

Sanctuary

MODERN GREEN HOMES

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57

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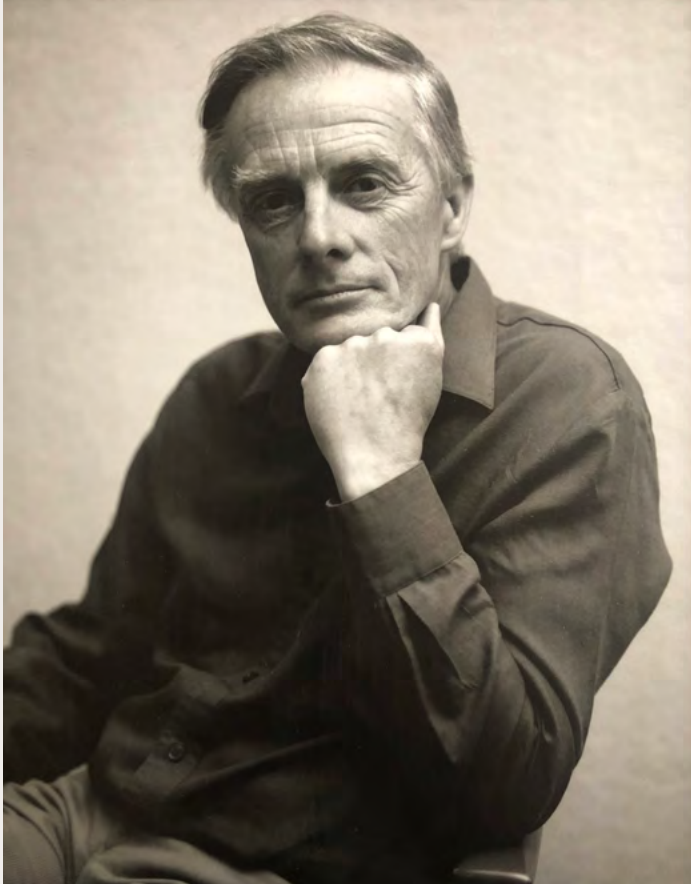
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DESIGN POWERHOUSE:

Remembering Derek Wrigley OAM, 1924-2021

WORDS Jenny Edwards



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Derek Wrigley in 1988. Image: Ben Wrigley

Architect, inventor, educator and polymath Derek Wrigley passed away last winter aged 97. In this moving tribute, building scientist Jenny Edwards of Light House Architecture & Science describes his contribution to the Canberra architectural landscape and to practical sustainable design in particular, and the inspiration he offered her own career.

Derek Wrigley led a fascinating and incredibly productive life. He had a profound impact on many people: colleagues, clients, family, friends, acquaintances and members of the public, including plenty who never met him in person but enjoyed his books and open-home events.

This is not a proper obituary; there have been many beautiful obituaries written about Derek since he passed away at winter solstice this year, and I encourage you to read them. Instead, this is a short story about my brief interactions and short friendship with Derek and how he inspired me. I hope it sheds light on one tiny portion of the great legacy he leaves and encourages others to dare to create change. Don't underestimate how big an impact your own actions can have on the people and world around you – Derek's certainly loomed large in my world, and this is my personal thanks to him.

A LONG LIFE IN BRIEF

Recently, I was rereading the articles Derek wrote for *Sanctuary's* sister publication, *Renew*, back in the noughties. At the end of the last article he is described as “a solar architectural consultant with a passion for simple and functional design”. This is a very modest description for a man who wore so many hats, so very well: architect, designer, maker, sculptor, inventor, builder, environmentalist and educator.

Derek studied architecture and town planning at Manchester University in the UK. In 1948 he emigrated to Australia where he practised as an architect and did some building before becoming a lecturer in design and construction at the New South Wales University of Technology (now the University of NSW) in 1951. He was a co-founder of the Industrial Design Council of Australia in 1956 and was awarded Life Fellowship of the Design Institute of Australia in 1980, having been an active member since it began in 1953. In 1957 he moved to Canberra as Assistant University Designer for the Australian National University (ANU). Derek's jam-packed 20-year career at the thriving new university involved the design of buildings, interiors, landscapes, graphics and more.

He left the ANU in 1977 to pursue his growing interests in passive solar design and inventing things to improve the way people live. During this period he was commissioned to design furniture for the Australian High Court, and he was a pioneer in design for the disabled, providing pro bono services and engaging other volunteers to develop bespoke devices to improve people's quality of life. He designed

and lived in a succession of homes from the late 1940s to the 1980s, each one showcasing his ingenuity and his evolving understanding of architecture, aesthetics, construction, and – increasingly – sustainable design.

In 1991 he moved into a Gary Willemssen designed townhouse in Mawson, Canberra, and set about retrofitting the property with energy saving measures, including mechanisms for reflecting sunlight and warmth into existing southern rooms, early examples of double glazing and solar panels, as well as innovative ventilation and heat recovery systems. Derek's focus shifted strongly to improving and retrofitting existing homes over this period and he published his first and very popular book in 2004: *How to Make Your Home Sustainable*. It was this aspect of his brilliant multi-faceted career that first attracted my attention.

A PERSONAL STORY

Derek was a brilliant architect, designer and inventor. I am more of a scientist. We came from different backgrounds at different times, but we shared an appreciation for great design and a passion for communication, education, sustainable housing, energy efficiency-focused retrofitting and simply getting stuff done: a gift of the gab combined with a very applied approach! Despite Derek being twice my age, we totally 'got' where the other was coming from.

I first discovered Derek in 2007, when he was 84, during a tour of his home on Sustainable House Day. It was just after I had moved back to Canberra and into an older house that was a prime candidate for a retrofit. Derek's practicality, enthusiasm and willingness to share his ideas, successes and failures was truly inspirational. (For more detail on the house itself, see Derek's *Renew* articles in 'Further reading', below.) At this time, my interest in sustainable housing as a potential change of career was just starting to percolate. Derek and the ABC TV show *Carbon Cops* that was running at this time were big ingredients in the brew that led to my new vocation.

In large part thanks to Derek's inspiration, my home underwent a major renovation and retrofit in 2011, appearing in *Sanctuary* ('Winter warmer', issue 20), winning local architecture and sustainability awards in 2012 and 2014 and becoming the ACT case study in *Your Home*, Australia's guide to sustainable homes. [Ed note: see our article on *Your Home* on p74.] While Derek had no direct input into that project, he certainly deserves some credit.

Time ticked on as I became busier working in the business of sustainable housing in the Canberra region. In late 2017 I commissioned Ben Wrigley, an excellent architectural photographer based in Melbourne but with close ties to Canberra, to photograph a couple of our projects. It was not until Ben and I were chatting as he photographed my own home that the penny dropped: his frequent trips to Canberra were to visit his father, Derek Wrigley! This was a delightful surprise to me and also explained how Ben, a non-professionally trained photographer, had developed such an



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Jenny Edwards in the glow of Derek's beautiful heliostat (pictured right) made from recycled stainless steel, outside his south-facing dining room, in May 2019. Images: David Dufty

incredible eye for design and architecture – it was genetic.

During 2018, Ben Wrigley photographed several more of our projects. Each time we would catch up for a good chat and as our friendship grew I would hear more about how Derek was going. In short, he was still going hard and going well: thinking, writing, experimenting and inventing. Ben stayed with Derek on those trips to Canberra and he would discuss Light House's new build and retrofit projects with him. Derek's interest was tweaked.

In mid-2019, I was thrilled to discover the 95-year-old Derek in the audience of a presentation I was giving on sustainable housing for the Design Institute of Australia at the Australian National University (ANU) – in fact, in a lecture theatre designed by Derek and his colleagues at the ANU Design Unit many, many years before. We chatted afterwards, gripping each other's arms in an excited semi-embrace, and I soon received a lovely invitation to visit him and discuss our work at Light House and how to spread the message of more effective house design.

On a gloriously sunny May day, my partner David and I had the great privilege of sitting with Derek and his wife Maxine in the reflected light from Derek's famous and beautiful heliostat (a large solar reflector positioned to the south of his home), enjoying fabulous company and interesting conversation. Derek's warmth, wit, generosity, intellect and inventiveness were on full display. We also got a tour of the house, which Derek had been tinkering with for more than 25 years, fine-tuning its passive solar performance and energy efficiency with a range of commercial and bespoke interventions.

THE LEGACY LIVES ON

Fast forward to autumn this year, when the Light House science team was contacted by a couple who had just purchased one of the few Canberra homes that Derek designed from scratch: Kalma House, built in 1977. Fortunately, the new owners recognised the significance of the passive solar principles



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Kalma House in 2021, designed by Derek for two CSIRO scientists and built in 1977. The Light House team were delighted to be contacted by the new owners who were seeking advice on how to renovate the home while honouring its original excellent solar passive design. Image: Jenny Edwards

employed in the home and were only after advice on how to do some clever maintenance and basic renovation work without altering the architectural integrity of the house. I jumped at the chance to be involved and arranged for my entire staff to visit the home when we conducted our assessment. Subsequently we connected the owners with one of the experienced renovation and retrofit builders we often work with (also a big Derek fan) to carry out our suggested repairs and upgrades to the ceilings, insulation and bathroom ventilation. It was great to see this example of Derek's signature 'smaller, smarter, sustainable architecture' still performing wonderfully well after more than 40 years.

A few weeks later one of Light House's recent projects, Little Loft House (see profile on p16), won two ACT architecture awards named in honour of significant contributors to the field: the Derek Wrigley Award for Sustainable Architecture and the Gene Willsford Award for Residential Alterations and Additions. I cannot overstate how significant, and delightfully surprising, this was to me and my team. It was wonderful to see a small-scale, sustainability-focused retrofit project, the type of project that Derek had become so passionate about later in his career, take out these awards. Disarmingly, a few days later I received a congratulatory email from Derek himself, who was in hospital at the time. He died two weeks later.

A month after Derek's death I had a visit from his sister Shirley Kral, a sprightly 89-year-old. Shirley lives in a lovely north-facing townhouse that Derek helped her choose in the 1980s and to which he made some judicious retrofits and modifications. Decades later, the timber-framed double-glazed sliding door on the north had deteriorated and was responsible for significant air leakage, and Shirley wanted my help to work out what to do. I am delighted that my friendship and connection with the Wrigley family continues through such sustainable housing measures – simple, and yet so important.

Derek and I have another interesting connection. I am a volunteer board member for Craft ACT, and Light House has been actively involved in their major outreach activity, the DESIGN Canberra festival, for many years. Derek was an early and integral member of this terrific organisation, founded back in 1971. I'm delighted to report that at the same time that this edition of *Sanctuary* is released, both Little Loft House by Light House and Kalma House by Derek Wrigley will be featuring in the DESIGN Canberra 2021 festival with open-home tours for members of the public (hopefully in person, but perhaps virtual). I can visualise Derek giving me a thumbs-up.

Thank you, Derek. The fact that such a wonderful advocate for passive solar design (and so much more) left this mortal coil on 22 June, the day of the year that sees the most sunshine flooding through northern windows here in the lower reaches of the southern hemisphere, seems somehow right. Your legacy shines strongly. 🍷

FURTHER READING

Derek Wrigley's personal website: www.derekwrigley.com

Derek's *Renew* magazine articles:

- 'Clever retrofitting provides more energy, light, comfort', *Renew* 76, 2001
- 'DIY solar home', *Renew* 98, 2007
- 'Pees and poos of dual flushing: a water saving solution', *Renew* 103, 2008

GET YOUR OWN DEREK WRIGLEY DESIGN

Derek's son Ben is working on the production of several hardware fixtures to his father's original mid-century designs, including coat hooks, a wooden front door handle, light fittings and even his solar reflectors for lighting southern spaces. For more information, get in touch with Ben through the contact page at www.derekwrigley.com.



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Derek with his sister Shirley Kral at the launch of an ANU exhibition focusing on his time with the university's Design Unit, March 2019. Image: Ben Wrigley