# BLUEPRINT TO PATTERNCRAFT: DIY FURNITURE PATTERNS AND PACKS IN POSTWAR AUSTRALIA

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#### **ABSTRACT**

In the period of reconstruction following World War II, designer Frederick Ward was concerned about the lack of affordable modern furniture for working and lower middle class Australians with which to furnish their small suburban houses and apartments. Limited investment capital, shortages of materials and of labour, had impacted on Australia's early post-war production of consumer goods, and high tariffs made imports expensive. Ward's experience in designing moderately priced furniture in the 1930s and in managing the construction of aircraft by an inexperienced workforce during the war, led to the idea of a range of paper patterns. Available by mail order through Australian Home Beautiful from 1947, Patterncraft furniture could be made with basic skills, using common materials and a limited set of tools.

Ward developed a subsequent innovation of furniture kits called Timber-pack, comprising pre-

cut pieces ready to glue and assemble, further stimulating the widespread enthusiasm for DIY furniture construction among people with limited skills or without access to timber. The Patterncraft system and furniture packs helped Australians furnish their modest homes with objects they had made themselves, avoiding debt, and constituting a unique effort by a designer at responding to social need while gaining a modest economic benefit.

# MAIN TEXT Introduction

This paper explores an historical instance of design activism that fits Ann Thorpe's four criteria for activist design. It framed a challenging issue, made a contentious claim for change, worked on behalf of a large but neglected group and was unorthodox in its approach (Thorpe 2000). As Thorpe argues, activism more generally, is effective only as part of a broader movement or campaign. Patterncraft and Blueprint paper

patterns, and Timber-packs facilitated DIY activity—a broad movement that emerged in response to changing social values and extreme post-war shortages. Furthermore, as Margolin has explained '...human beings depend on products in order to live their lives, or...to transform their consciousness into projects,' and Frederick Ward's designs for patterns and packs were both product and project (Margolin 2003).

Patterncraft patterns were first advertised in the nationally circulated Australian Home Beautiful magazine in 1947. Furniture designs and instructions to make them had been readily available for the cover price in Australian magazines since the inter-war period, but they were usually traditional in style and tended to require a much higher level of skill. Patterncraft patterns appear to have sold well until 1951 when they were replaced by a new range called Blueprint, also designed by Ward, that were sold for a further two years. While these pattern 'services' lasted only as long as the post-war shortages, the early success of Patterncraft led to Timber-pack, a separate brand of packaged, precut wood components in Patterncraft designs, to be assembled and glued together, also available through mail order. Timber-pack appeared in 1948, and lasted beyond the shortages, until the early 1960s. It was a whole new category of commodity in the Australian context, combining elements of craft kit, and a set of affordable, modern furniture that was sold nationally, and copied by numerous companies throughout the country from the mid 1950s.



Fig 1. The launch of Patterncraft in October 1947

Frederick Ward's conception and work in designing and bringing Patterncraft to market constitutes design activism defined as; 'design thinking, imagination and practice applied knowingly or unknowingly to create a counternarrative aimed at generating and balancing positive social, institutional and/or environmental change' (Thorpe 2008). His designs improved people's daily lives by helping them to obtain the furniture they needed. Furthermore, as a low-cost solution, Ward's designs proposed the counternarrative of a DIY future, leading to greater financial autonomy and social mobility through lower levels of indebtedness for an unprecedented proportion of working and lowermiddle class Australians who bought and built homes in the post-war period.

Patterncraft, Blueprint and Timber-pack have so far been excluded from the canon of Australian modernist design and its history, since although they were the work of a well-known designer, pioneering modernist Frederick Ward, their form—a set of patterns or kits for DIY construction meant that they didn't fit existing categories of study, such as furniture. Also the designs addressed popular taste, with Patterncraft in particular, with its American Arts and Craftsinflected style, a homely modernism, rather than exemplifying an innovative avant-garde aesthetic. While the patterns resulted in furniture that might have been collected and studied, its amateur and mostly anonymous construction and provenance means that it hasn't fitted with traditions of connoisseurship. Moreover, lack of interest in Patterncraft, Blueprint and Timber-pack reflects the way design often falls between the collections of decorative arts, and science and technology museums. No Australian museum has collected these patterns, packs or finished pieces, although the Powerhouse Museum in Sydney has collected furniture packs of another brand.

## The Context for Patterncraft

Whereas extended family households were common during the inter-war period in Australia, a generational change in values, the large pool of wartime savings, and expectations of full employment, meant that most young couples planned to buy or build a home of their own in the post-war period. But even as reconstruction planning began, a federal government report estimated there would be a nationwide housing shortage of over 300,000 homes at the war's end (Dingle 2000). Australia's population was also rapidly increasing as the result of a baby boom

and a mass immigration program, beginning in 1947, which saw the arrival of over 200,000 immigrants from Europe by 1950 and over one million by 1960. A significant number of Australians chose a DIY solution, building their own homes in the late 1940s. This phenomenon escalated in the 1950s and reached a peak of forty per cent in 1954 (Holland 1988). These houses were small compared to houses of the inter-war period, since state governments instituted uniform maximum house size to facilitate the maximum number of dwellings for the minimum amount of materials and labour.

Even if young couples had managed to buy or rent a home, they soon became aware of the lack of affordable modern furniture. Shortages of materials, of labour, and investment capital, meant Australian industry's conversion from wartime manufacturing to the production of even basic consumer goods was slow, and high federal government tariffs kept imports expensive. Many young couples were deterred by the expensive tradition of buying matching furniture suites for specific rooms that required them to outlay a substantial sum or acquire a debt through a hire purchase agreement. Ward's Patterncraft addressed the failures of manufacturers, retailers and the economy, to provide matching furniture that responded to the contemporary taste of young homemakers at a moderate cost. His intentions were based on his utopian modernist faith in the instrumentality of 'good design' to improve the lives of ordinary people, and a particular concern for the generation who had

served in the war. As Thorpe argues, activism may 'frame a better alternative—it may be generative' (Thorpe 2000). His work also fits Alastair Fuad-Luke's description of design as having 'the ability to catalyse societal transformations. Design is critical imagining' (Fuad-Luke 2009).

#### Frederick Ward: designer

Frederick Ward was Australia's leading designer of modernist furniture prior to World War II. He had trained as an artist and worked as a cartoonist and illustrator but was fascinated by mechanisms and enjoyed making things (Carter 2007). He began designing and making furniture for his own use, which he then sold to friends and before long, to a large retailer, the Myer Emporium. Ward sought training by attending technical drawing classes, displayed his furniture in exhibitions held by the Victorian Arts and Crafts Society and opened an eponymous shop, gallery and interior design consultancy in 1932. iv

By 1934 Ward was employed full time, supervising a fine furniture workshop producing his sober Depression-era 'Unit Range' for Myer. Made in cost-effective Australian native timbers, pieces or 'units' could be purchased one by one, as finances allowed—appealing to the section of the thrifty middle class who had some disposable income at the end of the Depression.

Advertisements presented the Unit Range as modern through its flexibility: it was suitable for use in different rooms and for apartment life since it wasn't bulky. Also the woman of the house, or a neighbourhood seamstress could replace its soft

covers, changing interiors cheaply and fashionably with the seasons.

With the entry of Japan into World War II in December 1941 Ward, like many Australians, registered for military service in early 1942. But he was assessed as unfit and as serving in a reserved occupation. vi Ward was directed to work in the Department of Aircraft Production where his manufacturing and management experience was used in the production of timber-framed Mosquito aircraft. Later he took charge of the (blueprint) plans and drawings for the Beaufort Beaufighters and instituted the 'stream of modifications sent out from Britain' (Ward nd.). Ward established 'a unit to handle the clarification of all drawings and manufacturing data ordered from industry' through the Department of Aircraft Production. He designed a shadow board for the Beaufort, enabling semi-skilled labourers, including women who were new to factory work, to assemble it more quickly and effectively. vii

At the war's end in 1945, Ward wrote a letter to the editor of the Melbourne *Herald*, which partly explains his motivation in developing Patterncraft. He argues that the federal government, manufacturers and retailers need to collaborate in using design to create products for the domestic market that will stand up to international competition in the post war period. He explains that Australia's economic development depends on the education of both a young generation of industrial designers and the public as consumers. In the short term Ward recommends that 'we must improve with what is

now available', failing to give clear guidelines of what he has in mind or how it should be undertaken. But Patterncraft fits Ward's prescription, it was a pragmatic improvement on what was available in terms of furniture aimed at the mass market of working and lower middle class consumers, a new low cost alternative to the mostly traditional, relatively expensive products of the furniture industry. <sup>ix</sup> It would also provide an accessible introduction to a casual, homely modernism.



**Fig 2.** One of two pages in *Australian Home Beautiful* showing Patterncraft furniture types.

# Patterncraft: A design, a service and a brand

On his demobilisation Ward became a consultant for Australian manufacturers who had supported the war effort that were now turning their equipment and personnel to peacetime production. He worked on a range of projects, including a successful design for an egg-incubator

called the Empress, before returning to Myer and furniture production aimed at the affluent middle class market. It was at this time he came up with the idea for Patterncraft. According to Fred's wife Elinor, his motivation was as humanitarian as it was entrepreneurial.

Fred wanted of course to do something to help returning soldiers, some of them missing a leg, or otherwise damaged. Their money was first spent on a spree and then on buying a house — not much left to furnish it and start again ... he had the idea of designing some basic pieces of furniture so simple that any man could make them with the few tools in every house, a hammer, a chisel, a saw, a hand lathe, even a tape measure. But how to get directions to the men was the question. The answer was at hand. The Herald already had a service of patterns for making home frocks and such things. Patterns could be cut to fit the parts of timber used to make a table, a stool, a chair and soon even a drawer or a bed.

Tam Purvis (sic) and his wife who ran the paper pattern service already were enthusiastic. At once they joined up and Patterncraft was born. Fred designed the furniture, making the first pieces himself. The Purvis pair cut the paper patterns to fit the timber. The Herald ran the patterns and sold them with plenty of ads also in Home Beautiful where I wrote the articles showing how to furnish a room for an incredibly small amount of cash; every piece and upholstery material documented. The patterns sold like hot cakes. Fred got a royalty of two shillings and sixpence on each and over the years it came to a tidy sum (Ward nd.).

Ward's wartime experience in training and developing systems for unskilled and semi-skilled workers in manufacturing had given him a unique insight into designing for DIY production by his future clients. His understanding of popular taste,

and of the increasing post-war enthusiasm for modernist design, was also important in the development of the new product.

Patterncraft was heavily promoted in the October 1947 issue of *Australian Home Beautiful*, firstly on the cover and then in a two page article titled 'Elinor Ward Suggests: Lounge Furniture for the Times'. A half page illustration shows two men and two fashionably dressed women in a living room furnished with three identical armchairs, a divan, a stool and a magazine table from the new Patterncraft range. The introduction makes clear that Patterncraft addresses shortages and budgetary considerations.

If you have been hamstrung in your furnishing by production shortages; if you are a person who hates waiting for something to happen; or if you are champing at the bit to get that house of yours looking decent; take a look at the drawing of the room which laughs at such troubles, Home Beautiful Patterncraft furniture designs have been used in this economical and practical room for the times (Ward 1947).

Initially the patterns were branded as 'Home Beautiful Patterncraft', either a sign of the editor's concern about whether this new product will be taken up by readers, or alternatively, a confidence that readers' loyalty to the magazine would flow on to this new product as an extension of its brand.

A full-page photograph showing a young woman glancing through a magazine in a room filled to capacity with Patterncraft furniture, and a double page spread showing the designs followed Elinor Ward's article. The text notes that only

three designs are available and that others will be released each month through the magazine, but the three pages of illustrations have made clear that Patterncraft is a co-ordinated set of designs. Within a year patterns for 26 different pieces of furniture and toys were made available.



**Fig 3.** Patterncraft was presented as easily made, with the minimum number of tools.

While Patterncraft was simple and flexible in use like Ward's earlier Unit Range, its DIY mode of production was profoundly different. *Australian Home Beautiful's* photographic illustrations of the furniture were followed by a page with a set of captioned photos, showing a young woman wielding a saw and a sanding block, and a man in a white business shirt using a hand-operated drill, to encourage women and inexperienced lower middle class male readers. The first caption suggests that Patterncraft designs are 'so simple they can successfully built by women, providing a

little time and patience is spent on the job. Almost every saw cut is a straight one and in most designs this hard work has been reduced to a minimum' (Australian Home Beautiful, 1947a).

NOW, probably more than ever, shortages of building materials, fittings and equipment are making the problem of setting up a home even more difficult. Rising costs, too, have added their burden and are often the last straw, which breaks the financial camel's back when the newly finished empty house has to be turned into a home with the installation of floor coverings and furniture. Even the modest requirements of a newly married couple in this field can run into several hundred pounds, and it is regrettable that very often the quality of furniture is nowadays scarcely on a par with that of pre-war goods (Australian Home Beautiful, 1947b).

Copy accompanying the order form, describes

Patterncraft as a system of home carpentry

produced by a panel of experts and as a 'valuable contribution to present day needs'.

Patterncraft helped working class and lower middle class people to furnish their homes using their own labour and to buy the materials when they could afford and obtain them. Along with other DIY projects such as renovating, painting and even self-building, it allowed them to avoid debt, build financial equity in their homes and thus attain an unprecedented level of economic independence in the following decades. University student and returned air force serviceman Bill Woodburn, whose only training in woodwork had been classes in Sloyd in his first two years of secondary school, made a set of Patterncraft furniture that was part of the

inspiration for he and his wife Bettina to build a two-bedroom mud brick (adobe) house in the summer of 1948-49. In an interview about their experience of DIY building he explained; "[T] hat's what triggered it off!" (Woodburn and Woodburn 2010).

# **Timber-pack and followers**

Nine months after its launch, in July 1948, a Patterncraft advertisement shared the page with one for Timber-Pack, described as 'Completed sets of machined, band sawn, shaped and sanded ready-to-assemble parts ...for ... Patterncraft designs'. Timber-pack was introduced with the headline; 'The Timber Problem Solved', referring to the general difficulty people had obtaining it. Production by the Australian timber industry was insufficient to domestic requirements in the post war period and imports from Europe and Scandinavia could not meet the gap in demand. Some Patterncraft promotions in the late 1940s suggested re-cycling timber from older furniture and buildings.



**Fig 4.** Early advertisement for Timber-pack, a new category of commodity.

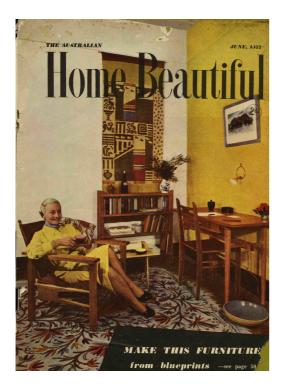
Timber-Packs were successfully sold through mail order from the Purves's pattern factory in Collingwood, until 1954. At first Patterncraft patterns and Timber-Packs were advertised together, with the public being advised that the patterns were required for the construction of the packs, but later they were advertised separately. By 1951 it appears that the Fler Company of Fred Lowen and Ernest Rodek, which became a leading furniture manufacturer in the following two decades, was producing Timber-Pack components.

In 1950 Ward moved to Canberra to work on a major interior and furniture design commission for Australia's growing capital, leaving an opening for others to design for Timber-pack.

He did however supply the new designs for Blueprint patterns that continued with the low-

skill requirements, but addressed increasing enthusiasm for modernist style without the heaviness that was the obvious legacy of Arts and Crafts style in Patterncraft. While Timber-packs continued to add new designs and were sold into the early 1960s, Australian Home Beautiful replaced Blueprint in 1954 with Plycraft patterns. These were designed for use with more affordable plywood, by architect Walter Gherardin, and Ron Rosenberg who had trained with Ward in the Myer workshop. But this venture appears to have been unsuccessful, lasting only a few months.

Australian Home Beautiful and other shelter magazines published advertisements for new furniture kits produced by a range of manufacturers in Melbourne and in other states by the mid 1950s. Since the worst shortages of timber were largely overcome by early 1954, it appears the continued popularity of furniture kits was related to their affordability and the popularity of DIY activity. Furniture packs were often marketed with the use of the term 'pre-fab', indicating popular understanding of the success of pre-fabrication in helping solve Australia's housing crisis.



**Fig 5.** Blueprint patterns replaced Patterncraft towards the end of the period of post-war shortages. While they were more modern in design they were equally simple to make.

#### **Conclusion**

Frederick Ward's designs for Patterncraft, Blueprint and Timber-pack became extremely popular, evidenced by the life of the pattern services, advertisements for Timber-pack and the perennial appearance of Patterncraft furniture in vintage furniture stores today. Anne Purves recalled that an *Australian Home Beautiful* photographer told her that he came across Patterncraft furniture throughout Australia, no matter how far he went from Melbourne where they originated (Purves C 2008). It is likely, since paper dress patterns were frequently shared among women within families, and easily mailed over vast distances, that Patterncraft and Blueprint patterns were copied and shared among

family and friends, and not necessarily employed in the recommended manner to be glued to the timber and used only once.

As Thorpe explains, design activism is more than good design that 'constitutes general improvements to daily life ... gained through private consumption, accessed according to the consumer's ability to pay' (Thorpe 2011).

Frederick Ward's response to the specific social and economic context of post-war shortages and the failure of existing manufacturers to adjust to the needs of post-war society, can be understood as design activism however, even if typically design activism typically 'distances itself from commercial or mainstream public policy-driven approaches'

(http://www.historiadeldisseny.org/congres/). While Ward's designs were commercially successful on a modest scale, this ensured that they continued to reach a mass audience because they provided a financial return for the Herald and Weekly Times, publisher of Australian Home Beautiful. Although flat-pack furniture today is often associated with multi-national conglomerates, rapid obsolescence and questionable environmental practices, Patterncraft, Blueprint and Timber-pack are examples of design for DIY production that met the practical needs and economic constraints of users at a time of shortage rather than excess.<sup>x</sup> They gave users of a confidence in their capacity to make the things they needed and facilitated a DIY future that often included building and renovating, and at the least, making essential

pieces of furniture at a moderate cost that enabled working and lower middle class people to consolidate their finances and avoid debt.

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<sup>i</sup> Called Swedish-craft, these were produced in Sydney 1953-60.

<sup>&</sup>quot;More than four million children were born in Australian between 1946 and 1961, a substantial increase given Australia's immediate post war population of just under seven and a half million people.

The immediate post war legislation imposed a maximum size of 125 square feet, which was maintained until 1952, when it was altered by each state according to its specific housing shortage and the ideology of its governing party.

<sup>&</sup>lt;sup>iv</sup> The first courses in industrial design weren't established in Australia until after World War II.

<sup>&</sup>lt;sup>v</sup> 'Unit furniture' was the British term for what has come to be referred to as modular furniture.

vi Fred Ward Archive, Powerhouse Museum, Sydney, 95/109/1-3/1

vii Fred Ward Archive, Powerhouse Museum, Sydney, 95/109/1-3/1

viii Fred Ward Archive, Powerhouse Museum, Sydney, 95/109/1-3/2:4.

ix In the post war period Frederick Ward worked for the professionalization of design for industry in Australia. He was a founding member of the Society of Designers for Industry, and the Industrial Design Council of Australia. He also contributed to the development of national standards in design education.

<sup>&</sup>lt;sup>x</sup> Also, when people are involved in making the things they need in their daily lives; they frequently experience a greater degree of attachment to them, compared to things that are purchased, resulting in a slowing of the commodity cycle.