



THE UNIVERSITY OF
MELBOURNE

Faculty of Architecture,
Building and Planning

Atrium

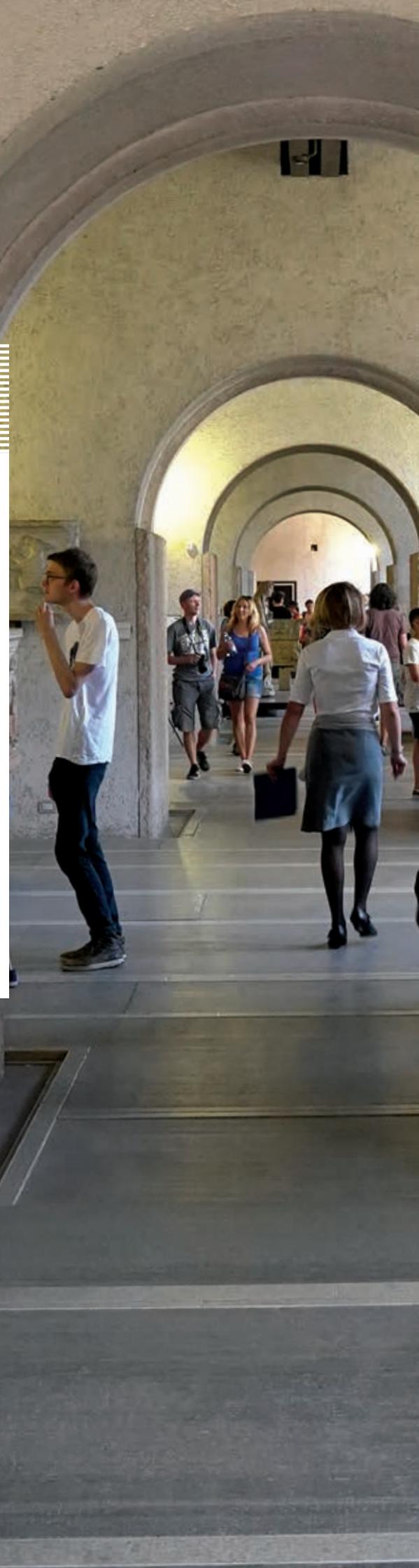
35 | 2018

msd.unimelb.edu.au



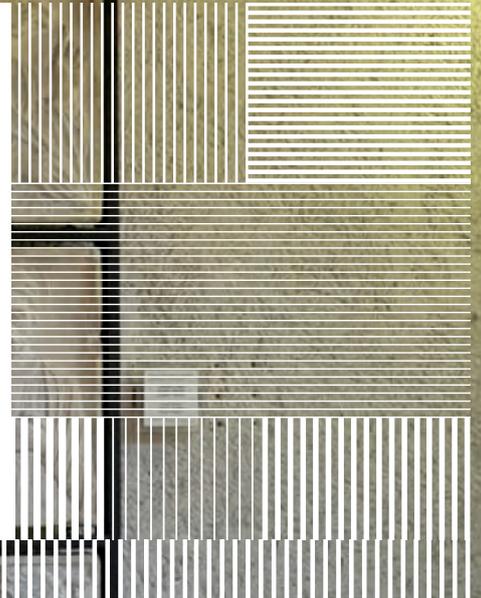
CONTENTS

Dean's message	02
Pioneering pre-fab plumbing design	04
Planning students explore Tokyo and Seoul	06
Snapshots from Venice	08
MSD at the Biennale	10
Space, learning, design and technology	12
Combining architectural and engineering expertise	14
Paying the right price for energy efficient homes	16
Our supporters	18
Been and seen	20
Inside the Faculty	22



FROM THE DEAN JULIE WILLIS

LIFE IS A SERIES OF BEGINNINGS AND ENDINGS. AT THE FACULTY OF ARCHITECTURE, BUILDING AND PLANNING, THIS ADAGE HAS NEVER BEEN MORE APPARENT THAN OVER THE PAST SEVERAL MONTHS.



A long and storied chapter ended with a celebration in June to mark the end of Professor Tom Kvan's formal tenure with the University. Many of you would have studied under the stewardship of Professor Kvan, who leaves an indelible mark on both the operational and spiritual ethos of this Faculty. This spirit will continue with the launch of the perpetual Tom Kvan Scholarship, which will support graduate coursework degree students. Tom will remain an honorary member of staff in the Faculty.

In September, Vice-Chancellor, Professor Glyn Davis closed his time at the University with a farewell gala held in our building, of which he is very fond. Hosting the gala was a wonderful opportunity to thank Professor Davis for his support of ABP over the years. University Council approved a special undertaking to recognise our outgoing Vice-Chancellor, which was announced at the gala – the MSD building will be named the Glyn Davis Building to honour his contributions to the University.

It is fair to say that under Professor Davis's term as Vice-Chancellor, the built environment professions here in Melbourne have been given a rare opportunity to flex their collective muscle in the design of learning environments and university campuses more broadly. In receiving commissions over recent years, and continue apace, our colleagues in the professions have themselves had an opportunity to expand their expertise.

I'd also like to acknowledge the sad passing of Professor Patrick Troy AO in July this year. Pat, who was awarded the D. Arch (Honoris Causa) (Melb) in 2005, was a giant in terms of Australian planning and urbanism. We will be looking at ways in which the Faculty and the Melbourne Sustainable Society Institute can honour his legacy.

On the beginnings front, I was delighted to provide a conference introduction and closing remarks at the Faculty's inaugural design symposium, which this year focused on Indigenous Design. Led by Jefa Greenaway, who I mentioned in the last edition of Atrium, the Symposium consisted of a three-day programme which drew together 30 speakers from 7 countries including Australian Indigenous participants from over 20 different nations. In Jefa's words, the Symposium "sought to create a culturally immersive experience that centred Indigenous voices, was Indigenous led and gave a flavour of Indigenous culture here in Australia."

Commencing with an exhibition opening and signature keynotes, the conference was formally opened on Day Two by Associate Provost Professor Marcia Langton. In addition to presentations, panels and tours the Symposium featured 'yarning' or 'dialogue' circles, a mode of communication, collaboration and knowledge sharing which gives equal voice and respect to participants. The Symposium was a resounding success,

receiving positive feedback from many quarters and energising all those involved to continue to support this most important of initiatives.

For a full list of speakers, events and themes please visit the conference website at msd.unimelb.edu.au/indigenous-design-symposium.

In June, I had the great pleasure of announcing the Miles Lewis Fellowship. The Fellowship, founded by the very generous philanthropic support of the Vera Moore Foundation, will support (in perpetuity) the invitation of international experts in architectural history to the Faculty as visiting scholars to engage with students and staff through studios and seminars and to give a public lecture on an annual or biennial basis. This significant gift fittingly celebrates the extraordinary scholarship and influence of Miles Lewis.

And as always, I was so pleased to connect with you, our alumni, this time in Singapore and Indonesia in July across a program of events and institutional visits. I look forward to meeting many more of you during my tenure as Dean.

Background image: James Rafferty
Portrait image: Paul Philipson



PIONEERING PRE-FAB PLUMBING DESIGN

Sophie Hill

IN FEBRUARY 2018 THE MELBOURNE SCHOOL OF DESIGN PARTNERED WITH THE RICHSTONE GROUP TO DEVELOP A PROTOTYPE FOR A FLAT-PACK PRE-FABRICATED WALL SYSTEM WHICH INCLUDES COMPLETE PLUMBING FIXTURES. THE PARTNERSHIP WAS FUNDED UNDER THE INNOVATIONS CONNECTIONS GRANT AWARDED BY THE DEPARTMENT OF INDUSTRY, INNOVATION AND SCIENCE.

Melbourne School of Design Senior Lecturers in Construction Management Dr Paulo Vaz Serra and Dr Toong-Khuan Chan comprised the research team on the project. "We were approached by Richstone Group to help them implement a Design for Manufacturing and Assembly (DfMA) methodology to the prefabrication process; enabling them to improve ease of assembly, reduce the number of components in the assembly and thus reduce cost" explains Dr Chan. DfMA is a term used to describe the dual methodology of designing for both ease of manufacture and ease of assembly.

Both Dr Chan and Dr Vaz Serra were already familiar with the Richstone Group as they had collaborated through teaching previously, in keeping with the strong emphasis on industry links within the Master of Construction management program. Students had participated in site-visits to Richstone's offices, studied their management systems and learnt from their staff via guest lectures as a way of accessing real-life industry exposure and perspectives.

"Through this project, Dr Chan and I saw a research opportunity which could result in the streamlining of a normally costly and time-heavy component of the construction process, especially in large-scale high-rise developments" says Vaz Serra.

"WE COULD ACTUALLY SEE THE FUTURE PLUMBING SECTOR TRANSFORM INTO AN ADVANCED MANUFACTURING INDUSTRY."

"Whilst there is a pre-fabricated plumbing 'pod' on the market, its application is much more restricted; you need to design specifically with the pod in mind. What's unique about our prototype is that it has an extremely flexible application and can be added to almost any building."

Dr Chan and Dr Vaz Serra developed DfMA guidelines which recognised the relationship between design choices, manufacturing processes and the ease of assembly. These guidelines informed the work of the prefab wall designers and ensured a better quality and more efficient final product overall. Dr Chan and Dr Vaz Serra then coded these guidelines into a DfMA toolkit that will be used for future improvements to the wall prototypes.

“THE POTENTIAL FOR THIS PROJECT TO POSITIVELY IMPACT BUSINESSES FINANCIALLY IS REALLY EXCITING.”

Richstone Group successfully built two wall prototypes – one was installed in a mock-up bathroom at their factory, and another was installed in a level 27 apartment in the Swanston Central development by Multiplex Construction.

The project confirmed that prefabricating the wall, complete with plumbing fixtures, significantly reduced the assembly time at a project site.

“The shift from site work to a factory improved labour productivity by a factor of two (double the productivity)” says Dr Chan. The assembly work in the factory environment was more efficient, and the amount of idle and waiting time prevalent on a high-rise building site was reduced significantly. Overall, the prototype wall resulted in a substantial 19% saving over the in-situ wall.

“Other benefits include better quality assurance, less waste, shorter installation schedules, and the requirement for less coordination on site”, adds Dr Chan, “this shift from site assembly to offsite manufacturing also allows Richstone Group to provide increased employment opportunities for manufacturing workers.

“The potential for this project to positively impact businesses financially is really exciting. We are really happy with the results this collaboration has yielded, especially given the entire venture from proposal to outcome took only six months. We could actually see the future plumbing sector transform into an advanced manufacturing industry.”

“THE SHIFT FROM SITE WORK TO A FACTORY IMPROVED LABOUR PRODUCTIVITY BY A FACTOR OF TWO (DOUBLE THE PRODUCTIVITY)”

If you are interested in collaborating with our staff and researchers please contact the Faculty’s Senior Business Development Manager Lynette Gillman:



lynette.gillman@unimelb.edu.au



Images: Toong-Khuan Chan and Paulo Vaz-Serra

PLANNING STUDENTS EXPLORE TOKYO AND SEOUL

Nicole Engwirda

A GROUP OF 16 MELBOURNE SCHOOL OF DESIGN MASTERS STUDENTS GAINED FIRSTHAND INSIGHTS INTO PLANNING PRACTICES IN ASIA PACIFIC CITIES THROUGH A STUDY TOUR TO JAPAN AND SOUTH KOREA IN JULY.

During the 10-day journey, the students heard presentations from planning institutions, consultant firms and government departments, and visited the Otemachi and Fujisawa Sustainable Smart Town in Japan, along with South Korea's Sewoon Plaza and Songdo International Business District.

It formed part of the masters-level Planning Asia Pacific Cities Studio, which explores the urban planning implications of the rapid change and development many cities in the region have experienced.

Subject leader Dr Hyung Min Kim said the study tour gave students the opportunity to explore new urban development projects and discuss these with local planners. He said Tokyo and Seoul faced challenges including natural disasters, ageing and hyper-concentration.

"These two cities are an excellent laboratory for having implemented new planning ideas to deal with urban challenges," Dr Kim said.

"Tokyo and Seoul have extensive public transport networks. They are trying to build smart cities to tackle critical urban issues."

Second-year Master of Urban Planning student Nicholas Bunney said he was attracted to the subject to learn about how other countries are tackling urban planning issues that also affect Australia. He felt the access to government agencies to hear about the thinking behind urban regeneration responses was a highlight of the trip.

For fellow second-year Urban Planning student Jan Christopher Quing, the trip was an opportunity to experience cities he'd visited previously as a tourist from a different perspective.

"Coming from an Asian city – Manila – I wanted to see the concepts I've been studying applied to an Asian city. It was more relatable for me," Mr Quing said.



“THESE TWO CITIES ARE AN EXCELLENT LABORATORY FOR HAVING IMPLEMENTED NEW PLANNING IDEAS TO DEAL WITH URBAN CHALLENGES. TOKYO AND SEOUL HAVE EXTENSIVE PUBLIC TRANSPORT NETWORKS. THEY ARE TRYING TO BUILD SMART CITIES TO TACKLE CRITICAL URBAN ISSUES.”

DR HYUNG MIN KIM

“I was also hooked by the smart cities focus. I come from a software engineering background so I really identify with that context.”

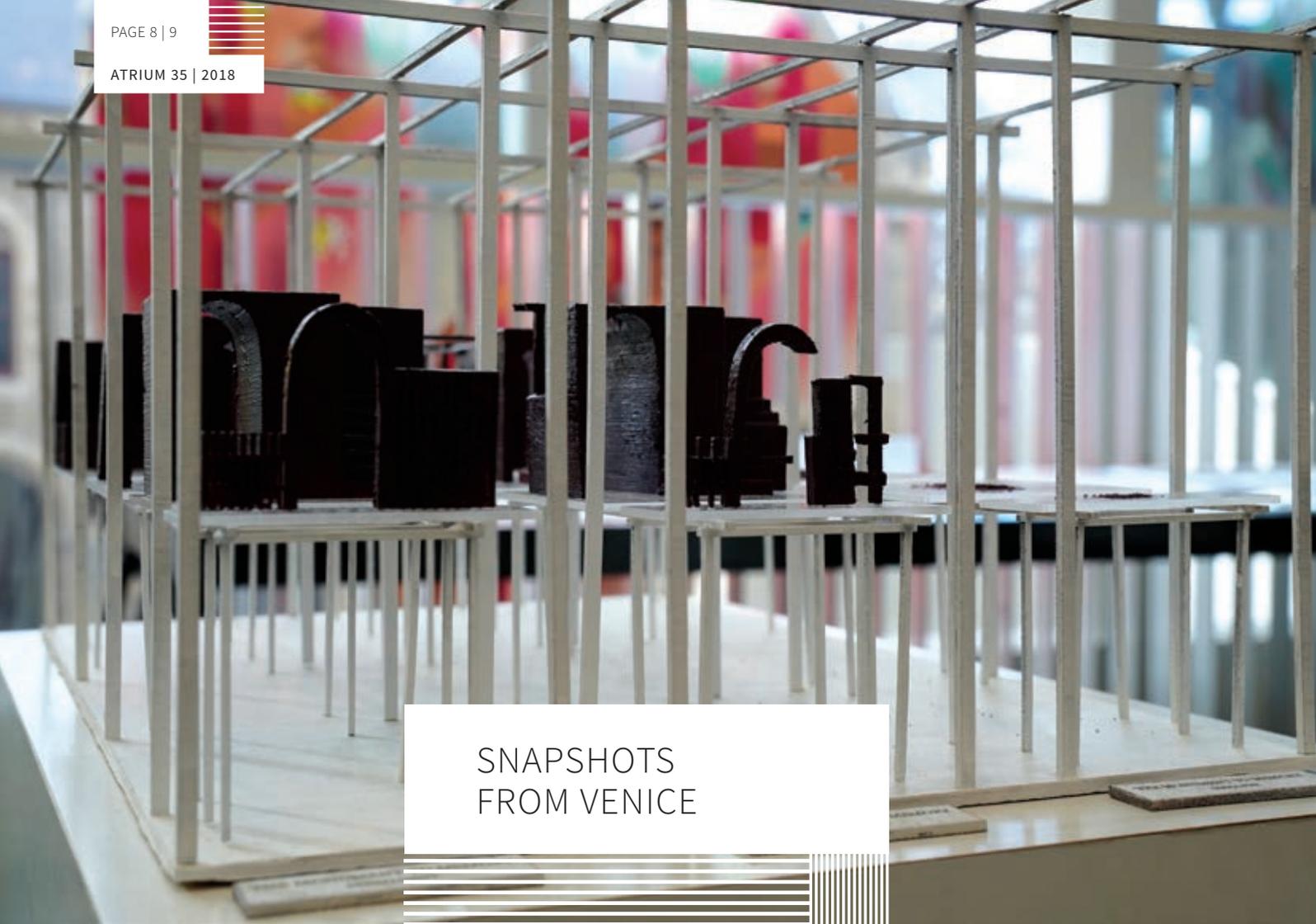
Both students highlighted the value of developing fieldwork skills as a benefit that would help inform their future work.

“I learned that it’s essential to take field notes. I do a lot of research and academic writing, but going out in the field and practising skills like photography and taking notes was really valuable,” Mr Quing said.

Mr Bunney said he also appreciated the importance of placemaking schemes and community engagement, particularly in South Korea, in bringing communities together.

Students participated in the study tour with support from an Australian Government Endeavour Mobility grant, and funding from the Faculty of Architecture, Building and Planning.

Images: Sewoon Plaza, Seoul, South Korea. Supplied by Hyung Min Kim.



SNAPSHOTS FROM VENICE



The 16th International Architecture Exhibition, organised by La Biennale de Venezia, is a grand-scale, six-month exhibition titled FREESPACE.

Melbourne School of Design staff and students engaged with FREESPACE, both as a pedagogical experience and with work presented in the exhibition.

A travelling studio brought 17 masters students to Venice to explore contemporary curatorial practices, while projects designed by the Bower Studio and lecturer Jefa Greenaway featured in the Australian Pavilion.

Images: James Rafferty and Sophie Hill







MSD AT THE BIENNALE: Travelling Studio

Sophie Hill

THIS JULY, LAUREN GRANEK WAS ONE OF 17 MASTERS STUDENTS WHO SPENT A WEEK AT THE ARCHITECTURE BIENNALE FOR THE VENICE TRAVELLING STUDIO, LED BY PROF ALAN PERT AND SCOTT WOODS.

The Venice TS provided students with the ideal means to observe, document and critically engage with the vanguard of contemporary curatorial practices currently re-defining architectural exhibition making, representation, publicity, museology, and indeed the role of the architect today.

Each student was allocated a nation in the Giardini section of the Biennale, and given a 'hidden history' which would be incorporated into and shape their final project in whichever way they chose.

What was the most inspirational part of the Venice TS experience?

The most inspirational part of the Biennale, and the Venice travelling studio as a whole, was the diversity of ideas that I was exposed to, from both the Biennale and my studio group. Studying and working in the industry has taught me to challenge and propose new ideas in architectural discourse, however, being placed in a foreign environment completely saturated with such a range of varied proposals really defied my familiar process and rationale when designing.

It was incredibly refreshing to witness architects challenging architectural norms in speculative works, providing a greater insight into national political, social, economic and architectural contexts.

Has the Venice TS experience changed the way you view architecture?

Definitely! The proposals at the Biennale were not solely architecture for architecture's sake - they had political, social and cultural purpose and content. Learning in the same environment over the years has perhaps narrowed my thinking in the discourse, which was why seeing work that really challenged architectural norms has had such an impact on my perception of architecture.

Has the experience changed the way you approach your projects?

My approach to projects has definitely been impacted by my experience in the travelling studio. During the studio I have seen works that challenge the banal, pushing ideas that are often suppressed somewhere along the lifespan of a project. The experience has shown me a sort of rebellion against common thinking and limitations in architecture and that speculative projects are far more exciting and challenging than known go-to outcomes.

What particular piece of work did you produce for the Venice TS and how did the Biennale experience shape this project?

The speculative work I created explores the idea of 'The Monument of Memory', with an examination of what we define as temporary or obsolete in object, space, architecture, place or even humanity itself. My work draws on ideas generated by Aldo Rossi's Teatro del Mondo and the Dutch National Pavilion, both closely linked to ideas of temporality and obsolescence in function and presence.

My work proposes the contention that ontological status (the nature of being) is defined by memory, thus to exist does not require embodiment or emplacement but rather a meaning and embeddedness in place.



MSD AT THE BIENNALE: Repair Exhibition

Nicole Engwirda

A MELBOURNE SCHOOL OF DESIGN STUDIO AND A PROJECT DESIGNED BY ARCHITECT AND LECTURER JEFA GREENAWAY FORM PART OF THE AUSTRALIAN PAVILION AT THE VENICE ARCHITECTURE BIENNALE.

The Bower Studio's Wave Hill Walk-off Pavilions project and Greenaway Architects' Ngarara Place are two of 15 Australian projects captured in a series of videos as part of the *Repair* exhibition, by creative directors Mauro Baracco and Louise Wright of Baracco+Wright Architects in collaboration with artist Linda Tegg.

The Bower Studio brings Master of Architecture students to work with Indigenous groups in remote Australia and Papua New Guinea to improve housing

and community infrastructure. In 2016, the Wave Hill Walk-off project brought together six designers, 12 students, eight labourers and the Gurindji people of Kalkaringi and Daguragu in the Northern Territory to give physical form to remembering the birth of Australia's Indigenous land rights movement.

Studio leader Dr David O'Brien said they had been working incrementally towards a more substantial project with the community since their initial visit in 2014.

"History has highlighted the need for strong partnerships and dialogue, with Indigenous communities leading conversations about design and construction," he said.

"A multi-year program was mapped, with us completing five smaller 'entrée' projects – all of which are helping us work towards the development of the arts/culture/ visitor centre. We share a hope to have the new centre completed before the 50th anniversary of the ceremony where Gough Whitlam symbolically poured sand into Vincent Lingiari's hand."

Jefa Greenaway designed Ngarara Place through his practice, Greenaway Architects, in collaboration with landscape designer Charles Solomon. The project is a landscape and urban design intervention in the RMIT University city campus.

"HISTORY HAS HIGHLIGHTED THE NEED FOR STRONG PARTNERSHIPS AND DIALOGUE, WITH INDIGENOUS COMMUNITIES LEADING CONVERSATIONS ABOUT DESIGN AND CONSTRUCTION."

DR DAVID O'BRIEN

Mr Greenaway said his response to the Australian Pavilion exhibition's theme was a broadening of the notion of 'repair'.

"In the first instance, Ngarara Place characterises the value of repairing culture through the built environment. The techniques employed were to reinforce that value of connecting to Country, while revealing the value of Indigenous knowledge systems," he said.

"Further, the importance of articulating connections to a palette of plant materials which connect to the project location's bioregion (namely on Kulin Nation country) was a key driver. Cultural narratives around seasonality, cultural expression and ceremonial practice, as well as the use of language, contemporary Aboriginal art and a design strategy which privileged Indigenous design voices ensured a level of cultural authority was able to tangibly inform the design solution."

SPACE, LEARNING, DESIGN AND TECHNOLOGY

Nicole Engwirda

AFTER COMPLETING A PHD AT MELBOURNE SCHOOL OF DESIGN, KATE TREGLOAN HAS RECENTLY RETURNED TO THE FACULTY AS ASSOCIATE PROFESSOR OF TEACHING AND LEARNING. HERE, SHE SHARES INSIGHTS FROM A CAREER SPANNING PRACTICE, RESEARCH AND TEACHING.

When did you start thinking about architecture as an area to explore?

I studied economics and commercial law here at the University of Melbourne straight after school. Those ways of thinking about big dynamic systems have been really useful in much of my recent work, although while I was studying economics I did spend lots of my time in the library, looking at architecture books.

I decided to give studying architecture a go, so I enrolled in the first year at the University of New South Wales as a means of testing it out and seeing how it clicked – and I just loved it from the beginning.

I love space, and I love design. I'm fascinated by the way people use space and the potential and richness of these interactions. I am endlessly fascinated by the way the built environment can respond to, support and express a community's needs and interests.

How did your career progress after your studies?

I worked in practice in Sydney, mostly on residential and small-scale commercial projects. One really interesting project was with Bruce Rickard on a dual occupancy with a Walter Burley Griffin house in Castlecrag. Later, I spent time in Tasmania teaching sessionally, and had my own practice.

I worked on low-cost housing and on building sites for designers I met there. It was fantastic to have hands-on experience with materials and develop a deeper understanding of construction. After returning to Sydney and working on a variety of projects – including interior architecture and exhibition design – I came back to Melbourne about 12 years ago.

There are some really consistent themes running through my career so far: space and making, education and learning. They're really central to the way I understand the world and the things I find interesting.

Your history with this Faculty includes completing your PhD here. What was your area of research?

It was called *Design Epiphany and the Opportunities of Wickedness*. The research investigated moments of insight in design processes, application in wicked problems, and the way the construction of those problems offer opportunities for designers to find a way in. I was really interested to develop an understanding of how different people experience those moments, how different disciplines explored and explained those moments, and how different practitioners and researchers talked about designing as an activity.

One outcome was to develop a model of designing relevant to teaching and learning in design studios and other spaces of learning for professional students, as well as undergraduates. It has helped me think about how we can support each student to engage meaningfully with designing and creative thinking, and to develop positive contributions through their experiences of insight.

You've now returned to the Faculty as a staff member, what is the focus of your new role?

The Faculty is supporting a strategic focus on teaching and learning with a new Built

Environment Learning and Teaching group (BELT). Our job is to celebrate and build on the great teaching already happening all over the Faculty, supporting great quality learning experiences, and communication of content that will help our graduates as they move into and impact the world. We'll be looking at what we can learn from good practice pedagogy research across the University and elsewhere, and how this can be tailored and applied for built environment disciplines. There are approaches to learning and student engagement that are only just emerging, so working with staff and students to make best use of those for built environment teaching at ABP is a really fantastic challenge and a great opportunity.

Your recent research includes projects such as My Home Space and My Support Space – what role do you see for architects and designers in the field of health and disability support?

I think there's great potential for designers and built environment practitioners to engage with other disciplines. Interdisciplinary research and professional work are really key opportunities. I think people who come from creative disciplines bring a skill set that doesn't exist elsewhere.

I came to these interdisciplinary research projects while working at Monash University because I had a background in researching assessment and interdisciplinary learning, and an interest in design thinking. The first project, developed with a colleague from Occupational Therapy, was a framework for post-occupancy evaluation of supported housing models for people with significant and ongoing disability as a result of road trauma. We developed criteria, methodology and evidence frameworks.

As part of our research work, we mapped the use of interactive assisted technologies, where people were spending their time,

where the majority of support was provided and what people could and couldn't reach. This all formed part of understanding how to talk about success in order to evaluate the environments.

We also tailored communication approaches including interactive reports and navigable panoramas. The panoramas are simple digital environments people can explore and learn from. De-identified images represent different apartments, and markers flag specific things to notice and consider for designers, investors, potential clients, families and supporters.

That suite of projects and our interdisciplinary team has grown over time. More recently My Home Space focused on Specialist Disability Accommodation – funding of supported housing for some participants in the National Disability Insurance Scheme. The findings are set up to be available and transferrable to a whole range of people. We developed navigable gamespaces, not as models for housing, but a way to spatially communicate a really rich understanding of these issues for designers, so they can apply that learning in their own projects.

Our most recent project, My Support Space, launched in August. It's a resource for students and health professionals supporting people with acquired brain injury. My contribution was in the design and delivery platform for online learning tools.

My work always ends up being at the intersection of space, learning, design and technology. My research work as well as this new role will draw on all of these themes. I am really looking forward to finding many new opportunities and combinations, and to seeing what we will make next.

Photograph: James Rafferty



“WHILE I WAS STUDYING ECONOMICS I DID SPEND LOTS OF MY TIME IN THE LIBRARY, LOOKING AT ARCHITECTURE BOOKS.”

ASSOCIATE PROFESSOR
KATE TREGLOAN

COMBINING
ARCHITECTURAL
AND ENGINEERING
EXPERTISE

Sara Brocklesby



AFTER MAKING AN INTERNATIONAL ENGINEERING CAREER AT GLOBAL MULTINATIONAL ARUP, ENTERPRISE PROFESSOR BRENDON MCNIVEN IS SHAPING OUR ARCHITECTURAL ENGINEERING CURRICULUM.



Some of the most loved and admired buildings in the world were created when both architects and engineers wove their expertise together in brilliant ways. The Sydney Opera House, the Centre Pompidou and the Labyrinth thermal system at Federation Square are just a few examples where an ingenious coupling of the professions has delivered innovation. The future holds exciting possibilities for designing with sustainability, environmental engineering and passive systems just some areas where this marriage is and will be critical.

Architectural engineering is relatively new in the Australian higher education landscape. Both architecture and engineering have been taught for decades – in the University of Melbourne’s case, for more than a century – but combining them into one program is more commonly seen in Europe.

Part of introducing this new program was finding the right person to ensure we are on the right track, meeting the needs of industry and our students.

This is where Professor Brendon McNiven comes in.

“Right from day one of my career at Arup I was aware of the interplay between architecture and engineering – how a job is authored, makes it onto paper, and is then built. The relationship between the disciplines is quite complex. There are both rockstar engineers and architects: sometimes the power of an individual designer carries through to a good result; other times it requires people to come together as a champion team and build off each other. I am currently conducting research that looks at how professionals in each discipline think, what the differences are, and how this plays out in the buildings we create.”

The potential of combining the professions became obvious to Professor McNiven when he worked on the London Eye as a young engineer.

“We – Arup – along with the architects, David Marks and Julia Barfield, came up with a ‘whole of project’ design statement that took into account a range of inputs and outputs, including sustainability, which was in its early days in the nineties. The approach valued everything within the build and output process including architecture and community sentiment. It stopped being architecture and it stopped being engineering, it was purely about design in the broadest sense.

“The penny dropped, for me, with this project – it epitomised what architectural engineering can achieve. In another context, I have really enjoyed working in the Melbourne School of Design building, it is another good example of how an architectural engineering approach can achieve something special.”

This international perspective is also important. “Part of my role at the Melbourne School of Design is researching what is happening overseas, in terms of architectural engineering education, and ensuring that our curriculum is a pre-eminent benchmark in Australia, but also an exemplar internationally.”

As our first group of Master of Architectural Engineering students completes their studies, they are entering an Australian industry with an appetite for their unique skillset. The masters program is unusual in the Australian context, in that it is designed to achieve dual accreditation – from both the Architectural Accreditation Council of Australia, and Engineers Australia. Students will have the choice to practice as either architects or engineers once they graduate. Professor McNiven explains, “It’s the right time in the industry for architectural engineering. Clients understand it and industry is really calling out for architectural engineers. The infrastructure industry is much more on the front foot here, more so than the building industry, although that will change very soon.

“When you build a new train line or a new train station, it’s the engineering considerations driving and motivating the project. These days however, clients and engineers see the value of bringing in an architect to help design it.”

Professor McNiven is an advocate for the architectural profession and the ways in which it embraces its fellow built environment disciplines. “I think it’s only natural that we will see more multidisciplinary teams and projects, particularly as sustainability considerations drive our work. The Faculty of Architecture, Building and Planning, with its unusual mix of disciplines, is a great place for an architectural engineering program to develop.

“I believe your work has a large part to play in defining how you see the world, and I feel strongly that engineering and architecture are great professions to commit to. You get to understand nature, how the world functions – physics, motion, forces; you get to understand how society works – you’re building for people.”

If you would like more detail about the Master of Architectural Engineering or have questions about the program, Professor McNiven would like to hear from you



brendon.mcniven@unimelb.edu.au

Learn more

study.msd.unimelb.edu.au/programs/master-of-architectural-engineering/overview

PAYING THE RIGHT PRICE FOR ENERGY EFFICIENT HOMES

Nicole Engwirda

NEW RESEARCH FINDS THAT PEOPLE ARE WILLING TO PAY MORE FOR ENERGY EFFICIENT HOUSING, MAKING THE CASE FOR A MANDATORY NATIONAL RATING SYSTEM FOR EXISTING HOMES.

“Location, location, location” is a time-honoured mantra for pricing property, but research shows buyers and renters are also prepared to pay a premium for energy efficiency.

A new study, published in *Energy Economics*, has analysed tens of thousands of property transactions over five years from 2011-16 in the Australian Capital Territory, where it is mandatory to disclose the energy efficiency rating (EER) when selling a home.

The analysis, which factored in other characteristics that drive pricing, found that generally the higher the rating, the higher the price or rent.

University of Melbourne property researcher Dr Georgia Warren-Myers says the results are evidence EERs carry weight with buyers and renters, and provide a clear market signal for builders and owners to install more energy efficient systems.

“By providing a mandatory disclosure program Australia wide, decision-making by owners, occupiers and landlords will drive more energy efficient dwellings, potentially reducing carbon emissions associated with housing,” says Dr Warren-Myers, who conducted the research with University of Cambridge visiting fellow Dr Franz Fuerst.

Generally, they found prices rise as the star rating increases. Compared with three-star properties, properties rated five and six attracted sale premiums of 2 and 2.4 per cent respectively. But properties that went further on energy efficiency to gain a seven-star rating attracted heftier premiums of up to 9.4 per cent.



IF WE WANT TO REALLY DRIVE ENERGY EFFICIENCY IN HOMES AND HAVE A BETTER PRODUCT IN THE MARKET, WE NEED TO LOOK AT APPLYING THIS AUSTRALIA-WIDE,

DR GEORGIA WARREN-MYERS.

The ACT is the only Australian State or Territory to introduce mandatory rating disclosure for all dwellings, while nationally only new dwellings need a rating – a minimum six-star rating out of a possible 10. In the ACT these ratings must be displayed during any sales process and there are fines for breaches. The system is limited in the rental market, where Dr Warren-Myers points to loopholes that mean landlords can, and do, avoid disclosing an EER – such as not obtaining a rating to disclose.

“The data shows people are valuing energy efficiency and making decisions based on the energy efficiency portrayed in these ratings. It has become one of the factors that people consider when they’re looking. They see the number of bedrooms, the number of bathrooms, carparks – and they see the energy star rating,” she says.

Dr Warren-Myers says the jump in prices for seven-star properties suggests homeowners recognise the value of going above the minimum six-star standard for new homes.

“Home owners know that new homes meet a minimum six-star level, and want to be better than the standard,” she says. “They’re going to that seven-star mark to differentiate themselves from that baseline.

Interestingly, properties with eight stars only earned a 2.8 per cent premium, which she says may reflect the small sample size. Only 0.3 per cent of the 31,000 sold properties covered in the study had eight-star ratings. At the bottom end of the ratings, zero-star and one-star rated properties sold at a 2.8 and 2.4 per cent discount to three-star rated properties.

In the rental market, five and six-star properties rented at a 3.5 and 3.6 per cent premium respectively compared to three-star properties. However, the gains flattened at seven and eight stars with premiums of 2.6 per cent and 3.5 per cent respectively.

More than half the 67,600 rental properties analysed in the study hadn’t disclosed an efficiency rating. And it is likely to be low rated properties that don’t have an energy rating, says Dr Warren-Myers.

For tenants, who have limited capacity to make changes to a property, it means having less information to make rental decisions and the potential to be stuck with a ‘lemon’.

“They can effectively be penalised, from the perspective of household bills, but also because they may end up still paying a standard rental price for a property that doesn’t actually perform,” says Dr Warren-Myers.

She says this lack of transparency needs to be addressed by closing the current loopholes on rental properties in the ACT. More broadly, Dr Warren-Myers argues, the results in the ACT support the roll out of a ratings disclosure system nationally as a way to encourage a broader take up of energy efficiency in existing properties, particularly in the rental market where landlords lack incentives. This is because tenants, rather than landlords, have to pay for energy costs.

But as this research demonstrates, a boost in rental income and resale value can be offset against the initial outlay of an efficiency upgrade.

“If we want to really drive energy efficiency in homes and have a better product in the market, we need to look at applying this Australia-wide,” says Dr Warren-Myers.

“In the new construction sector, under the building code we have a mandatory minimum requirement, which is a six-star home. But there is nothing that existing homeowners, in the rest of Australia, can actually do to understand what the energy efficiency of their home is at this point in time.”

“We already have a national rating system mandatory at the new build level. By applying that to the rest of Australia for existing buildings, at least we can start comparing all buildings on the same basis.”

This story was originally published on Pursuit, the University of Melbourne’s research news site. Read more pursuit.unimelb.edu.au/design

OUR SUPPORTERS

SCHOLARSHIPS AND AWARDS IN PERPETUITY

The Faculty would like to thank the generous donors that have in recent years endowed scholarships and awards in perpetuity, ensuring that outstanding students receive support to excel in their studies and research, and make a contribution to shaping the built environment.

Steve Calhoun

Creative Futures

The Bharat Dave Scholarship supporters fund

Denton Corker Marshall

The Forster Family Foundation

The Hugh O'Neill Scholarship supporters fund

Alasdair N Fraser & Jenny Fraser

Anthony Auh Chew Kang

Vera Moore Foundation

SUPPORT TO THE FACULTY OF ABP: 2017 –2018

The Faculty of Architecture, Building and Planning is grateful to the generous individuals, families and companies listed below who have donated to provide better opportunities for our students and staff over the period January 1 2017 to September 12 2018.

\$500,000 – \$999,999

The Myer Foundation

\$100,000 – \$499,999

Penny Morris

\$10,000 – \$99,999

Ron Billard

Ronald J Ferguson

John P Henderson

Lovell Chen

Ewan Ogilvy

Peter G Rowe

Penelope Seidler AM

Anonymous

\$1,000 – \$9,999

Architects Registration

Board of Victoria

Jeff Arnold

BEP Akitek in memory

of Kington Loo

Rebecca L Bond

The Climate Reality Project

John Hasker AM &

Jennifer F Hasker

George Hatzisavvas

Dominique Hes

Tom Kvan & Justyna

Karakiewicz

Hank Koning & Julie Eizenberg

Helen I Jessup

Lim Chong Nam

Robert McGauran

George A Michell AM

Andrew Middleton &

Clare Harper

John Middleton &

Carole Middleton

National Trust of Australia

(Victoria)

Laurence J Parsons

Steven L Pell

Haripriya Rangan

Kelvin J Steel

Andrew Stobart

The Teng Family (Dato' Teng

Chew Hoe

& Datin Chew Ying Teng Chiu,

Pe-Khai Teng, Pe-Yang Teng,

Hsin Y Teng)

Julie Willis

6 Anonymous Donors

Up to \$999

Rizqi M Abmar

Guy M Abrahams

Richard D Allen

Anona F Armstrong AM

William M Barr

Huan Borland

Deborah Bourke

Mitchell B Brady

Annmarie Brennan

Gerald H Bridgland

John S Castles AM

The Late Max Chester OAM

Leslie Chung

Fred Coates & Faye Coates

Suzanne J Dance &

Jason Pickford

Peter Dalton

Robyn J Dalziel

Andrew Dickson

Linh M Do

Michael Doherty

Elvira S Edmond

Margaret L Edmond

Clive J Fredman

Alasdair N Fraser & Jenny Fraser

Delwyn Freestone

Angela Frimberger

Irene Giavasoglou

Marcus Gibson

Lynette O Gillman

Philip Goad & Anna Johnston

David Gomeze

Elisabeth F Grove

David Grutzner

Robin Gunning

Llew Gwyther

Julian F Hamilton

Chris Harvey

James L Holt

Matthew Ivezic

Sukhjit Kaur Jagjit Singh

Brigitta D Johnson

Peter L Jones

Graeme Kelleher

Joseph V Lam

Rizky Lasmaratti

Miles Lewis AM & Mary P Lewis

David B Logan

Peter N Louden

Thomas Y Lui

Andrea Macdonald

James M Macneil

Desmond Maddalena

Marguerite Marshall

Dennis G Martin

Teresa Martin-Lim

Bernard P McNamara

Daniel M Meszaros

Gregory K Missingham

& Deidre J Missingham

Barry Mitchell

Patricia Morton & Bruce Morton

Brendan H Murphy

Bernard P McNamara

James Neil

Clare L Newton

Tom Paciocco

Randall Pearce

David Pryor

Peter J Quigley

Jarran A Rapsey

Peter Rooks

Philip C Rounsevell

Jan Schapper

Stri N Setiaji

Michael A Sharp

Uren H Symons

Diane R Tibbits

Mary Traitsis

Sylvia Traitsis

Peter Epaminondas Tsitas

Jeffrey J Turnbull

Serman U Uluca

John Vernon & Jenny Vernon

Peter Williams &

Patricia Williams

Craig C Wilson

Allan F Willingham

Sarah Wood

Tristan Y Wong

Maureen X Wu

Joseph Zagari

9 Anonymous Donors

DEAN'S HONOURS AWARDS

The Faculty also thanks the generous donors that have supported the Dean's Honours Awards during their life time or through a will, supporting the Faculty's acknowledgement of academic excellence.

AECOM Australia	Graham Treloar Fellowship
Architects Registration Board of Victoria	The Late Sir John Grice
Australian Communities Foundation	The Hansen Family
Australian Institute of Building	John W Henderson
Australian Property Institute	The Late Peter Pincas Kaufman
Bates Smart	The Ledger Memorial Fund
Frank A Billson	The Late Charles D Lloyd
Catherin Bull	The Macdonald Family (Margaret Macdonald & the Late Roderick I Macdonald, John Macdonald, Roderick W Macdonald)
Chartered Institute of Building	The Late Rina Mackley
Betty Chen	Grant F Marani
Department of Environment, Land, Water and Planning	The Late Nell Norris
DesignInc	Ewan Ogilvy
Dulux	Royal Institution of Chartered Surveyors
Ellis Stones Memorial Fund	Jan Schapper
Eric Ormond Baker Charitable Fund	SGS Australia
Richard Falkinger AO	SJB Architects
The Late Noemi Fooks	Tarkett Australia



We have made our best attempt to ensure the list is correct, but we are aware that our records may not be complete. If you notice any errors or omissions please contact Andrew Middleton, ABP Development Manager, on (03) 8344 3111 or miaj@unimelb.edu.au.

GIVING TO THE MSD BUILDING: \$10,000+

The Faculty is indebted to the many visionary corporations, groups and individuals who have contributed towards our Faculty's MSD Building.

\$1,000,000 or above

Dulux Australia

\$500,000 or above

Andrew Lee King Fun
Hansen Yuncken & The Peter Hansen Family Fund

\$100,000 - \$499,999

BEP Akitek in memory of Kington Loo
Hijjas bin Kasturi & Angela Hijjas
Alan Choe
Koh Seow Chuan & Lim Wen Gin
Douglas K Y Joaquina Lee
Lovell Chen
The Teo Family (Daniel T H Teo & Goh Soo Khim, Dana K Y Teo, Rachel K C Teo)
Alfred H K Wong & Joyce Wong
Anonymous

\$50,000 - \$99,999

Commemorative Organization for the Japan World Exposition (1970)
Crema Group
Noel R Henderson
Ruby S H Lai-Chuah
Dato' Sri John KS Lau
Marian (Lobban) & Guy Paynter
Roger Y P Ma & Vickie Y Y Fung
Urbis

\$10,000 - \$49,999

Ted N Baillieu MP & Robyn Baillieu
Ron Billard
The Late Nicholas Ming Sing Chan
Glyn Davis AC
Forbo Flooring Systems
Peter Holland

Charles Justin & Leah Justin
James L Kelly
Kirin and Lion
Tom & Justyna Karakiewicz
Thomas Law
Geoff Lawler PSM
Leong Yew Kooi & Lau Pei Yan
Miles Lewis AM & Mary P Lewis
LU Simon Builders
The Late Roderick Macdonald & Margaret Macdonald
Grant F Marani & Anne Rieselbach
Peter Martin & Sarah Martin
Robert McGauran
Mitsubishi Australia Ltd.
North Fawkner Joinery
Ooi Choun Teng
Jon Peacock
Quah Sek Cheng
Peter G Rowe
Sim Yaw Hang & Wai Kuen Priscilla Wong
Mr Soekrisman
Alan Synman & Zorita Sormann
Tan Kah Hoe & The Late Wong Swee Yin
Datuk Tan Pei Ing
Dato' Peter Tan & Phillip Tan
Teh Leong Meng
The Teng Family (Dato' Teng Chew Hoe & Datin Chew Ying Teng Chiu, Pe-Khai Teng, Pe-Yang Teng, Hsin Y Teng)
The Tibbits Family, Dorothy & Robin Underwood
Peter Epaminondas Tsitas
Wee Choo Keng & Family
Clarence Wing-Man Wong
Woo Yip Yee & Gan Kam Ming
Wu Hon Cheong
Yang Soo Suan & Tan Ai Fong
Jay Yeunh Wee-Tiong & Chew Siew Mae

GIFTS IN YOUR WILL TO THE FACULTY OF ABP

The Faculty of ABP is grateful to its supporters who have made a gift in their will, so their legacy will enrich the lives of future generations.

Estate of John Stevens Gawler

Estate of Donald Emsley Napier



01



02



03



03



04



05



05

BEEN & SEEN

01

On June 28 2018, the Faculty of ABP's second alumni network – the ABP Future Leaders – launched with a sold out event at Woods Bagot. Congratulations to the network volunteers!

02

ABP alumni and young architects Kamil Muhammad and Brahmastyo Puji presented their inspiring work on a local training centre for organic agriculture to UoM alumni and guests at a July dinner in Jakarta.

03

More than 500 alumni and guests across two lecture theatres attended Professor Mark Stevenson's lecture Understanding the Complex City: Decisions for Healthy Future Cities in May – and many also joined us for the reception following the lecture.

04

In August, the Faculty visited its alumni in Perth for the very first time. Professors Philip Goad and Hannah Lewi presented their upcoming book on modernist Australian architecture to an engaged alumni audience

05

The Women of ABP Alumni Network held their second 2018 event in the Melbourne offices of Multiplex.

FOSTERING THE POSITIVE POTENTIAL OF DESIGN

Andrew Middleton



IMAGINE IF EVERY STUDENT HAD IN THE BACK OF THEIR MIND HOW THE DESIGNS THEY CREATE DELIVER SOCIAL AND ECOLOGICAL BENEFITS. WOULD THEY TAKE THIS POSITIVE APPROACH INTO THEIR CAREER AS THEY WORK ON DESIGNS THAT SHAPE OUR BUILT ENVIRONMENT?

The Positive Legacy of Design Awards in the Faculty of ABP are the brainchild of senior academic and member of the Thrive Research Hub, Dr Dominique Hes (BSc(1995)). Conceived to encourage graduate students to consider social benefits when responding to their design studio's challenges, the initiative was made possible by the philanthropic support of Ewan Ogilvy's (MArch (1983)) Green Cities Innovation Fund, through the Australian Communities Foundation.

An undergraduate award was subsequently introduced. Thanks to support from the initial benefactors, along with Tarkett and DesignInc, the Positive Legacy of Design awards have now celebrated and rewarded two cohorts of students, in 2017 and 2018, whose work demonstrated that positive social and ecological outcomes are possible through design.

Brigit Skilbeck, the 2017 undergraduate recipient, said the awards would help encourage students across the Faculty to give greater consideration to sustainability and legacy.

"It's heart-warming to know that there are companies and individual donors who care as much as I do about sustainability and positive change," she said.

Other recipients have highlighted how the award has inspired them to give back themselves, and look forward to helping future students achieve their goals.

The future of design is broader than buildings that make us gasp in awe. It is consideration for the future of people, our environment and how we live. Alumni, friends of the Faculty and firms, like Denton Corker Marshall, Bates Smart and Grimshaw Architects, have seen the importance of encouraging good design from students to ensure the world they create as graduates is better for future generations.

We aim to extend the Positive Legacy of Design Awards in perpetuity and welcome your support in achieving this goal. We invite you to speak to Andrew Middleton, the Senior Development Manager, if you would like to make a valued contribution to this or another cause within ABP.



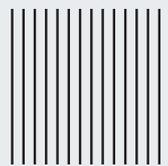
miaj@unimelb.edu.au

Photograph of Brigit Skilbeck: Paul Philipson



"IT'S HEART-WARMING TO KNOW THAT THERE ARE COMPANIES AND INDIVIDUAL DONORS WHO CARE AS MUCH AS I DO ABOUT SUSTAINABILITY AND POSITIVE CHANGE."

BRIGIT SKILBECK, 2017 Undergraduate Recipient



INSIDE THE FACULTY

News, People, Recent Events

NEWS AND PEOPLE

Building Connections: Schools as Community Hubs is a new ARC Linkage Project that will generate new knowledge to plan, design, govern and manage school facilities and infrastructure, enabling schools to be maximised as 'community hubs'. The project, led by **Ben Cleveland** from the **Learning Environments Applied Research Network (LEARN)**, aims to support school systems and planning authorities to rethink how schools engage with local communities.

The University of Melbourne and Harvard University announced the appointment of **Philip Goad** as the Gough Whitlam and Malcolm Fraser Chair in Australian Studies for the 2019-2020 academic year. Joining Harvard's Department of the History of Art and Architecture, Professor Goad will spend the year teaching courses on Australian architecture and its connection to the Americas.

Kim Dovey presented a Senate Occasional Lecture 'How do buildings shape politics?' in May, as part of the 30th birthday celebrations for Parliament House. An edited version of the lecture was published on *The Conversation* as an essay: 'How to fix Parliament House – what about some neighbours?'

The **Australian Urban Research Infrastructure Network** was awarded \$7.4 million by the Federal Government in its National Research Infrastructure Investment Plan. The Investment Plan runs from 2017-2018 to 2021-2022. The National Collaborative Research Infrastructure Strategy has also been funded \$18.8 million in the same Roadmap research stream, linking data sets for research and government use in urban environments and transport.

Mark Stevenson spoke at the EDGE national architecture conference, presented by the Australian Institute of Architects, on the Gold Coast in June.

Jennifer Sheridan, Kirsten Larsen and Faculty of Veterinary and Agricultural Sciences colleague Rachel Carey released a new **Foodprint Melbourne** report 'Food for thought: Challenges and opportunities for farming in Melbourne's foodbowl'. The report investigated the planning, agriculture and water policy needed to support peri-urban farming, reduce landbanking and speculation on the city fringe, and maintain the city's green wedges.

The **Melbourne Sustainable Society Institute** hosted the Australian launch of Nature Sustainability journal in July. An audience from institutions across Australia heard from Chief Editor Monica Contestabile and a panel of sustainability experts, speaking about the crucial interface of sustainability policy and research.

Jillian Walliss and **Kim Dovey** were recognised at the Australian Institute of Landscape Architects' 2018 Victorian Landscape Architecture Awards in August. *Urban Choreography: Central Melbourne 1985-*, by Kim Dovey, Rob Adams and Ronald Jones and the *Embracing the Asian Century* edition of *Landscape Architecture Australia* by Jillian Walliss, Heike Rahmann and Ricky Ray Ricardo won in the Research Policy and Communications category.

Jefa Greenaway, with Russell Kennedy and Meghan Kelly from Deakin University, received the 2018 Victorian Premier's Design Award of the Year for the International Indigenous Design Charter.

Transforming Housing researchers shared three reports focused on the 'Tap turners and game changers' of affordable housing in Melbourne. **Carolyn Whitzman, Matthew Palm** and **Katrina Raynor** spoke about their research at a public event in October.



RECENT EVENTS

Winter MSDx

Melbourne School of Design welcomed hundreds of guests to celebrate the opening of mid-year MSDx in June. The exhibition showcased an extensive collection of student work, with projects from undergraduate through to thesis students displayed across four levels of the building. The opening night included the presentation of a new award, the Bates Smart graduate prize for outstanding design. Bates Smart studio director Tim Leslie presented the award to Master of Architecture student Ruby So.

AA Visiting School: New Paper

This year's Architectural Association Visiting School reconsidered architecture through the lenses of today's culture and shared visions of what is to come. The intensive design studio included a public lecture series featuring speakers from Factory Fifteen, TTT, Space Popular, Different, Cube Zero, A Cuarta Parede Films and United Make. An exhibition of student work showcased outcomes of the 12-day workshop, exploring mixed reality technology through gaming engines, cinematic film and daring animations.

Indigenous Design – Past | Present | Future symposium

The Faculty's inaugural public symposium in July brought together local and international practitioners to explore the role of Indigenous design. Convened by Jefa Greenaway, the Indigenous Design – Past | Present | Future symposium sought to create a culturally immersive experience and reveal design approaches which straddle interconnected themes of culture, Country and identity. The event featured 30 speakers from seven countries, beginning with a keynote lecture from Lesotho architect Mphethi Morojele. The varied presentations covered cultural heritage, design practice and methodologies, Indigenous intellectual property, landscape, design advocacy, decolonising curriculum

and re-establishing connections to language. To coincide with the symposium, Indigenizen Montreal was re-exhibited at Melbourne School of Design following its exhibition at the World Design Summit in 2017.

The Australian Ugliness exhibition

This exhibition by artist Eugenia Lim was a keynote of the 2018 Open House Melbourne July program and installed at Melbourne School of Design alongside a free month-long program of related talks and special events. *The Australian Ugliness* exhibition paid homage to Robin Boyd and his book of the same name, while exploring the ethics and aesthetics of the nation today. In a three-channel video installation, housed within a pavilion designed by WOWOWA as a reinterpretation of Boyd's 1970 Neptune's Fishbowl, Eugenia brought forward a female, performative and Asian-Australian perspective to the screens and spaces of Australia.

PERFECTION by Science Gallery Melbourne

Melbourne School of Design hosted PERFECTION, part experiment / part exhibition by Science Gallery Melbourne, from September to November. Featuring 22 artworks from across the globe, from artists, musicians, mathematicians, architects, designers, psychologists and surgeons, PERFECTION explored what it means to pursue perfection in a non-perfect world. A series of events accompanied the exhibition, including a lecture by post-disciplinary artist, designer and consultant Adam Peacock, who visited Melbourne School of Design as the 2018 recipient of the Robert Garland Treseder Fellowship. His project 'Genetics Gym', exhibited within PERFECTION, attempts to uncover the consumer psychology behind how and why we might want to change ourselves if we had the ability to do so through the lens of genetic technology and artificial intelligence.



**PUBLISHED BY
THE FACULTY OF
ARCHITECTURE,
BUILDING AND PLANNING**

OCTOBER 2018

Editor: Michelle
Segal-Crawford
Design: Studio Binocular
Authorised by Professor
Julie Willis, Dean Faculty
of Architecture, Building
and Planning

CONTACT

Faculty of Architecture,
Building & Planning
University of Melbourne
Victoria 3010 Australia
Phone: + 61 3 8344 6417
msd.unimelb.edu.au

Cover image: Student work from
Digital Design subject displayed at
Winter MSDx 2018. Photograph: by
James Rafferty

35 | 2018

ISSN 1447-1728
The University of Melbourne
CRICOS provider code: 00116K