Fred's design philosophy*.

Please return to p. 190, which shows three wooden chairs^{20R,S,T} with a common framing pattern used in the National Library of Australia.

Chair 20R with a slatted backrest has no spreader rail between the two back posts just *below* the back of the seat (see also 20G and 20N). But chairs 20S and 20T have such a rail. A careful look at 20K will show that the chair already has two cross rails, at the top of the back and at seat level, and should therefore be structurally adequate. The lower rail below the back of the seat can thus be regarded as *structurally* redundant. However, Fred might have felt that when viewed as in 20K, it helps to visually balance the front spreader rail.

What do you think?