When one of Australia’s models is criticised for being broken, it is often instructive to look at what other similar economies are doing around the world.

With the new Coalition Government in Australia facing its first budget in May 2014, the inevitable “tough” budget of any incoming government starts getting discussed in ever increasing detail and various pundits offer seemingly “obvious” helpful hints to “fix” existing regimes.

Superannuation in Australia seems to come under consideration for change every year whether there is a new government or not. This year the debate is as furious as ever. With the government having called a Commission of Audit to provide avenues for spending cuts, the hostile Senate called an inquiry into the Commission itself. One of the witnesses to the inquiry was Professor John Hewson, newly appointed chair of the Tax and Transfer Policy Institute at the Australian National University.

In his testimony to the Senate inquiry and subsequently in mainstream media he criticised the existing superannuation model for skewing income tax concessions towards higher income earners who arguably did not require any incentive to save and were capable of providing adequately for their retirement without any government assistance. The present flat tax of 15% applying to contributions means that those with taxable income under $18k pay 15% for the privilege of making superannuation contributions, whereas those with taxable income exceeding $180k receive a 30% benefit for doing so. This distortion is worsened by the fact that withdrawals as early as 55 are taxed concessionally obvious of more benefit to those who contributed more and tax free after 60.

The Canadian retirement model for individuals, which has existed in a similar form since 1957, allows for contributions to be claimed as a deduction at one’s marginal rate of tax, so at least low income earners aren’t penalised, and withdrawals are taxed at one’s marginal rate. So, there is still a greater incentive to save given to wealthier taxpayers, as in Australia, but tax is payable upon withdrawal at one’s ordinary marginal rates. By aligning contributions and withdrawals to one’s marginal rates and not restricting withdrawals, there is no need to establish special highly regulated entities in Canada as there is in Australia, instead one simply registers an account with the Canadian Revenue Agency, Canada’s equivalent to the ATO.

Once a Canadian turns 71, her or he must either cash in the registered account, or RRSP, in Canada; or convert it to a Registered Retirement Income Fund (“RRIF”). The RRIF has a minimum % withdrawal, similar in principle to what operates in Australia with respect to withdrawal of superannuation funds.

So, the key differences between the Australian and Canadian retirement model are:

1. the use of a highly regulated discretionary trust structure, known as a superannuation fund, in Australia, and a simple registered personal account, or RRSP, in Canada;
2. a flat tax on contributions in Australia and a progressive deduction in Canada;
3. a flat tax or no tax on withdrawals in Australia and a progressive tax in Canada; and
4. restricted access on benefits in Australia until age 55, with no restrictions on access in Canada.

Given that Australia already has nearly $2 trillion invested in the abovementioned highly regulated discretionary trust structures, changing the taxation of such structures needs to be approached with care. Nevertheless, some interesting possibilities come to mind after comparing the Canadian regime with the Australian one:

1. rather than having the superannuation fund as a taxed structure, it could be an untaxed structure, such that the superannuation fund income tax return becomes wholly a regulatory return, which it is partially now in any case;
2. contributions made into the fund, either personally or by an employer on behalf of the taxpayer, would be deductible to the taxpayer meaning that the employer would increase the wage by the amount of the compulsory superannuation amount and then pay that amount into the taxpayer’s superannuation fund to retain the status quo;
3. all the regulation as to access could go, as lower income earners would have the greatest incentive to save given the significant jump in their tax rate from nil to 15% on withdrawals, although the status quo could just as easily remain;
4. withdrawals from the fund would be taxable at the taxpayer’s marginal tax rate, which for lower or lower-middle income older persons under the current regime with the myriad tax offsets available would be effectively nil if withdrawals were made on a normal pension like basis as opposed to one lump sum.

The above changes, particularly those relating to withdrawals, would of course represent a significant loss of concessions for wealthier Australians. There would also be a need to consider the effective loss of imputation credits and capital gains discounts that would arise where superannuation funds became untaxed structures versus the reduction in tax paid on contribution and earned income. So, if Australia were to adopt the Canadian model it would have to be as part of an integrated package of reform dealing also with aged pensions and other measures.

However, with the tax forgone as a result of superannuation concessions about to exceed the $45 billion dollars spent annually on aged pensions, perhaps it is indeed time to look at alternative retirement models and consider an overhaul of the taxation system of what we call in Australia “superannuation”.

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Modern Textile Printing Part II, Modernist Architecture in the North Shore, and more

ADVERTORIAL

Canada’s Retirement Plans – An Interesting Alternative?
**EVENTS UPCOMING**

The months have whizzed by and have brought us many and varied activities. The events continued to be well supported by our members, and new members continue to come on board, and both of these developments are heartening.

Our renowned vice President David de Rozenker-Apted notes on page 3 that the Society will turn 19 at the upcoming AGM, and he and our esteemed President Roy Lummy have been there from the start, so congratulations to them.

Also on page 3 we have a list of upcoming events through to the end of this year. Please review this list carefully and I recommend that you commit the dates to your diary now so as not to miss out!

A fabulous time was enjoyed by all last month as members were allowed in to two very special North Shore homes and a Quaker Meeting House and inspected the former Lemberg residence where Quaker meetings were held before the Quaker Meeting House was built. The whole afternoon was a wonderful exploration of Modernist architecture at its finest. Your intrepid reporter was there and my report begins on page 4.

Larisa Sarkadi, a most prolific contributor to The News, has again provided an impressive article, this time looking at modern textile printing and the “winds of change” that blew in the earlier parts of last century in that industry. This enlightening piece may be found on page 6.

Our web master extraordinary, Matt Stone, has found some time to indulge his other passion, aeronautics, and has combined his knowledge of this with his interest in interwar design generally and streamlining in particular and has woven a fascinating tale together which essentially shows how one concept promoted the other. The information he has to give is substantial and Part I of this serialised tale starts on page 12.

Every Christmas party held by the Society is a memorable event and your intrepid reporter was there at the Australian Hotel last December to capture all the action. So please feel free to join us. The next edition is sure to be something special, so why not be part of it?

John Dymond

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Worth Saving – heritage matters

Monetary’s Fibro Modern, David de Rozenker-Apted

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**FROM THE VICE-PRESIDENT**

The President and I admit to being rather pleased that the Society will be 19 years old in September this year, and that we have been able to provide events and publications that have encouraged so many Members to continue their support of our Aims & Objectives since 1995.

This achievement is a credit to Management Committee members, past and present, who have given so much of their time and generosity over the years, and to all of those Guest Speakers who have graced the platform at our Talks. We sincerely thank those who have given dedicated years of service to the successful running of the Society, either as Management Committee members or as Office Bearers, and whilst they are not named here for brevity’s sake, they can all be assured that they are not for one minute forgotten.

All of those tireless supporters of the Society join you, our continuing and recent members, in making the Society such a strong and cohesive group, and all our members have helped to create an atmosphere of friendship, cooperation, and the pursuit of knowledge in our areas of interest.

Speaking of birthdays we would like to pass on our wishes to the Art Deco & Modernism Society of Victoria which celebrated 21 years of operation in 2013, but even more notable is the fact that the Art Deco Society of Western Australia was launched in 1987 as the very first such organisation in Australia. Their founding President Vyvonne Geneve was honoured in January 2007 with the Medal of the Order of Australia for her work in conservation of the built environment and other artistic disciplines. Vyvonne has been a tireless conservationist and has been hugely supported in that work by her partner and Vice President Ron Faccius, and like us by a dedicated Management Committee.

Below is a table setting out the dates and types of events that are coming up over the rest of the year. Apart from the Society’s own outings, the President and I have been representing the Society at associated functions. There have been a number of “Tea & Tales” presentations at The Grace Hotel, which in the main have been attended by various Probus Groups.

These presentations have a dual purpose inasmuch as they are not only a marketing tool, but also a means of building awareness of the high significance of this iconic Commercial Gothic skyscraper.

On Saturday August 16 the Society will have the opportunity to enjoy one of these afternoon “Tea & Tales” presented by Roy Lummy and catered for by the wonderful people in Food & Beverage at The Grace.

Memories… What do the Rose Seidler House and Citroën automobiles have in common? Please turn to page 25.

David de Rozenker-Apted

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**UPCOMING EVENTS**

For the latest updates visit www.twentieth.org.au

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<th>OCTOBER</th>
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<tr>
<td>Sadly this walk in Bondi will not now take place and we will reschedule</td>
<td><em>Tea &amp; Tales</em>, a special event at The Grace Hotel, 77 York Street, Sydney, $15</td>
<td><em>Maenner through Millers Point</em></td>
<td>Discover more about Bathurst!</td>
<td><em>Sacred and Profane – Approaches to Designing New amongst the Old</em></td>
<td>Please join us for a casual Christmas Lunch at the Australian Heritage Hotel in The Rocks. A booking for 40 persons has been made on the lower side of the hotel on Gloucester Street Whether you join us for a meal or a quick drink it’s that we look forward to your company. As usual you can order at the Bar so you can choose a main or a snack, or if you are simply passing through do stop for a moment to say “Hi”.</td>
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<tr>
<td>Saturday 16 2:30 pm</td>
<td>The Grace Hotel</td>
<td>Milers Point</td>
<td>BATHURST</td>
<td>Friday 21 7:30 pm</td>
<td>Australian Heritage Hotel 100 Cumberland St, The Rocks</td>
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<td>Friday 29 7:30 pm</td>
<td>Tusculum</td>
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The gentle autumnal sun smiled on us as we gathered expectantly for a special “members only” tour of four 1950s modernist gems nestled quietly within Sydney’s leafy North Shore.

This area spawned a number of experimental houses by young architects of the Sydney School following World War II, with innovative designs (such as a house with no corridors) and bold new concepts (such as integrating the built and natural environment), that launched many careers.

The Jack House, the family home of Pamela and Russell Jack, was the first port of call on our day’s tour, and gave us a striking example of the Modernist ethos of separation of private and public space and the implementation of a minimal “footprint” on the environment. Nestled into a steep slope as if it were part of it, and utilizing the natural feature of a small creek running through the property to great effect, the house shows that Russell Jack seems to have thought of everything in its design.

The house itself is hidden behind a high wall with an archway providing a sense of leaving the noisy, busy, public space behind and entering the quiet, calm private space.

Upon entering this private space, one is immediately struck by a beautiful water feature which takes the creek alongside the entrance walkway and under the house. Post and rail construction, with the use of glass, draws the visitor’s eyes outwards to the bush and makes whichever room one is in seem larger.

At the Lemberg residence, the sweeping lines and striking use of pitched roof and wide overhang mirror in this respect the design features of the Quaker Meeting House.

After digesting these fine examples of Modernist architecture, it was back into the car and off to Gordon to inspect one of Harry Seidler’s early works, the former J Tuck House.

As with the Jack House, a shoestring budget was involved, and here also as with the Jack House, innovative design won out. Harry Seidler was given a very small, rectangular building envelope on the top of a steep hill to build on. He made optimal use of space with a kitchen as the feature and centre of the house, and adjoining spaces wrapped around this in such a way as to completely avoid corridors! Like the Jack House, it has to be seen to be believed and is just marvellous.

My thanks go out to the very generous hosts at the Jack House and the former J Tuck House for allowing us into their homes, to our esteemed Vice-President David de Rozenker-Apted and President Roy Lumby for making all the arrangements which enabled us to have exclusive Society member access, including a lovely lunch in the afternoon sun at the former J Tuck house, and to Anne Higham for assisting the Tuck House host with the lunch presentation.

Truly a most enjoyable afternoon and I’m sure very much appreciated by all members who were able to attend. Please look out for the next “members only” tour, judging from this tour they are certainly worth clearing one’s calendar for!
MODERN TEXTILE PRINTING
Winds of Change 1910-1920

by Larisa Sarkadi

The second decade of the 20th century commenced on a vibrant note. Developments in mechanisation, as well as the invention of man-made fibres and synthetic dyes, have been secondary elements of progress in textile printing. The major force behind the changes to the industry has been that of an aesthetic nature. Textile designers were increasingly influenced by the current modernist stylistic movements in architecture and decorative arts. Pared down natural forms, geometric and, eventually, abstract patterns became dominant themes of fabric designs.

The Paris-based Russian group Ballet Russes proved to be another major inspiration for a wide variety of decorative arts in the beginning of this decade. Stage sets and costumes in exuberant colours were specially created for the group by the most progressive Russian and European painters of the day. One of the first couturiers to do so, Poiret should also be credited with setting up a design studio, Atelier Martine, in 1911. Alongside Ecole des Beaux Artes-educated but still unknown artist, Raoul Dufy, Atelier Martine employed young untrained girls. Characterised by their spontaneity, resulting sketches for fabric designs were both playful and colourful. The following year Raoul Dufy, with the approval of Poiret, began to work for Lyon-based firm, Bianchi-Ferier, which at the time was the largest textile mill in France.

The firm was known for its luxurious fabrics from the 19th century. Wishing to update its pattern range, Bianchi-Ferier in 1911 unsuccessfully tried to imitate the wood-block designs created by Raoul Dufy for Paul Poiret. In 1912 Bianchi signed Dufy on...
Lines of Crescents dress fabric by C R Mackintosh for W Foxton, 1913. Printed silk.

Commemorative scarf by Raoul Dufy for Atelier Martine, 1915. Woodblock print on silk.

Mood by Omega Workshops. 1913. Printed linen.

Lines of Crescents dress fabric by C R Mackintosh for W Foxton, 1913. Printed silk.

The Crocus by the Atelier Martine, 1918-1919. Printed velvet.

In 20th century it was the greatest of its kind between the artist and his employers.

Dufy’s creations for Bianchi-Ferier in the period from 1912 to 1920 included Fauve-inspired bright florals, as well as geometric patterns achieved by inventive use of blocks in opposing colours. His most popular designs, however, were stylised two-tone compositions of human and animal figures amidst leafy environments. In Great Britain the radical approach to textile decorating was pioneered by the London-based Omega Workshops, established in 1913. Printed by Maromme Printworks in Rouen, France, their range of textiles clearly displayed the dynamic influence of modernist art. Closely associated with the Bloomsbury Group, the workshops employed many fine artists, such as Charles Rennie Mackintosh, further blurring distinction between fine art and textile design. In Omega designs, natural forms of the past were continually stylised into repeating patterns of curved shapes and bands in vivid colours highlighted by bold black outlines.

The shift of the textile industry towards production of printed textiles continued. To reduce undue rivalry, several British manufacturers with well established trade reputations merged together. In 1912 the new company, later called Morton Sundour Fabrics, set up its own block-printing facilities at Carlisle, in the north of England. Calico Printers’ Association, with headquarters in Manchester, was another cooperation of textile printers and merchants, active in textile production during the decade.

In Austria, the Wiener Werkstatte cooperative of artists and...
craftsmen catered mostly for its wealthy, avant-garde clientele, working on special ‘total work of art’ projects. Around 1912, Wiener Werkstatte issued a book of silk patterns featuring printed textiles. The fabrics could be used for home furnishings as well as for matching hostess dresses. As with other ranges of their artisan goods, textile designs frequently utilised geometric elements with floral inserts. More than 80 affiliated artists worked on designs and ideas for fabric patterns. Unlike their earlier mostly cream and black designs, from the 1910s onwards the palette of Wiener Werkstatte fabrics gradually became more colourful. Some fabrics were printed and hand-painted, others were machine-manufactured by Johann Backhausen & Sohne.

While fabric designers were creating increasingly bolder and brighter patterns, the world political situation changed for the worse. In August 1914 the Great World War broke out. It changed the social order, as women had to replace men in public service, in manufacturing and in retail sectors. Clothing had to suit the more active role women played in the workforce. Skirts were shortened to above the ankle, gradually reaching the mid-calf length by the middle of the decade.

With enormous casualties on the battlefields affecting millions of families, the darker, more sombre-coloured clothing reflected the prevailing mood. There was no need for textile decoration as the monochrome look in fashion dominated until the end of hostilities in 1918. During the war, as was described in one memoir, ‘Parisian women were swathed in the black crepe’. For more than four years, no society events took place in Europe.

During the war years textile printing had almost come to a halt. Some manufacturers, as was the case with Omega Workshops, were forced to close due to financial pressures in 1919. The Calico Printers’ Association had to greatly reduce the number of their printing workshops. The luxury fabrics such as silks and velvets were replaced by cotton and synthetic fibres. In spite of shortages of raw materials, British manufacturers such as W Foxton, F W Grafton and Seftons continued to produce outstanding examples of printed textiles.

A new kind of aesthetics emerged from the ashes of the Great War. While artists of Germany, Austria and the Scandinavian countries had chosen to follow the path of geometric abstraction in their designs, their French counterparts embraced exuberance in ornamentation in their thirst to celebrate.

References and Sources:


www.fashionencyclopedia.com

This is Part Two in a series of articles tracing modern textile printing in the 20th Century.

Streamlining: ART FROM THE SKIES

Part I – from wooden gliders to high-performance monoplanes

by Matt Stone

Many of us who appreciate interwar design are particularly fond of the Streamline Moderne or Art Moderne movement. Perhaps part of its inherent charm is how characteristic ‘aerodynamic’ styling cues were often applied to objects that didn’t need them.

Sleek rounded forms and ‘speed’ lines were incorporated into suburban bungalows and commercial buildings; furniture and interior fittings; and everyday appliances like toasters, irons, kitchen radios and vacuum cleaners.

During the movement’s heyday, architects, industrial designers and visual artists fell in love with streamlining. They used it in an expressive manner, conveying ideas about ‘modernity’ both to their commercial sponsors and the buying public.

However, as those designers well knew, for static objects, the functional benefits of streamlining were marginal at best – or more likely, non-existent. When it came to the design of objects in motion, however, it was a very different story.

From the early days, a small amount of streamlining had often been instinctively incorporated into vehicles such as cars. As speeds grew, that streamlining became more formalised. Ongoing experiments had shown that for a vehicle, even modest attention to aerodynamics could result in improved performance and comfort – with reduced air turbulence, especially at higher speeds. The result was a trend towards streamlined cars, buses, trucks, motorcycles, ships, railway locomotives and entire trains. Streamlining was often applied both for aesthetic reasons and to provide performance benefits.

There was one mode of transport in which streamlining was taken very seriously indeed: in the design and development of aircraft – where attention paid to streamlining could mean, literally, the difference between life and death. Well-applied streamlining could significantly improve an aircraft’s endurance and range, both through increased speed through the air, and reduced consumption of fuel.

Industrial designers were undoubtedly taking cues from the aircraft industry. As Norman Bel Geddes wrote in Horizons (pub. 1932): ‘...when the design of an object is in keeping with the purpose it serves, it appeals to us as having a distinctive kind of beauty... The emotional response that the airplane stirs in us would seem to be the same as that which accounts for the emotional effect of the finest architecture – the form, proportion, and color best suited to that object’s purpose...’

While the birth of streamlining is usually associated with the 1920s and 30s – its gestation began many years before, in the aeronautical experiments of the early 19th century. It was around this time that a more scientific approach started being taken towards solving the aerodynamic problems associated with manned flight.

19th-century pioneers: taking cues from birds, bats and dolphins

The very earliest practicable aircraft were simple gliders, constructed from wood and fabric, and capable of flying only relatively short distances. For their basic overall designs, the designers of these gliders naturally took their inspiration from flying creatures such as birds and bats. But less obviously, they would also draw upon nautical traditions, which provided an excellent precedent.

After all, thousands of years of refinement had resulted in craft which could move smoothly through water – and designers knew that similar principles would apply to those moving through air.

(There were also similarities in the way boats and aircraft needed to be controlled – for example, both were steered by making use of a ‘rudder’.)

Sir George Cayley (b. 1773, d. 1857), a wealthy 19th-century engineer from Yorkshire, is generally acknowledged as the designer of the first successful manned gliders.

He started his experiments with small models in the early 1800s, progressing to full-scale glider test flights in the 1850s. Legend has it that these were piloted by one of his manservants – presumably with a degree of trepidation.

In Cayley’s best-known glider design, the pilot sat within in a small dinghy-like hull, steering the craft ‘athwartships’ (facing to one side, looking forward, as if in a small boat). Cayley seems to have reckoned that the boat-like hull, with a curved prow, would cleave a smoother passage through the air. In 1973, a replica of this design was flown in England for a TV documentary by noted pilot and gliding instructor, Derek Piggott. After cautious initial trials, tethered behind a TV crewmember’s...
never made a viable power source. Not surprisingly, Henson’s carriage’s proposed steam engine would have rudder. It even had paddle-like propellers. Significantly too, like Henson imagined technology that would later be taken for granted in aircraft design: a rigid cambered wing, three-wheeled passenger carrying airliner, and in many respects, a scaled up Liam Henson (b.1812, d.1888), tried to get investors interested in aeronautical science. One of Cayley’s younger disciples, Wil-

Many of Cayley’s wing designs incorporated curves in their lead-

The box kite configuration subsequently became a platform for many successful European aircraft designs. As Charles Gibbs-Smith puts it, in Early Flying Machines 1799-1909: “…this kite was to provide the Europeans with a new and successful conception of inherent stability…” (ironically, after being rejected by Australian institutions, Hargrave’s model flying machines were accepted by the Deutsches Museum in Munich, where many would be destroyed by bombs raining down from Allied aircraft during World War II.)

The Australian inventor made other significant contributions to aviation, including the invention of a lightweight compressed air engine. His core design would form the basis for the radial en-

tunnel. PHOTO: STATE LIBRARY OF NEW SOUTH WALES.

Lawrence Hargrave and his kite with Charles Bayliss at Stanwell Park, 1894.

Deperdussin Monocoque, glider construction techniques predominated. Although its stressed plywood airframe was very advanced, it used curved load-bearing shells which were used in conjunction with a conventional wooden frame. And the design still relied upon extensive strut-work with wire bracing, resulting in a great deal of drag.

Wire-braced wood with fabric coverings remained the most prac-
table way to construct the airframes of the time. By the time war had started in 1914, most aircraft were configured with multiple wings: e.g. biplanes, triplanes, and occasionally, quadruplans. One of the main reasons was that — given the limitations of the materials available at the time — multiple wings formed an inher-

herself inspired by the form of a dolphin – describing it with the phrase ‘a solid of least resist-

In this context, his design philosophy set a template for modern hang gliders and flapping wing aircraft — e.g. biplanes, triplanes and flapping wing aircraft (or ornithopters).

To save weight, his gliders lacked any kind of fuselage, and Lilienthal piloted them suspended beneath the wings, shifting his body weight around to maintain control. In this respect, his design philosophy set a template for modern hang gliders and ultra-light aircraft. Tragically, in 1896, after more than 2,000 successful flights — totalling more than five hours airborne — Lilien-
thal died from injuries sustained in a glider crash.

The Wright brothers and powered flight

Part of Lilienthal’s legacy was his seminal treatise on aerody-
namics, Birthflight as the Basis of Aviation (pub. 1889). With its

Volvo, a series of successful controlled flights demonstrated the soundness of Cayley’s design.

‘If it looks right, it will fly right…’

Despite this, Henson’s vision had fired the public’s imagination. Although first published in the 1840s, various illustrations of the Henson Aerial Steam Carriage continued to appear on and off in newspapers and magazines for at least another 50 years.

By the late 19th century, many other aviation pioneers had been building upon Cayley’s work. A significant step forward was made with the invention of the wind tunnel. This is generally at-

An Australian breakthrough

Lawrence Hargrave (b.1850, d.1915), a very significant Australian inventor, was also active at this time. Hargrave had been observing waves and the motion of fish, snakes and birds. This led him to ‘follow in the footsteps of nature’, and to build nu-

merous flyable models, including self-propelled versions using elastic bands or compressed air as a power source.

Hargrave’s major contribution was the invention of the box kite in 1893. This was a milestone in solving the problems of manned flight, and in 1894 he used four ganged box kites to lift himself off the ground. By 1899, he had taken examples of these kites to Europe.

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 boards and tailing edges. He was known to have been inspired by the form of a dolphin in particular – describing it with the phrase ‘a solid of least resist-

instincts apart, aviation historians consider Cayley to be one of the founders of aeronauti-

cal science, with a deep understanding of the underlying principles of flight.

He compiled formalised calculations of key forc-

es such as lift and drag, and his methodical, ground-breaking work was later developed and refined by other aviation pioneers. Romantic visionaries also played a significant role in advancing aeronautical science. One of Cayley’s younger disciples, William Henson (b.1812, d.1888), tried to get investors interested in backing his Henson Aerial Steam Carriage. This was to be a passenger carrying airliner, and in many respects, a scaled up derivative of Cayley’s glider.

Henson imagined technology that would later be taken for granted in aircraft design: a rigid combined wing, three-wheeled landing gear and control surfaces including stabilisers and a rudder. It even had paddle-like propellers. Significantly too, like Cayley’s glider, its curved fuselage was clearly inspired by nauti-

cal traditions – again, an instinctive inclusion of ‘streamlining’ for smoother airflow.

However, the carriage’s proposed steam engine would have never made a viable power source. Not surprisingly, Henson’s ambitious air liner was never built. Pat-

tenents were applied for, and a small-scale model did manage a few tentative hops, but the project remained firmly earthbound. Even Henson was even accused of running a scam to fleece investors.

For some of this glider
designs, Cayley was inspired
by the form of a dolphin — a ‘solid of least resistance’.
B.1882, d.1965), one of Britain’s great success. Many manufacturers were applying their top speed capabilities. That being in high levels of drag, severely limiting the age of biplanes and triplanes was drawing to a close. Despite their excellent structural durability and flying properties, their typically blunt cross-braced airframes resulted in high levels of drag, severely limiting their top speed capabilities. That being said, many manufacturers were applying streamlining to biplanes with considerable success. A good example was De Havilland Aircraft Co Ltd., founded by Geoffrey De Havilland (b.1882, d.1965), one of Britain’s great aviation engineers and innovators. By the 1920s, his company had already become well-known for successful biplanes such as the Tiger Moth.

**Evolving Dragons**

One particular De Havilland design provides an excellent illustration of how streamlining was evolving in the early to mid-interwar period. This was the Dragon biplane, which was developed into a successful line of commercial and military aircraft.

The first production model, the Dragon 1, first flew in 1932. It was about 34 ft (10.52 m) long, with a wingspan of around 47 ft (14.4 m), and powered by a pair of inline air-cooled engines, also designed and built by De Havilland. In commercial use, the Dragon could carry six passengers. Military versions could be armed with two machine guns, and carried cargo or a modest bomb load. The Dragon 1 certainly had an aerodynamic overall shape, but was not particularly advanced in the finer points of streamlining. After initial sales success, it was closely followed by the Dragon 2, which although similar overall, had been refined somewhat – for example, with streamlined ‘spats’ over the wheels.

Finally, the line culminated with the Dragon Rapide, powered by a pair of larger six-cylinder engines. This elegant design was thoroughly streamlined, and unmistakably a product of the ‘Art Deco’ era. Some Dragons were built in Australia by De Havilland’s subsidiary here. These flew with the Royal Flying Doctor Service and commercial airlines such as TAA. Sadly, some of these formerly glamorous Dragons ended their days on farms in the 1950s, converted to crop-dusting workhorses. Today, surviving Dragons are highly prized by vintage aircraft enthusiasts, and a few are maintained as airworthy for joyrides.

**War on the horizon**

With the 1930s in full swing, various commercial and political forces were affecting the aviation industry around the world. The race was on to achieve ever-faster speeds, and although this was partly driven by natural human competitiveness, there was also a more serious agenda, particularly in Europe, where many people held the view that another major war was inevitable.

If there was going to be another conflict, many of the manufacturers involved were keen to improve aircraft speed, range and endurance. Racing and time trials were used as test beds for new ideas. These attracted enormous publicity for the pilots, engineers and manufacturers involved.

The movie that changed the course of aviation history

In the late 1920s and early 1930s, one of America’s great aviation innovators started making his mark. Howard Hughes (b.1905, d.1976) had inherited a hugely profitable mining equipment business in 1925, at the age of 19. He was not particularly interested in running the business, but was determined to succeed in two areas that fascinated him: filmmaking and aviation.

These interests became entwined in an unexpected way in his early twenties. Having been a boyhood admirer of British and German World War I pilots, Hughes decided to produce a feature film about their exploits; risking an unprecedented amount of money in the process.

After a lengthy and difficult production process, Hell’s Angels was released in 1930. It featured some of the most authentic aerial combat footage filmed to this day – and raised eyebrows at the time with provocative clothing and occasionally racy dialogue (notably, a young Jean Harlow’s now-classic line about changing into something more comfortable).

Having sourced scores of old biplanes from Europe for Hell’s Angels – Hughes also brought together a team of seasoned wartime pilots, for what he called ‘the world’s largest private air force’. While directing the film, the young tycoon managed to gain the pilots’ respect by personally demonstrating risky dog-fighting manoeuvres – even hospitalising himself after a serious crash.

To maintain this huge fleet of biplanes for the film, Hughes had required much specialised help, and he became friends with his head mechanic, Glenn Odekirk (b.1905, d.1987). After Hell’s Angels was finished, they embarked upon a project to build a state-of-the-art racing plane.

**Pushing the state of the art**

Hughes dedicated it a ‘cost no object’ venture; bringing together a skilled and dedicated team who would apply the most advanced thinking and ideas of the time. Hughes had ambitious goals for the new plane. He had already achieved some success with speed records at the helm of his Boeing 100 – a civilian version of the Army’s renowned P-128 pursuit aircraft, and had modified his example of this already fast and agile biplane with more power and extensive streamlining.
After its first test flights in 1935, Hughes went on to pilot his 'Winged Bullet' on a number of record-breaking flights. It had a top speed of 352 mph (566 km/h) and remains, to this day, the last privately developed plane to hold the absolute world air speed record.

As the first product of his newly formed Hughes Aircraft Company, he later tried to sell the design to the US military for development as a pursuit aircraft. After some initial interest they declined; considering their fleet of fabric-covered biplanes to be adequate for their needs.

Influencing other designs

Hughes was soon vindicated, however, for it didn’t take long for the H-1 Racer to be considered a landmark design. It was hugely influential around the world – creating a template for engineers designing a new generation of aircraft that would dominate the skies.

Within a few years, most new aircraft would have wings that were cantilevered, instead of externally braced with wires and struts; smoothly covered joints and external fittings; engines beneath streamlined cowlings; and landing gear that was fully retractable.

With its compact dimensions and uncompromising design purity, it is unlikely that the Hughes H-1 Racer could have been developed directly into a fighter. But some aviation historians consider several famous radial-powered World War II fighters to be influenced by its design – including the Grumman F6F Hellcat, Republic P-47 Thunderbolt, Mitsubishi Zero and Focke-Wulf Fw190.

There is a degree of circumstantial evidence supporting this view. For example, the Focke-Wulf's designer, Kurt Tank, visited America from Germany and was in the crowd observing one of Hughes' record-breaking runs. And after examples of the Mitsubishi plane had been captured for inspection, Hughes found himself having to deny any involvement in its design – attributing the similarities to ‘espongaje’.

Certainly, during this period Hughes was not the only innovator pushing the limits of technology. Many other aviation pioneers were pursing their own design approaches in America, Europe and the Soviet Union.

By the mid 1930s, the era of the advanced monoplane was well underway.

REFERENCES AND SOURCES: Early Flying Machines 1799-1945 by Charles Galla-Smith; ‘Tailspin’, by Peter M. Bowes & Ernest R. McDowell; Howard Hughes: His Life and Madness by Donald L. Bartlett & James B. Steele; airmagazine.com; monash.edu.au/hargrave; History of Flight at grc.nasa.gov; northropaircraft.com; Smithsonian Institution; boeing.com; century-of-flight.net; Early Australian aviation at australianaviation.com.au

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Certainly, during this period Hughes was not the only innovator pushing the limits of technology. Many other aviation pioneers were pursing their own design approaches in America, Europe and the Soviet Union.

By the mid 1930s, the era of the advanced monoplane was well underway.
It was put about the town that the Society was to return to that wonderful old watering hole that had stood the test of time, the Australian Heritage Hotel, and your intrepid reporter was looking forward to once again demolishing an edible form of the coat of arms of the Commonwealth whilst quaffing an ale brewed in south Wagga Wagga.

Approaching the Australian from the Quay under clear skies, one can see the hotel standing out like a welcoming beacon as one rises gently from sea level.

Stopping to catch my breath after the brisk skip up the street, I noticed our web-master extraordinaire, Matthew Stone, deliberating over fiscal matters with our former Treasurer, David Drage. A very good number of us had joined the fray by the time I got there and all were in high spirits.

Thanks to David de Rozenker-Apted’s planning, tables were reserved and so we were able to enjoy our traditional domain near the cellars in Gloucester Street.

Others were deep in conversation which appeared to be of the utmost importance. I was beginning to think that I’d need to upgrade to that fancy boutique beer from Junee to keep up….

The Society’s Christmas Party in mid December is a splendid gathering of members and friends where there is ample opportunity to catch up, contemplate the activities of the Society over the year, catch the ear of a Society officer bearer or just enjoy good company. If you haven’t yet been to one or it’s been a while, I’d thoroughly recommend it!

John Dymond
**Worth saving**

**Significant buildings under threat, and other heritage matters.**

**GOULBURN MULWAREE COUNCIL**

18 February 2014

Dear Mayor Kettle,

We have taken the liberty of sending a copy of The News, the regular newsletter of the Society, to reinforce the status of Goulburn and its environs as a major repository of Heritage & Heritage Sensitive items, not only of the built environment but all other items of the decorative and allied arts.

The Twentieth Century Heritage Society of NSW is committed to raising awareness of the dwindling stock of Heritage & Heritage Sensitive items, not only of the built environment but all other items of the decorative and allied arts.

The Society mounted a highly successful Heritage Tour over the 2013 October Long Weekend in Goulburn, Taralga, Binda and Crookwell to raise awareness of the rich heritage resources that reside in those areas. Our Members, some of whom have visited Goulburn on previous C20th tours, were thrilled with the events and the reinforcement of the highly significant heritage value of each of the areas visited.

We would also mention local resources such as those located in the Archives of the Goulburn & District Historical Society and those of Crookwell and Taralga. Members of these Societies assisted us in the arrangements for our tour. Goulburn is well served by such groups and we value their work and recognise those of Crookwell and Taralga. Members of these Societies in the Archives of the Goulburn & District Historical Society and those of Crookwell and Taralga.

The Society, with the greatest respect, encourages Council to continue its work in ensuring that resources are provided to maintain and improve the heritage of Goulburn and District, whilst acknowledging the very real issue of the economy. During our Main Street tour on the Monday, we felt that there were opportunities to engage with organisations such as the Chamber of Commerce to garner support from property owners to add value to their buildings. We have seen in other centres how a streetscape paint scheme in concert with a “Signage Strategy” can transform the area and lift the local community. The fastest growing “industry” is cultural tourism and Goulburn is eminently positioned to benefit from it.

Kindest regards

Dr Roy Lumb
B Arch., M Arch., PhD., M. ICOMOS
President
David de Rozenker-Apted
Vice President

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**LYONS HOUSE**

733 PORT HACKING ROAD, PORT HACKING

14 April 2014

Attention: Dr Tracey Avery - Director, Heritage Division

Heritage Council of New South Wales

Dear Dr Avery

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**BALLARAT CIVIC HALL**

15 March 2014

Attention: Dr Tracey Avery - Director, Heritage Division

Heritage Council of New South Wales

On behalf of the Twentieth Century Heritage Society of NSW, I write in support of the retention of the Civic Hall and urge Council to ensure that the building be given a new lease of life.

I understand that whilst it has not been used for some years and needs some refurbishment, the building is structurally sound and has the potential for refurbishment so that it can meet current standards for a large civic hall and community centre. This would maintain and continue some 60 years of social and cultural significance that the building has for the City of Ballarat.

I note that the building is not recognised as having individual significance by Council and sections of the community. Notwithstanding that, the Civic Hall has played an important role in the life of the City as a venue for many cultural, social and political events. The high quality of its architectural design, the work of prominent architects Les Coburn and Gordon Murphy, has enhanced the City since the 1950s and is a fine example of mid-twentieth century architecture influenced by the classical tradition. Sydney’s Museum of Contemporary Art, which has a similar history of being designed prior to World War II and being constructed afterwards, is a much loved feature of Central Sydney.

I am writing on behalf of the Twentieth Century Heritage Society of NSW, which supports the proposed listing of the Lyons House on the State Heritage Register. In the Society’s view the Lyons House is significant at a number of levels, fulfilling several of the assessment criteria used to evaluate heritage significance:

• It is significant because of its associations with the important and influential architect Robin Boyd, who designed some of Australia’s most outstanding houses of the post World War II era. He was also the country’s foremost architectural commentator in this period and The Lyons House is reputedly the only house designed by Boyd in Sydney.

• The house has architectural significance because its unusual and distinctive design was generated by a specific client brief and was a response to the site conditions. The materials used in its construction are characteristic of the period in which it was built, while its structural system is an integral component of its architectural design and resolution. The house is complemented by the works of two highly regarded designers, having interiors by Marion Hall Best and landscaping works by Bruce Mackenzie, both of whom are highly regarded and influential designers. It is one of the most individual post-WWII houses in New South Wales.

• The house has retained a high level of integrity, doubtless the result of its remaining in the possession of its original owner.

We firmly believe that this exemplary building warrants protection as an item of State significant cultural heritage by inclusion in the State Heritage Register.

Yours faithfully

Dr Roy Lumb
President
Sydney and an important component of its physical identity. It is quite possible that the Civic Hall occupies the same place in the minds of many who live in Ballarat.

At another level, there is mounting evidence that the retention and adaptive reuse of historic buildings is environmentally sustainable, exploiting the embodied energy in its building fabric and providing financial benefits when compared to demolition and construction of a new building.

Our Sponsor Membership of the International Coalition of Art Deco Societies over the past nineteen years has shown that countless such items throughout Australia and overseas, whilst not enjoying heritage protection, are recognised by administrations and communities and continue to serve important purposes.

We urge Council to consider sympathetic adaptive reuse of the Civic Hall so that it can retain its proper place in the community.

Yours faithfully

Dr Roy Lumby  B Arch  M Arch  PhD   M.I.COMOS
President

City of Canada Bay
14 April 2014

Dear Mayor Tsirekas

The Twentieth Century Heritage Society of NSW has been advised by one of our members that the Concord Early Childhood Centre may be under potential threat because of proposed planning changes in nearby localities.

It is very pleasing to note that this significant building is listed as a heritage item in the Canada Bay Local Environmental Plan. However, I am writing on behalf of the Society to draw Council’s attention to aspects of the building’s heritage significance of which it may not be aware. Although it is not the first baby health centre in metropolitan Sydney, it is certainly important historically and architecturally.

According to the NSW Department of Health’s history of baby health centres, Our Babies: the State’s best assets, in the early 1940s local government instrumentalities experienced a renewed interest in establishing and improving baby health centres in their localities. This led to the preparation of standard guidelines. In 1943 Concord Council built the first baby health centre in response to these guidelines, at its own expense, then handed it over to the Department of Public Health. These actions are recognised as being historically significant.

The building was sufficiently well known for the representatives of several councils to inspect it not long after it was completed when they were contemplating building a baby health centre in their local government area. In 1944 the Commonwealth Government published detailed national guidelines in a book entitled The Infant Welfare Centre as a Community Service. The Concord Baby Health Centre was featured as an ideal facility, and photographs of the building and its plan were reproduced in the book.

It is noteworthy that the Concord Baby Health Centre was completed at a time when there were severe restrictions on building materials. Its siting demonstrates a widely accepted principle that baby health centres should be located near parks to encourage their use. The building’s domestic scale and form is very characteristic of baby health centres built during the 1940s, while its architecture is distinguished by finely detailed brickwork and metal grilles. It is remarkably intact externally. We understand that its interior is also quite intact.

We trust Council will continue to maintain and protect this unique building, which has served the community well for the last 70 years. It is important at state level as well as locally.

Yours faithfully

Dr Roy Lumby
President

CONCORD EARLY CHILDHOOD CENTRE
57 WELLBANK STREET, CONCORD

City of Canada Bay
14 April 2014

Harry Seidler favoured Citroën cars, purchasing them and drawing their outlines on his architectural plans. So it was a natural fit in March 2012 for our first foray into partnered events, when Members of the Citroën Car Club of NSW joined us and the Historic Houses Trust at the Rose Seidler House for a combined visit and picnic. We are working on another partnered event to be floated in 2015.
Monterey’s Fibro Moderne...

The President and I attended a significant book launch at the Syd Frost Memorial Hall in Hawthorne Street, Ramsgate on Saturday 31st of May.

The publication is a Visitor Guide book to the fast disappearing modest fibro houses of the early 20th century in the bay side suburb of Monterey. Louise Thom, Heritage Advisor to Rockdale City Council says:

“Fast disappearing, the modest fibro houses of the early 20th century bay side suburb of Monterey show ingenuity and an eye to the architectural fashions of the time. Identified in a 1991 heritage study as “Fibro Moderne” these houses used the modernist idiom as a source book for ideas. According to Charles Pickett fibro houses are perhaps our most distinctive expression of domestic architecture. Driven by the interwar austerity measured by asbestos, the project aims to raise public appreciation and record this rare collection of houses for posterity”

Dr Charles Pickett, curator of Design and the Built Environment at The Powerhouse Museum and author of “The Fibro Frontier” presented an illustrated talk on Monterey’s unique “moderne” fibro houses and discussed the project with members of the audience. The co-author of the guide, Michael Bogle, 20th century architect, led a guided tour of the houses.

The important guide is an initiative of Rockdale City Council and was made possible by funding from the Australian Government’s ‘Your Community Heritage Program’.

Archival images were made available from the collections of the Caroline Simpson Library & Research Collections, Sydney’s Living Museums and the Powerhouse Museum. Images taken in 2013 were by Russell Workman.

Jennifer More, communication designer, designed this delightful visitor’s guide that celebrates this small but unique collection of houses.

David de Rozenker-Apted