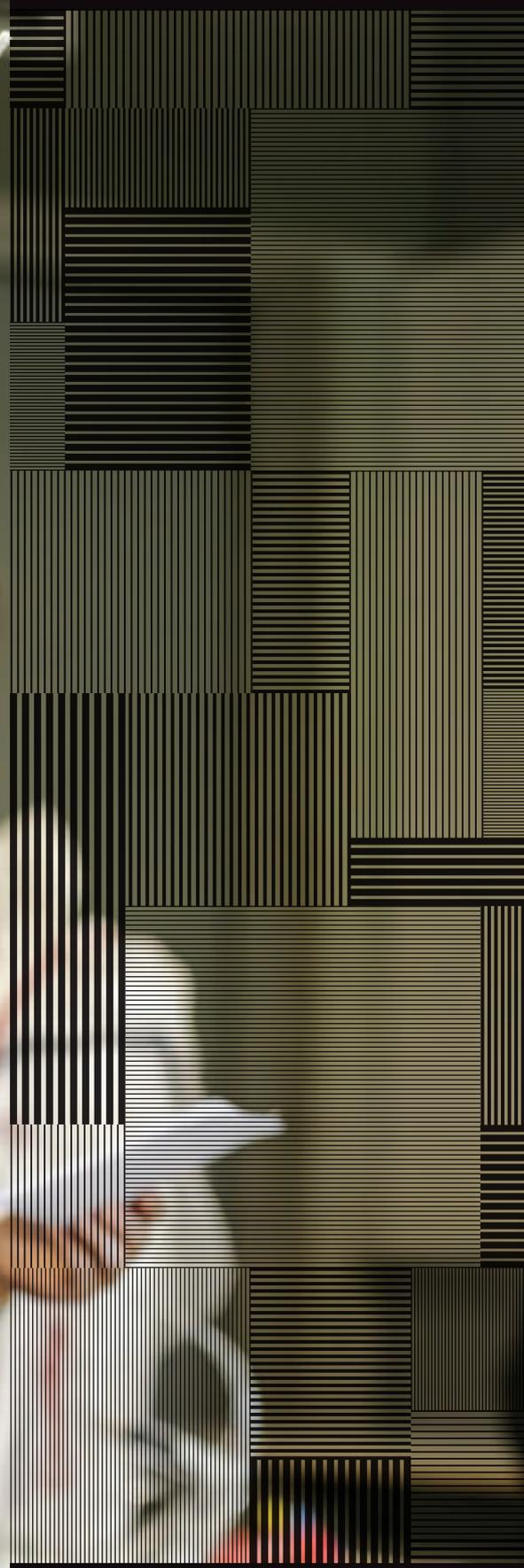




Atrium

THE UNIVERSITY
OF MELBOURNE
FACULTY OF ARCHITECTURE,
BUILDING & PLANNING



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FROM THE DEAN JULIE WILLIS



HARD TO BELIEVE THAT THE END OF SEMESTER IS FAST APPROACHING ALREADY, BUT THE SIGNS ARE AS SURE AS THE COOLING WEATHER. WITH DESIGN CRITS AND ASSIGNMENTS ABOUNDING, THERE IS A GENERAL SENSE OF INTENSITY IN THE AIR.

A warm hello to you, our valued alumni. As I make my way through my first semester as Dean of the Faculty of Architecture, Building and Planning, I look forward to meeting many of you in a variety of forums. I'm deeply privileged to lead a dynamic and vibrant Faculty, in which there is always something interesting going on, whether it be public lectures, exhibitions, student-led events or research seminars. Our alumni are an integral part of who we are as a Faculty, and we welcome the opportunity to connect with you in multiple ways.

I would like to thank Professor Daryl Le Grew for his generosity in acting as Interim Dean across 2015 and 2016; he has made a lasting impression on who we are and what we do. His guidance, building on the strong foundation of what Tom Kvan achieved before him, has put the Faculty in a very strong position. I pay tribute to his collegiality and his leadership in guiding the introduction of the Bachelor of Design. Again, thank you Daryl.

We have started this year strongly, with good interest in the Bachelor of Design translating into very healthy enrolment rates and clearly-in ATAR score. It is an excellent start for a new degree. Students across campus have been following the progress of our undergraduate students with some envy – the Bachelor of Design is fast developing a standout reputation for offering a challenging, hands-on and innovative curriculum.

ABP's Faculty Executive recently gathered to look at both the immediate challenges and opportunities we have, and to consider where we should be going in the longer term. It is the first of many conversations that will take place over the next six months, as the Faculty works towards articulating a new five-year strategic plan.

I would also like to take the opportunity to welcome our new Faculty Executive Director, Rebecca Bond. Rebecca brings enormous knowledge and experience to the role. Please do introduce yourself to Rebecca when the opportunity arises.

One of my first tasks as Dean of Faculty has been to accept, with great pleasure, a gift of \$1 million from Creative Futures. This very generous gift supports the Robert Garland Treseder Fellowship to bring outstanding design innovators to the Faculty as visitors. The gift was facilitated by Professor Daryl Le Grew and Dr Robert Treseder, both alumni of the Faculty, with strong support from the Creative Futures board. Such gifts offer so much more than support for events and/or people, for the connections, networks and enhancements they bring foster lasting and tangible benefit to the Faculty and its students.

This edition of *Atrium* asks the question, what is the future of the design studio? As a school of the built environment we invest significant thought, time and dedication into our studio teaching program.

We are one of the few schools globally to offer studio teaching across the range of built environment disciplines – beyond the design-dominated. Our travelling studios which take our students to Asia, India, Europe, South America and remote Australia make for exceptional student experience and learning.

Studios make for fabulous learning experiences, where insight and investigation into a specified problem or task in a holistic way, reaps understanding and ways of doing that few other teaching methods can realise. Studios foster creative, lateral thinking, building skills that result in innovative solutions. There is no better preparation for tackling the complex problems of the future.

**Professor Julie Willis
Dean**

Images: Paul Philipson and Erieta Attali

NATIONAL ARCHITECTURE PRIZE AIA GOLD MEDAL GOES TO PETER ELLIOTT

Sara Brocklesby



PETER ELLIOTT AM LFRAIA, BARCH(HONS) (MELB) 1976 HON DARCH (MELB) 2015, HAS BEEN AWARDED THE AUSTRALIAN INSTITUTE OF ARCHITECTS' HIGHEST HONOUR, THE AIA GOLD MEDAL.

Dean of Faculty, Professor Julie Willis says of the win, "Peter Elliott is a highly talented architect who has behind him some extraordinarily gorgeous work. His contribution to our University is physically evident in his network of small and beautiful interventions which sensitively integrates our Parkville campus. His thoughtful, patient approach to his teaching and academic work here, as well as his personal integrity, remains influential in our school's culture. We are all delighted that he has been awarded the AIA Gold Medal and it is wonderful to see him and his talent so appropriately recognised."

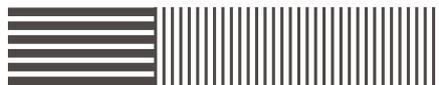
Elliott began teaching at the University of Melbourne in the mid-1970s at the same time as starting his architectural practice and founding the Fitzroy Housing Repair Advisory Service, among other inner-city public housing and community projects. He also served on our Architecture Advisory Board (1985 to 1988).

Philip Goad, Chair of Architecture and Redmond Barry Distinguished Professor, has paid tribute to Elliott's work in *Architecture Australia*¹, explaining, "He deftly combines architecture and urban design with modesty and unassuming ease. The results seem utterly natural and right. At the same time, they conceal an extremely sophisticated and expert knowledge of the city and its multiple scales and a meticulous attention as to how one experiences space and a place."

He acts like an urban surgeon: stitching and knitting the city back together, grafting new onto old, removing and revealing, but always leaving the body better than before."



"...PETER ELLIOTT IS A MOST WORTHY RECIPIENT OF THE AUSTRALIAN INSTITUTE OF ARCHITECTS GOLD MEDAL BY HIS EXCEPTIONAL CONTRIBUTION THROUGH DESIGN, TO ARCHITECTURAL EDUCATION, LEADERSHIP WITHIN THE PROFESSION, AND PROMOTION OF ARCHITECTURE WITHIN THE COMMUNITY."



The jury, in recognising Elliott's achievements across design, education, public policy and social housing, also spoke of the role Elliott's generosity in his work and influence.

"Peter's intelligence, humanity and humility has endeared him to many in the profession,

and earned him the highest respect within government and the community. The breadth and depth of his interpretation of the human experience of the city provides an exemplary model for architectural practice. Peter Elliott is a most worthy recipient of the Australian Institute of Architects Gold Medal by his exceptional contribution through design, to architectural education, leadership within the profession, and promotion of architecture within the community."

The Gold Medal recognises distinguished service by architects who have designed or executed buildings of high merit, produced work of great distinction resulting in the advancement of architecture or endowed the profession of architecture in a distinguished manner. The jury noted, "Remarkably, Peter Elliott has excelled in all these areas through his consistent practice of architecture in the public interest over many years."

The Faculty of Architecture, Building and Planning offers our warmest congratulations.

1. Goad, Philip. "Urban surgeon: education and infrastructure as city making". *Architecture Australia*. May/June (2017). 106.

Image: Peter Elliott by Hosna Saleem.

“BEING ABLE TO COMMUNICATE AND PRESENT IDEAS, LISTEN AND RESPOND QUICKLY, YOU HAVE TO DEVELOP THOSE SKILLS IN STUDIO. STUDENTS TAKE THESE SKILLS TO PRACTICE.”

01

EXUBERANCE AND VITALITY: TEACHING FROM PRACTICE IN *UNLIVEABLE BERLIN*

Sara Brocklesby

ABOUT CATHERINE DUGGAN ↓

Catherine Duggan BEnvDes (UTas) BArch (Hons) (Melb) is Senior Associate at Peter Elliott Architecture + Urban Design.

ABOUT MICHAEL ROPER ↓

Michael Roper BPD (Melb), BArch (Hons) is Director at Architecture Architecture. Michael was awarded the AIA Emerging Architect Prize in 2016.

Catherine Duggan (Peter Elliott Architecture + Urban Design) and Michael Roper (Architecture Architecture) teach the *Unliveable Berlin* studio, which takes masters students to the ANCB Metropolitan Laboratory for three weeks of intensive design work, the culmination of seven weeks of research and design esquisse. Their work is exhibited at the Melbourne School of Design's end of semester show, MSDx.

We asked Catherine and Michael about the experience of teaching as practitioners. How does practice inform studio teaching, and vice versa?

CD: I have been teaching here since 2008 in the masters program.

MR: Catherine has done much more teaching here than I have, but my first class was way back in 2005.

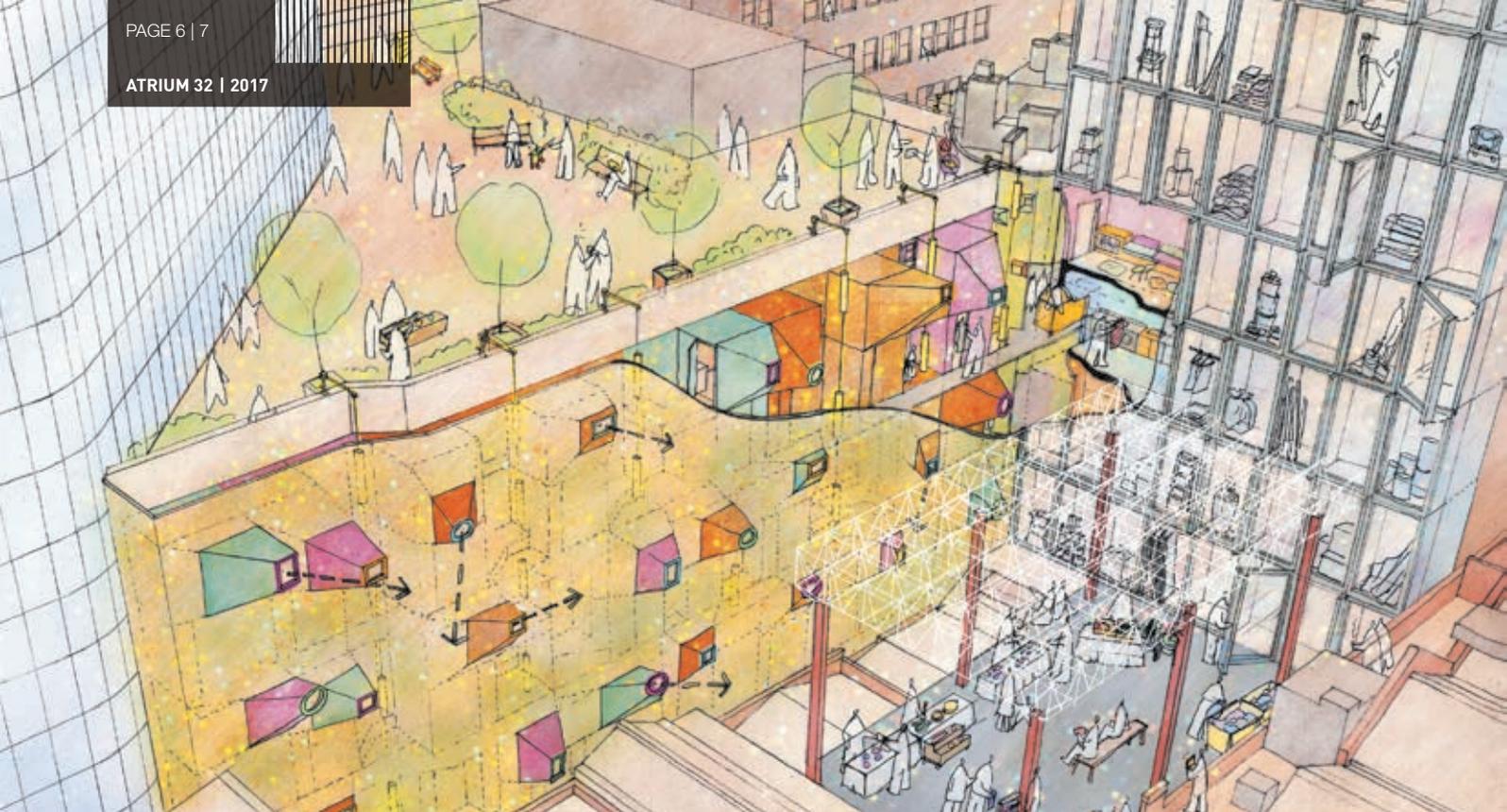
CD: When we started teaching together we started with a studio based in Melbourne called *The Unliveable City*.

We've transitioned that studio into *Unliveable Berlin*. Developing one theme across several studios has allowed us to build an archive of work to draw on, this adds a richness to the studio that wouldn't otherwise be possible. We are running *Unliveable Berlin* again this year, in Semester 2.

MR: *Unliveable City* concerned itself with the ways in which cities can be exclusionary, asking students to consider who their city caters for and who it overlooks, the ideas a city embodies and the ideologies a city rejects. Berlin provides rich territory to explore these concerns. A century of war, division, demolition, reunification, aborted reconstruction, and temporary occupation is written into the city's urban fabric. Hence the development of our latest studio *Unliveable Berlin*.

CD: Berlin provides a real point of difference with Melbourne, because the social agendas and urban character differ so greatly. Developers are more opportunistic here, and as a society we are less opportunistic than Berliners.

Continued overleaf →



MR: Taking students out of their familiar environment helps them to see the world afresh. It's that old idea of trying to get a fish to see the water they're swimming in. Students are so energised by being in a foreign city, which is an exciting starting point for a design investigation.

CD: Studio provides an opportunity to develop ideas you're interested in. Ideas that you are unable to pursue in formal practice, for various reasons, can be tested through the studio. Studio teaching provides an avenue for installation work for example. The studio, in terms of benefit to practice is around honing skills.

The studio environment is quite abstracted. It's a heightened version of what happens in practice. Being able to communicate and present ideas, listen and respond quickly, you have to develop those skills in studio. Students take these skills to practice. For me, teaching means I am more precise about my work.

MR: The urban regeneration and renewal work you're doing at Peter Elliott's – small interventions to activate the urban environment – these tie in fairly neatly with our studio.

CD: Yes, that's a good example of something that we're interested in that we bring into studio. I think you do that anyway, you bring in your body of work and the things that are already on your mind. What you bring to the studio and what you take back into practice are different things. The creative thinking that happens in studios, is really exciting, the energy and the crazy ideas that bounce around in studio, may never be played out in reality.

MR: It's good to be reminded of the benefits of naïve thinking in a design process. The stripping away of well-worn references. First year projects – I'm not sure what they look like these days – can be quite wild. Buildings bursting out in all sorts of unlikely directions. They have an exuberance and a total, impractical vitality which is really excellent.

CD: To have a single problem, and to have fifteen people in a studio all approaching that problem in entirely different ways is brilliant to see. You witness an amazing capacity to think laterally. You never get that exact situation in an office because you tend to be working toward a single agenda.

MR: Catherine and I often have very different positions on students' work. I think we see that as a strength of our teaching.

CD: Students have the benefit of both our perspectives on a weekly basis. They will receive different feedback from Michael and I, which pushes them to really strengthen their position.

MR: Having to negotiate both sets of feedback and work out what's important to them is great training. Sometimes there's a risk that students think their tutors somehow hold the 'correct' answer. We dispel that myth by offering them two divergent perspectives.

CD: We also have our own rigorous discussions in the planning of each studio about its agenda. Differences of opinion mean we tease out exactly what our focus is.

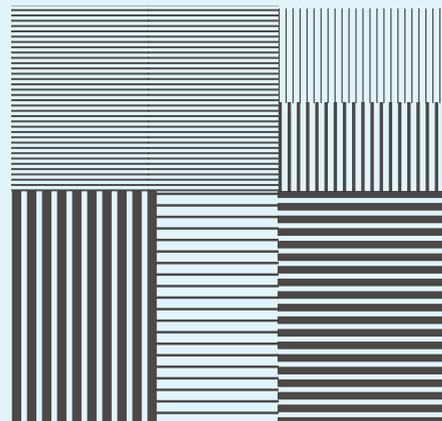
MR: Catherine wins.

CD: ...not always.

“BERLIN PROVIDES A REAL POINT OF DIFFERENCE WITH MELBOURNE, BECAUSE THE SOCIAL AGENDAS AND URBAN CHARACTER DIFFER SO GREATLY. DEVELOPERS ARE MORE OPPORTUNISTIC HERE, AND AS A SOCIETY WE ARE LESS OPPORTUNISTIC THAN BERLINERS.”

Image:

Amelyn Ng, Master of Architecture project
The Hotel Project. An Apparatus for Opportunism.





DESIGNING THROUGH MAKING: MACHINING OUR FUTURE

Paul Loh and Xuyou Yang

MACHINING AESTHETICS
STUDIO IS LED BY PAUL LOH,
LECTURER IN DIGITAL
ARCHITECTURE AND
DAVID LEGGETT OF POWER
TO MAKE/ LLDS.

The work of the studio was exhibited by Craft Victoria in 2013, titled *Machining Aesthetics 9+1*. The Articulated Ground Pavilion designed and fabricated by the studio received a commendation prize in the 2015 Timber Vision Award, Public Space categories. Three research papers based on the studio work were published between 2015 and 2017, including one student receiving the Young CAADRIA award in 2017.

We talked to studio leader Paul Loh and student Xuyou Yang to understand how *Machining Aesthetics* is reimagining design teaching and learning.

Continued overleaf →

“THE WAY WE MAKE THINGS
CHANGES THE WAY WE
DESIGN AND BUILD.”

“WE WANT OUR STUDENTS TO LITERALLY CRAFT AND MACHINE THEIR AESTHETICS.”

Paul Loh: The *Machining Aesthetics* studio questions the nature of architectural design practice. When we first started formulating the agenda of the studio, now in its eighth iteration, we wanted to challenge our students to design from a deeper understanding of materials and technology instead of responding to the traditional design brief. Fundamentally, we are interested in how understandings of new technologies and materials can act as drivers for design methodology; and therefore, allow a different mode of practice.

The inspiration for the studio emerged from our architectural practice, *Power to Make / LLDS*. We are one of the few architectural offices in Melbourne that has its own making workshop equipped with Computer Numerically Controlled (CNC) machines. Our material investigations through technology provide different methods of engaging with design: sometimes through abstraction of material quality, other times through the fabrication process. More recently, we started to make our own CNC devices to advance our digital manufacturing techniques and evolve our design repertoire. This design research methodology carried into our studio teaching.

The studio formulates design around the articulation of architectural language. Architectural language of elemental parts (of columns, wall, floor, roof and stairs) exists beyond stylistic gesture and should be driven by the physical materiality of what makes architecture. We want our students

to literally craft and machine their aesthetics. This is not some abstract appreciation of material quality; it can be quite literal, like markings on a piece of timber or a visual distortion when one vacuum-forms a sheet of plastic. As designers, we often ignore these material effects. Most of our students initially rejected this approach as separate from their design thinking – the conceptual idea already developed in their mind often does not seem to match the material outcome. When students let go of their pre-conceived formal expression, they start to appreciate the material and its manufacturing process as an operative driver in their design. In this way, we argued that the language of architecture is inherent in the material and fabrication processes.

This design knowledge is critical because the design process enters into immediate dialogue with materiality instead of as an afterthought. The way we make things changes the way we design and build. A major part of the studio teaching is formulated around the development of tacit knowledge; that is, knowledge that could only be gained through making or doing something. We see this as a fertile ground for material research, which contributes to contemporary discourse in digital design and fabrication. The studio has published three research papers to date.

In recent iterations of the studio, we have incorporated electronics prototyping platforms into the studio project in order to design and make fabrication machines

or responsive systems. This way, the fabrication process becomes the starting point of the design. It sets the aesthetics, scale, geometric potential, constraints and the fabrication sequence of the interventions. This bottom-up design method allows students to develop spatial and material thinking that is not preconceived or assumed.

The studio sees emerging technology and numerically-controlled machinery as tools that have their own unique method of production and inherent logic. We work with these logics and seek to expand the capacity of the tools to operate as design drivers. This method of thinking is not dissimilar to how a craft person considers their toolset: the ability to deploy a chain of tools in a fluid and lateral manner to make unique artefacts. Through this lens, we incorporate emerging technology into the studio, encouraging students to move laterally across media and technologies.

Machining Aesthetics represents a specific studio teaching methodology. Its lineage in 1:1 scale making in an educational environment is indebted to mine and David's unique education at the University of East London and later at the Architectural Association, School of Architecture in London. Architecture as a discipline is intricately tied with its material outcome and requires a material response. One cannot learn how to make a building without knowing how to make: a direct engagement with fabrication processes is part of our business in architecture.





Xuyou Yang: *Machining Aesthetics* is a very demanding studio across architectural design, digital modelling, fabrication and representation techniques. I chose this studio for its emphasis on using innovative technologies in architectural applications which, to me, suggests a strong catalyst for interesting project outcomes. Moreover, *Machining Aesthetics* V4.0 offered us the opportunity to work with the Faculty's new robotic arms, a rare opportunity in a studio environment. Consequently, our project was the first masters-level project in the Melbourne School of Design to make use of the robotic arm.

At the start of the studio, we were given a digital skills workshop which allowed us to engage with robotics very quickly. My project explored methods for casting doubly-curved geometries with the robotic arm. *Machining Aesthetics* creates an extremely fast-paced study environment, and requires a high level of productions. During the making process, we were pushed to design, fabricate and test a new iteration of formwork almost every week. The experimentation was part of the learning process, especially when we were exposed to new technical content. We endured many failures while exploring the variable formwork and robotics programming. Failures are part of the learning outcome which eventually led to successfully working prototypes.

At an early stage of the design, my project partner and I consulted with Arup engineers about the structural potential of the system.

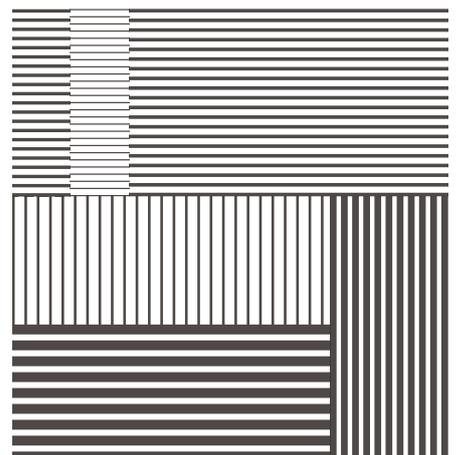
Later, with the combined support of the studio leaders and the Robotics Lab staff, we came up with a robotic variable fabric formwork to cast hyperbolic paraboloid panels using plaster, which is a less complex and wasteful procedure than conventional methods of casting doubly curved geometry in construction. With the assistance of the studio leaders, we published our innovation in a research paper.

Machining Aesthetics is the toughest studio I have ever undertaken, but it has also greatly advanced my architectural thinking. I learned advanced digital fabrication techniques, how to design digital workflows (especially robotic fabrication) and automation in construction. It also provided me with the opportunity to write an academic peer reviewed paper. These skills will be indispensable in my future career. Several months after *Machining Aesthetics* V4.0, our paper, *Robotic Variable Fabric Formwork* was accepted by the International Conference on Computer-Aided Architecture Design Research in Asia (CAADRIA). I was supported by the Michael Kaufman Scholarship Fund to present the paper at the Conference to an international audience in Suzhou, China, where I was awarded the Young CAADRIA Award. I'm now employed as a robotics technician in the MSD Robotics Lab.

"THE FABRICATION PROCESS BECOMES THE STARTING POINT OF THE DESIGN."

Images:

01. Pneumatic prototype exploring electronic prototyping platforms as part of the design process, by Ryan Huang, Daniel Parker and Suyi Zha.
02. Articulated Timber Ground project awarded commendation in the 2015 Timber Vision Award
03. Envisaging new ways of construction through use of technology.
04. *Machining Aesthetics* 9 + 1 exhibition at Craft Victoria, 2016.
05. Tool making as part of future designing.



MAXIMISING OUR BUILT ENVIRONMENT EDUCATION THROUGH THE DESIGN STUDIO

Donald Bates

***STUDIO FUTURES: CHANGING TRAJECTORIES IN ARCHITECTURAL EDUCATION*⁽¹⁾ IS A RECENT ATTEMPT TO PROVIDE A SPECULATION ON THE RELEVANCE OF THE DESIGN STUDIO AS A DEFINING FEATURE OF ARCHITECTURAL EDUCATION.**

The book provides evidence of the diverse modes by which architecture is currently taught across Australia (and internationally), while also questioning whether this pedagogic formation is being deployed and appreciated to its full potential.

At the heart of this debate is the proposition that design teaching – as exemplified by the ‘studio’ – is a unique form of knowledge formation. Although most studio programs are directed to a ‘project’ as the basis of student development and the procurement of architectural competencies, this is not to say that the development of a design is the same as solving a problem. In studio teaching there is no ‘answer’; there are only potential resolutions to the theme, the site, the brief, the context, the aspirations of a client. Such a process of working may seem self-evident as part of a design education, but it is in marked distinction to other forms of teaching and knowledge formation.

Studio teaching, and by extension, studio *learning*, is a non-linear, non-formulaic process of investigations

and ‘proof’ by making and doing. At its best, studio learning accumulates capabilities by the speculative act of doing, as opposed to the re-presentation of facts and agreed responses as a confirmation of the already known. Ideas and concepts are tested by a dynamic process of producing options and alternatives that undergo a comparative assessment to make possible new directions and further pathways for elaboration and assessment.

Within the Master of Architecture program at the MSD, we work with the largest cohort of architecture students in Australia. Managing over 450 students each semester within the design studios is logistically complex and pedagogically demanding. But there are, in fact, major advantages that accrues from the size of the cohort – variety and diversity.

In Semester 1 2017, we have 30 distinct studios operating for the C, D, E students (i.e. the first three semesters of a four-semester M.Arch degree). With this considerable number of studios, we are able to program five or ten or more ‘normal’ design studios (studios

based on conventional project types: housing, schools, library, museum, etc) and still have another 15 or 20 more exploratory studios, based around broad themes of ‘the city’, ‘technology’, ‘living’, ‘the civic domain’, ‘senses’ and ‘process’. These thematic are interpreted and elaborated on by a range of studio leaders, both from within the Faculty and through sessional engagements. Studio leaders range from esteemed statespersons of the architectural profession to talented recent graduates. Many operate within large corporate firms, or as single practitioners, or as decidedly academic researchers and theorists.

This array of teaching options constitutes an emergent ecology of architectural pedagogy, where new strands of architectural thinking start to germinate, and other well-formed domains consolidate and then split off into expanded realms. There are many over-laps and adjacent lines of enquiry. This allows for studios to share resources and debate directions, and then for new networks to materialise, with cross-fertilisation an ever-present benefit.

Discussion of the nature of the design studio often returns to a question regarding how in parallel or in opposition studio teaching is in comparison to office practice – should the studio replicate the nature of an architectural office? Real projects or ‘make-believe’ projects. Real clients or invented clients. Generally, I consider this line of questioning to be irrelevant to architectural education. Rather than try to claim or support one side of a false opposition over another, I would prefer to detail how the M.Arch program at MSD uses our large cohort to test and work with numerous variations of the engaged versus independent argument.

Each semester, a percentage of the project undertaken by the studios will be projects that are developed in conjunction with external partners. These projects range from work with the Mt Macedon CFA to retro-fit and reimagine a local fire station, to assisting a commercial developer such as Cedar Woods Properties to investigate dense suburban developments with new forms of habitation for multi-generational living (with architecture and property students working together), to a studio focused on aged housing and developing prototypes with the Assisi Centre in Rosanna.

Along with the partnership projects and the attendant outcomes, several studios each semester operate from the offices of some of the more established firms of Melbourne. Here the pedagogic consequence is not about replicating office practice, so much as it is about how architectural production is increasingly team based, built around multiple inputs, research and technique sharing, and internal critique and assessment.

With students participating in at least four design studios in the course of their degree, the structure of the MSD exposes students to disparate, often oppositional modes of teaching and project exploration. This is intentional. Students gain experiences that challenge them to consider the architectural and professional consequences of alternative positions, alternative techniques and alternative logics in the establishment of an understanding of architecture. The ‘studio’ provides that active ground for these types of knowledge formation, where understanding is generated through making and doing.

Professor Donald Bates, is Chair of Architectural Design, the University of Melbourne and Director of LAB Architecture Studio.

“THE STRUCTURE OF THE MSD EXPOSES STUDENTS TO DISPARATE, OFTEN OPPOSITIONAL MODES OF TEACHING AND PROJECT EXPLORATION”

Bates, D. Mitsogianni, V. & Ramirez-Lovering, D. *Studio Futures: Changing trajectories in architectural education.* (URO Publications 2015).

Image: Aik Meng Heng, Master of Architecture Thesis project. Winner of the Victorian Graduate Prize 2017 awarded by the Australian Institute of Architects.



UNLOCKING PHOLIOTA

Philip Goad

IN OCTOBER 2016, THE EXHIBITION *PHOLIOTA UNLOCKED* TOOK PLACE IN THE MSD'S DULUX GALLERY. IT WAS OUR CONTRIBUTION TO *CULTURAL COLLISIONS*, THE ARTISTIC PROGRAM CURATED BY VICE-CHANCELLOR'S FELLOW, SIR JONATHAN MILLS, AND THE UNIVERSITY OF MELBOURNE'S CONTRIBUTION TO LAST YEAR'S MELBOURNE FESTIVAL.

The exhibition celebrated the work of American architects and husband and wife team, Walter Burley Griffin and Marion Mahony. It also showcased student designs and the state-of-the-art digital fabrication and workshop facilities of the MSD Building.

The exhibition focus was Knitlock, the concrete block system patented by Walter Burley Griffin in 1917 and its centrepiece was a full-scale, 1:1 reconstruction of *Pholiota* (1920–1), the Griffins' house at Eaglemont. Complementing the reconstruction were designs undertaken by thirteen final year MArch students for a contemporary version of *Pholiota*.

The students examined the Glenard Estate in Eaglemont, which Griffin had laid out as a 120 lot suburban subdivision in 1916. A distinctive feature of the estate was the inclusion of curving streets aligned with the site's contours, two communal parklands located at the rear of the allotments, and a series of footpaths that led through the

estate to the Yarra River. Each student was allocated a different set of eight blocks on the estate and asked to, in addition to siting their new *Pholiota*, double the density as a possible answer to Melbourne's need to consolidate its building stock and accommodate increased population density.

Adding to the challenge was a required detailed investigation of Knitlock – to study the Griffins' special system, to make some of the tiles at various scales in the MSD fabrication workshops and work out ways of making the tiles afresh, and then in some cases, inventing a new Knitlock tile or system.

In pedagogical terms, this meant that a rich vein of learning techniques could be exploited. Dr Jeffrey Turnbull presented on the Griffins and Knitlock; and Professor Paolo Tombesi on the prefabricated concrete systems design for the SARAH Network of Rehabilitation Hospitals in Brazil. Design critics during semester included Sir Jonathan Mills, Dr Jeff Turnbull, Dr Alex Selenitsch, Marika Neustupny (NMBW Architecture Studio), Tobias Horrocks (Fold Theory) and Chris Haddad (Archier).

Students undertook historical and archival research on the Griffins. They digitally re-drew and constructed the original plans of *Pholiota* according to the Knitlock construction system. Using digital fabrication techniques they experimented with various materials to perfect the moulding system using silicon and MDF, and made the blocks themselves, using 3D printing, plaster and also, of course, concrete.

We visited the Eaglemont site, the former Herborn House in East Hawthorn (1929,

Eric M. Nicholls), which employed pre-cast concrete pipe columns, and the Vaughan Griffin House in Heidelberg (1924), built using the Knitlock system and now owned by Professor Graham Sewell (Faculty of Business and Economics at the University). At the same time, the students were designing their new *Pholiotas* and revised subdivisions plans for the Glenard Estate. In the twelve weeks of a semester, they had begun to unlock *Pholiota*.

Our next step was to bring all of this material together to make an exhibition. Key to this second stage (July–September 2016) was the involvement of MArch student Manjit Patil, who along with industrial designer and sculptor, Alex Goad, devised a way to fabricate the entire suite of Knitlock tiles. Together we produced the more than 2300 tiles required to build *Pholiota*. Student Mengyan Wang, worked with Travis Cox from Microsoft SocialNUI at the University of Melbourne, supplying him with her *Pholiota* design so that it could be transformed into a virtual reality experience. Professor Sewell generously lent us original Knitlock blocks and roof tiles for the exhibition and Peter Navaretti helped compile a complete list of Knitlock structures (built and unbuilt) in Australia. Student Ali Eslamzadeh supplied 3D animation of his new designs for *Pholiota* and all the students reformatted their work for exhibition. Faculty multimedia coordinator James Rafferty set up time-lapse photography in the Dulux Gallery to record the whole construction process. All through this, Italian filmmaker Giulio Tami was recording everything on film.

Remarkably, construction of all of the walls, chimney and fireplace of *Pholiota* took just two days – partly due to the



ingenuity of Griffin's system and partly due to the students' developed expertise in understanding the logic and intricacies of the system. They had become experts and confident in their ability to manage and manipulate the elements. At its completion and during construction, the replica *Pholiota* was a revelation: elegant in its simplicity, and the plaster blocks, while not concrete, and even with their minor imperfections in laying and low sheen, took on the quality of marble. We had created a little domestic temple!

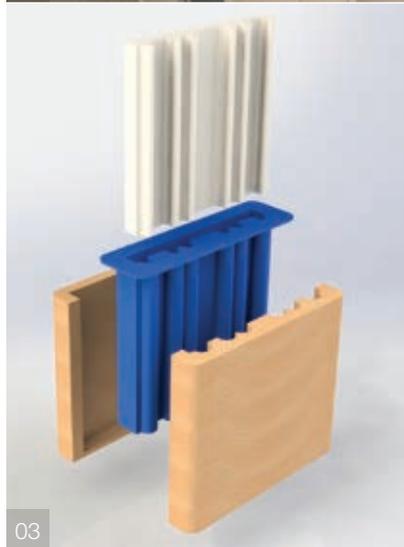
Philip Goad is Chair of Architecture, Redmond Barry Distinguished Professor Melbourne School of Design, University of Melbourne.

OUR DULUX GALLERY

The Dulux Gallery is named in recognition of the sponsorship and support by Dulux Australia of the MSD. The University is pleased to be in a partnership with this leading supplier to the industry.

A manufacturer and supplier of paints and finishes widely used in our industry, Dulux Australia has long supported the ongoing development of the professions, notably through their annual program, the Dulux Study Tour, as well as the many other professional programs around the country. Extending these, the sponsorship of the Melbourne School of Design contributes to the education and development of our professions broadly.

dulux.com.au



Images:

01. The compactly aligned Knitlock bricks are delivered prior to construction.

02. Master of Architecture students make rapid progress constructing a replica of the Griffins' home, *Pholiota*.

03. Expanded view of the moulding process students used to re-created the Griffins' innovative Knitlock brick system (drawing: Manjit Patil).

04. Studio Leader Professor Philip Goad works with students on the West wall mid-construction.

05. *Pholiota: Unlocked* opens to the public, complete with a full-scale replica of the Griffins' Eaglemont home, and new designs re-imagining the space for the present day.

IS THERE A PLACE FOR TRADITIONAL CONSTRUCTION TECHNIQUES IN POST INDUSTRIAL AHMEDABAD?

Phillip Culpan and Carey Landwehr

Touching down in Ahmedabad, any preconceived notions of the city we have researched for the Ahmedabad Travelling Studio dissipate in the dusty evening air. There is a recurring cliché that India and the subcontinent cannot truly be explained without visiting in person and, if our incredibly expeditious two-week travelling studio will teach us anything, it is that the cliché is mostly true. Equipped with the task of investigating the post-industrial fabric of Ahmedabad's built environment, we set out through the city and wider Gujarat in the search for answers.

We are immediately swept up in the chaotic motion of the city as we rattle along in a convoy of auto-rickshaws through tightly packed streets teeming with vendor activity. The sun streams through the openings between the city's low-rise, densely packed concrete and masonry buildings. The glare temporarily blinds us to the informal communities dotted along the street's edge. Our gaze shifts across the colours of reappropriated modern materials sheathing seemingly temporary structures. Honking our horns, we glide between narrow openings onto vastly exposed sun scorched intersections to reach the multitude of destinations within our loaded itinerary.

During our time in Ahmedabad we work closely with international educators and students from the local CEPT University, our studio leaders, local architects, communities and construction workers to understand the evolution of Gujarat's construction industry. At the forefront of our minds is the question, how can we design a building to empower local, mainly unskilled, workers through skill building drawing on a history of traditional construction craft and knowledge?

Our design brief to create a centre for research is applied to the Ahmedabad property of late University of Melbourne Professor Bharat Dave as a case study.

The property is a typical 1970s masonry middle class, low rise urban house. Could it be used as a mechanism to explore new ways of designing and constructing in order to maximise local knowledge and accommodate largely uneducated workers' skills? Could learning new ways to design and construct empower?

In a bygone era, Ahmedabad prospered from its thriving textile industry, commandeered by local Mill owners. It was these Mill owners who commissioned international architects like Louis Kahn and Le Corbusier to build local, now iconic, buildings. Today, the profound impact of the mid 20th century modernist tendencies are reflected in the work of local architects and yet their contributions remain withdrawn and guarded from the complexity of the surrounding urban context. Our first clues in understanding the climatic context are revealed in these buildings, most aptly through the works of Indian modernist architects Charles Correa and Balkrishna Doshi. Deep voids, gigantic guttering systems, louvered breezeways, planted courtyards and shallow water bodies speak volumes to the extreme heat and torrential downpours experienced throughout the year. A tradition of climatic appropriateness embodied under a veil of internationalist forms.

As we depart Ahmedabad's architectural outposts, we watch the sun engulf the city, piercing shallow voids and storing its energy across a vast thermal mass heat sink. We are reminded of how the disregard for tradition in lieu of the speed of globalisation has left a legacy of poor building stock across the city.

Over the last few decades the region's textile industry has rapidly diminished and the agricultural industry is no longer as large as it once was, resulting in significant job losses.

The rural population is moving in droves to cities like Ahmedabad in search of employment opportunities. Many end up in the local construction industry, with little formal construction experience, and find themselves building contemporary Ahmedabad. In the rush to modernise and construct quickly, traditional methods deriving from the local landscapes have taken a back seat. Unskilled labourers follow developers' orders with little opportunity to upskill, or draw on craft traditions which can be perceived as outdated for modern buildings.

Local architect and newly appointed Dean of Architecture at CEPT University, Surya Kakani, explains his own beliefs on the appropriateness of an architecture derived from its people, processes and place. He guides us through his practice and projects, describing how many of the complex built environment problems facing modern India can have well considered yet simple responses if architects only choose to address the problems head on with local solutions, exemplified in his practice's oeuvre. Kakani aims to minimise environmental impact by using industrial waste products such as fly ash masonry construction in his projects. He combines this with the utilisation of traditional artisan craftsmanship expertise in the articulation of architectural details. His highly effective spatial planning pays deep attention to the sited context of each project and its environs, thus using a process that seamlessly weaves people and place.

With Surya's remarks in mind, we temporarily escape the city. Arriving in Kutch we are greeted by what could only be described as the epicentre of traditional building practice. Bamboo structures, mud brick and render, shallow masonry domes and woven fabric partitions; a tapestry of construction possibilities derived explicitly from local materials and methods.



Here, we uncover the processes for training, the relevance of these traditional skills to the climatic and environmental context of Gujarat and the importance of retaining these practices in Ahmedabad's mechanising and rapidly growing construction industry.

We are reminded of a message given to us by Ahmedabad architect Nimish Patel during the last few moments of our visit to his office; "It does not matter how fast you are going, if you are heading in the wrong direction." For Patel, and a handful of local architects, it is a vital mission to integrate and bring back into the main fold of architecture the deployment of the indigenous construction techniques and artisan craftsmanship that sustained India for hundreds of years prior to industrialisation.

Phillip and Carey are Master of Architecture students who participated in the Ahmedabad Travelling Studio.



In honour and memory of Professor Bharat Dave.

Images:

01. Learning from Hunnarshala founder Sandeep Virmani at Hunnarshala, Bhuj. Photograph: Hannah Robertson.

02. A stone inlay craftsman at Jayantilal Stone. Photograph: James Oberin.

03. Repairs to brickwork at Louis Kahn's modernist IIM campus. Photograph: James Oberin.

04: The studio group in Jaai and Surya Kakani's garden. Back row (from left to right): Mitchell Stewart, James Oberin, Andy Clements, Morgan Doty, Blair Gardiner, Erin Donovan, Phillip Culpan, Tom Jones. Front row (from left to right): Amelia Warhurst, Surya Kakani, Hannah Robertson, Jaai Kakani, Carey Landwehr and Andy Nicholson. Photograph: Mitch Stewart.



LET'S GO ON AN ADVENTURE: DECIBEL(ARCHITECTURE))) AND THE ALUMNI SURVEY SERIES

Sara Brocklesby



Two exhibitions will open in the Dulux Gallery this September: deciBel(Architecture))) will exhibit concurrently with Koning Eizenberg Architecture.

The Series, first held in 2009 with Peter Elliott Architecture + Urban Design, is not strictly a retrospective. Each practice is encouraged to curate their exhibition in whatever way they choose, to reflect their unique architectural vision and projects.

The ABP Alumni Survey Series provides alumni with a space to experiment with ideas and approaches that might otherwise not have an arena.

THIS YEAR THE ALUMNI SURVEY SERIES RETURNS AS ONE OF THE FACULTY OF ARCHITECTURE BUILDING AND PLANNING'S FLAGSHIP ANNUAL EXHIBITIONS. IT SHOWCASES THE WORK AND IDEAS OF OUR EXCEPTIONAL GRADUATES, BOTH ESTABLISHED AND EMERGING.

Dylan Brady, Conductor at deciBel(Architecture))) is already looking ahead to the story his practice may tell this October.

"I took my crew up to the recent Terragni exhibition [*A Modernity Different from all Others: Giuseppe Terragni in Rome*] to see the Dulux space and how we could potentially use it for our exhibition later this year."

"The last time I exhibited it was a stage set for the Archi Revue in 92 in the old Architecture building. It was fantastic: an operable sculpture that was three stories high that folded down and became a ceiling. We created a cathedral-like space and the action took place within and around this space. So I'm looking forward to working with a little bit more than just the panels in the Dulux Gallery."

Brady's irrepressible energy has driven a remarkable career. "deciBel(Architecture))) is only fifteen months old. I had studio505 for about ten, fifteen years before that. Before that I was with LAB on Federation Square and before that I was with DCM

on the Exhibition Centre and the Museum. It was John Denton who told me to go back to school and do a masters, I'd been out working for him after my first degree. I came out of the masters directly into the Federation Square project, which was a formative experience for me.

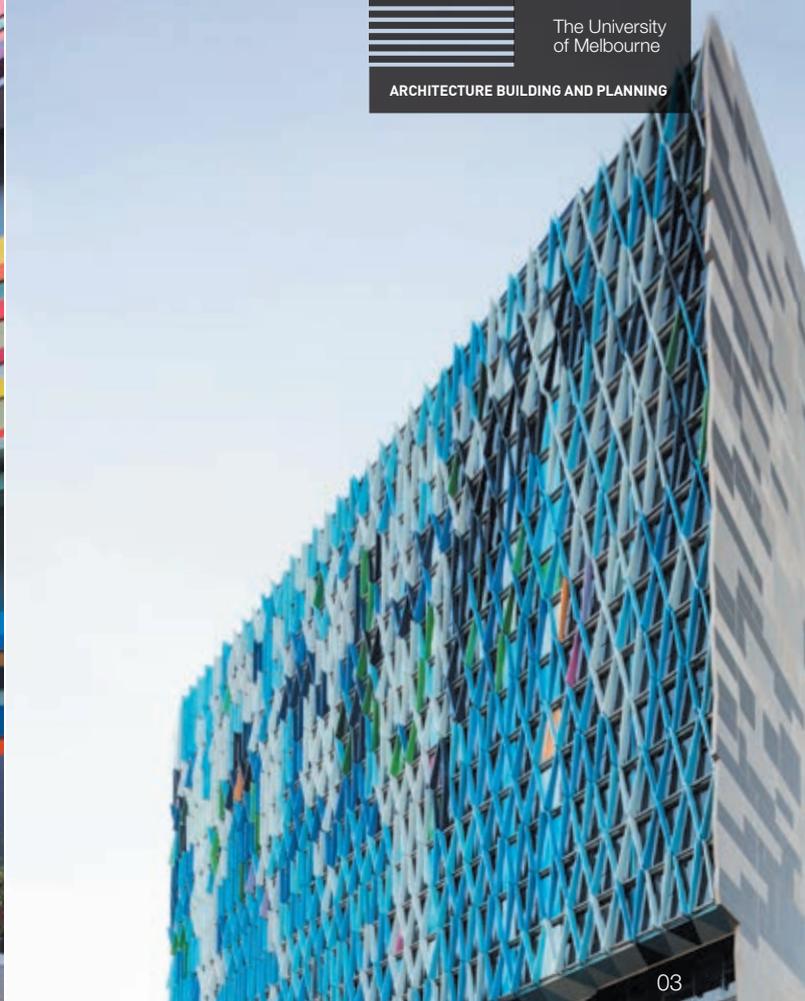
"From that project I developed a desire to always wander out into the unknown, to seek new ways of doing things all the time. Experience often dulls your expertise. Repetition of approach leads to getting trapped in a rut."

Brady's adventurous qualities are innate, but they were also encouraged. "My parents met at the University of Melbourne studying architecture. They were very clever, revolutionary people. I've always known I was interested in creativity, sculpture, art. I read a lot of science fiction growing up. I was fascinated reading about coherent futures with very, very different drivers in them to our own.

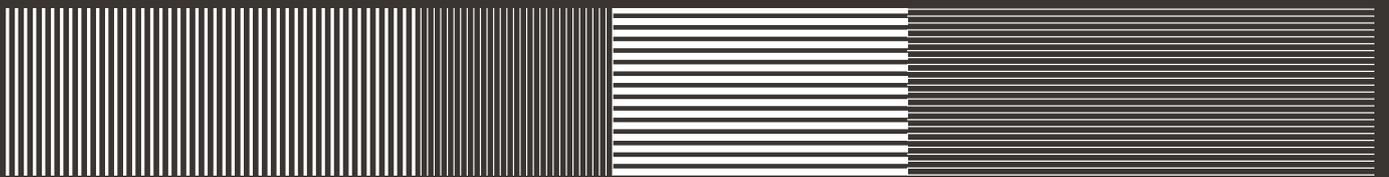
"Immersing myself in, and thinking about, the future, technology, materials and



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culture of science fiction was a brilliant place to come from walking into my first architecture course. Architecture is a very challenging profession to work in, but I believe it's the best education you can receive. It is the ultimate generalist education. You can study history, art, graphics, maths, science, construction."

"WE OFTEN FIND, IN WORKING ON OUR PROJECTS, THAT WHAT CLIENTS THINK OF AS A SET OF PROBLEMS, ARE ACTUALLY A MIX OF PROBLEMS AND THEIR OWN SOLUTIONS. PROBLEM B MAY ACTUALLY BE THE SOLUTION TO PROBLEM A. USE YOUR WASTE ISSUES TO SOLVE YOUR ENERGY ISSUES. WE REALLY SEE OUR ROLE AS BRINGING FRESH PERSPECTIVE."

For Brady, establishing deciBel(Architecture)) has enabled continued experimentation not only in design, but in approaches to working. "We like to remind our clients of their agency and the larger context of the built environment beyond their own brief. We often find, in working on our projects, that what clients think of as a set of problems, are actually a mix of problems and their own solutions. Problem B may actually be the solution to Problem A. Use your waste issues to solve your energy issues. We really see our role as bringing fresh perspective.

"For us this process involves a lot of listening, jokes, free thinking. I try to make everyone relaxed enough at the table that no one is afraid to put forward that crazy idea that might lead to something exciting. We use humour, play and experimentation."

The ABP Alumni Survey Series has come at an interesting time for deciBel(Architecture)). "It's a great opportunity to really try and clarify and represent our practice and where we want to go. We can announce, after fifteen months, that we're here to the industry and to students and publicise the fact that we have a pretty cracking

idea going in deciBel(Architecture))) and are doing some pretty great work.

"Ultimately it's an opportunity to legitimise a moment of taking stock: to pause and ask, what does it all mean? What do we want to say about ourselves? It's an interesting prospect because we really have to set our own ceiling with where we go with this. Do we exhibit lots of work or one large piece? What do we explore digitally? We've been exploring augmented reality, taking people inside buildings using that technology. That could be really fun. But what will we tell them while they're there? Getting creative around storytelling is the main aim with our exhibition, and it's an exciting challenge."

Images:

01. Hanoi Lotus, Hanoi, Vietnam. Designed by deciBel(Architecture)). Image: Durek Visualistion and deciBel(Architecture)).

02. Nanyang Primary School, Singapore. Designed by studio505, Dylan Brady & Dirk Zimmermann. Image: Rory Daniel.

03. Bouverie Street Apartments, Melbourne, Australia. Designed by studio505, Dylan Brady & Dirk Zimmermann. Image: John Gollings.

TRANSDISCIPLINARY DREAMING IN THE DESIGN STUDIO: ARCHITECTURAL EDUCATION MEETS THE AFFORDANCES OF A MODERN UNIVERSITY CAMPUS

Rebecca McLaughlan and Alan Pert

MARKAUSKAITE AND GOODYEAR HAVE ISSUED THE CHALLENGE THAT GRADUATES MUST BE ARMED WITH THE SKILLS TO CREATE NEW KNOWLEDGE AND THE AGILITY TO ADAPT TO THE CHANGING DEMANDS OF PROFESSIONAL PRACTICE; EXERCISING THE HABITS OF PROFESSIONAL COMPETENCY IS NO LONGER ENOUGH.

The design professionals we educate today, and indeed their colleagues in law, medicine, engineering and business, will face challenges that neither we as educators, nor the industries into which they will graduate, can predict.

We are already seeing evidence of this. Pressing global health issues provide just one example of the ways that professional practice will be required to collaborate in new ways, to produce new forms of knowledge in order to solve problems across disciplinary boundaries. For example, increasing rates of dementia, obesity, diabetes and depression have prompted researchers and policy makers to look to the built environment in the hopes it can provide strategies to support global and population health.

If architects are to contribute to meaningful advances in respect of these challenges, we will not achieve it by working within the existing collaboration structures that have traditionally characterised our practice. The longstanding associations we have had with artists, landscape designers, traffic, structural, geotechnical and environmental engineers must be expanded to include neuroscientists, psychologists, epidemiologists, anthropologists ... this list goes on.

These new collaborative relationships will demand different knowledge resources. As Mirko Noordegraaf predicts, graduates will require enhanced skills in collaboration and cooperation including a capacity

to adopt and incorporate the skills, vocabularies, techniques and routines of other professions, to experiment with new service models and critically evaluate the successes of these experiments.

So where do we start? Why not right here, on campus. The University of Melbourne has 47,000 students, 10 faculties, 270 graduate courses and more than 100 research centres and institutes. So we're wandering the halls with our eyes open, asking the question, what are the affordances of a modern university campus for the design studio – how do we turbo charge this learning space? We dream in transdisciplinarity.

Let's rewind to the beginning. In May 2015 Pert asked a question that was impossible to ignore: how do we challenge the status quo if our research methods require us to look only at what has already been built; how do we project forward? This conversation began around the subject of hospitals and materialised as the *[un] prescribed hospital* studio, delivered in partnership with Lyons the following semester. Iterations two and three will roll out next semester with the *Rethinking Palliative Care* studio, delivered in partnership with the Centre for Palliative Care (with Jennifer Philip and Mark Boughey; taught by us), and *Speculative Dreaming within our Biomedical Precinct*, delivered in partnership with the Department of Health and Human Services (with Stefano Scalzo; MSD tutors to be confirmed).

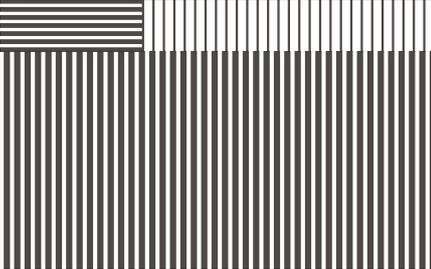
These studios build on the model we adopted for the pilot studio that utilised McLaughlan's

experience as an undergraduate at the University of Auckland (New Zealand, 2000). In a prison design studio, architect Mike Barns made Chomsky and Foucault mandatory reading; he invited prison guards, former inmates and government ministers to lead discussions and review crits. Within the *[un] prescribed hospital* studio students got to attend lectures, workshops and crits with architects experienced in hospital design, clinician researchers, practising clinicians, environmental psychologists, waste-managers and researchers in cancer experiences, dementia and healthcare environments design. We will do the same again next semester.

We care very much about hospitals but we're also out to prove that "Where Great Minds Collide" is more than just a marketing campaign. We're in conversations to run two further transdisciplinary, research-based studios: one with the Faculty of Arts (with Rachel Marsden, *Exhibitions Management*; Stephanie Liddicoat to tutor) and another with the Victorian College of the Arts (VCA) (with musician David Shea; MSD tutor to be confirmed). These will explore exhibition design and biomimicry as a design generator, respectively. Like the hospital studios, both will focus on finding common ground between the disciplines of HASS and STEM (arts and sciences, once you lose the fancy acronyms).

Within these studios we will be seeking opportunities to share lecture programmes and workshops between architecture and VCA students and those from the *Exhibition Management* course. In the exhibition design studio for example, we propose

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inviting VCA students to act as clients for an object based design task, and researchers from the sciences to act as clients to inspire the semester's major design project. We'll invite arts students to use these final design projects as a basis for their own major assessment, a proposal that costs and pitches an exhibition.

Bringing together these various skillsets will deliver a highly authentic learning experience that has the potential to result in obtaining funding to stage an exhibition; a fitting opportunity given the universities plans to build a Science Gallery, for the new gallery at the VCA, and the eventual extension planned for the Potter.

These are just a small handful of the affordances of our location, within a thriving, multi-disciplinary research campus to enhance the studio experience. The design studio remains the cornerstone of an architectural education but many have argued this has not changed significantly from its roots in the Beaux Arts method. The studio is overdue for an update; we suggest transdisciplinarity is the way forward.

Dr Rebecca McLaughlan is an architect, research fellow and studio leader, the University of Melbourne.

Professor Alan Pert is Director of the Melbourne School of Design, the University of Melbourne and Director of Nord.

If you are interested in being involved with any of these studios, please contact Rebecca McLaughlan or Alan Pert.

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THE BENEFITS OF TRANSDISCIPLINARY DREAMING

The speculative designs produced within the context of the design studio provide a vehicle for imagining new directions for the role of the hospital in society, for new models of health care delivery and the ways that the built environment might challenge expectations of contemporary health care. Highlights from our pilot studio included:

- » Yien Hsui Niu's research uncovered disparities between the recycling practices of hospitals and how architects are briefed to design these – a communication practice that can exacerbate hospital waste.
- » Sarah Lam Po Tang speculated on the integration of a palliative care facility with the VCA's artist studios. This work responded to the recognised benefits to wellbeing of music and art therapy programmes and inspired our upcoming studio.
- » Work by Rovi Lau and Laura Ng challenged the exclusion of people living with dementia from our city centre; Lau by expanding the concept of universal design to include dementia and applying this lens to Swanston Street, Ng by doing the same with Flinders Street Station.

- » Imogen Siberry and Ding Yu reimagined the contemporary paediatric hospital. Siberry applied children's stories as a framework for experiencing the hospital and Yu questioned whether the practice of building a hospital and inserting distractions should be reversed; could we insert a hospital into a theme park [see images]. Now we admit that hanging a two tonne CT-Scanner upside down from a roller coaster stretches the bounds of plausibility. However, if you've seen the price tag that accompanies Philips' Kitten-scanners (a miniature MRI machine for toy animals – not uncommon in contemporary children's hospitals), the idea that someone might prototype a Ferris wheel consultation room is not inconceivable. Perhaps more importantly, both projects suggested a more engaging model for arriving at, and traversing the hospital, while challenging what the process of waiting might entail.

One studio, four innovative ideas for healthcare. We're currently working on getting this work out to the world through conferences and research journals – not as research *about* teaching but as research in its own right.

Acknowledgements

The [un]prescribed hospital pilot studio was delivered in collaboration with Lyons, and with generous time contributions from: Corbett Lyon and Codey Lyon (Lyons), Stefano Scalzo (DHHS, formerly of Lyons), Julie Bernhardt, Colin Masters and Quao-Xin Li (Florey

Institute), Jonathan Daly (Studio Huss), Catherine O'Shea and Forbes McGain (Western Health), Tanya Petrovich (Alzheimer's Australia), Michael Annear (Wicking Dementia and Research Institute, University of Tasmania), Sarah Blaske (Peter Mac Cancer Centre), Allen Kong (Allen Kong Architects), Pippa Soccio, Stephanie Liddicoat & Ahmed Sadek (MSD).

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Markauskaite, L. & Goodyear, P. *Epistemic Fluency and Professional Education: Innovation, Knowledgeable Action and Actionable Knowledge* (Springer 2016).

Mirko Noordegraaf. "Risky business: How professionals and professional fields (must) deal with organizational issues." *Organization Studies* 32 (2011): 1349–1371.

Images:

Master of Architecture Thesis, Ding Yu: Paediatric Hospital as Neverland.

- 01. Space Force.
- 02. Ferris Wheel.
- 03. Tunnel World.

TERRA ODDITIES: THE PAINTED DESERT MOBILE STUDIO PROJECT

Andrew Saniga

CREATIVITY CAN BE STIMULATED IN MANY DIFFERENT WAYS. IMMERSING STUDENTS IN CHALLENGING FIELDWORK ENGENDERS SELF-BELIEF AND CONFIDENCE IN ONE'S CREATIVE POTENTIAL.

Fieldwork should embrace improvisation. Making things up as one goes along develops competence and resilience which are essential for survival, in all walks of life.

My studios have focused on remote and marginal landscapes, their histories, and an array of artistic genre that such landscape have generated.

The *Terra Oddities* studio subject for the Master of Landscape Architecture gave students the opportunity to test relationships between the past, present and future in the creation of architecture and landscape.

The studio is set for a revival in the 2018 Masters program, having run in 2002, 2005, 2008 and 2010.

In its 2010 incarnation, fifteen staff and students went on a two-week painting trip into the South Australian Desert. Unlike most Faculty travelling studios that head offshore, ours was firmly planted in Australia, and a remote part of it at that. Our studio took the notion of a travelling studio literally – we physically built a 'mobile studio', a 'classroom that travelled'.

Our study site was Woomera, a village set deep in the South Australian desert. A product of Australia's role in the Cold War, by the 1960s and 70s Woomera's



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FIELDWORK SHOULD EMBRACE IMPROVISATION. MAKING THINGS UP AS ONE GOES ALONG DEVELOPS COMPETENCE AND RESILIENCE WHICH ARE ESSENTIAL FOR SURVIVAL, IN ALL WALKS OF LIFE.

population levels reached around 6000 people. Rocket testing and related military activities were gradually scaled down through the 1990s. With drastically depleted populace and three and half pubs, its ruinous landscape still carries traces of history, running deep seams through the region.

Our early trips to Woomera featured watercolour classes at dawn. Stories of these painting stunts became somewhat legendary around the Faculty and on the 2010 trip painting ruinous desert landscapes became our chief activity. We researched international art movements that resonated with our aims, such as earthworks artists Robert Smithson and Nancy Holt; and the Survival Research Laboratory, a US-based art outfit that invents and tests machines. The advice of various landscape artists was sought: Jack Absalom, Alex Mendelssohn, Nick and Heather Safstrom and Melbourne-based artist John Wolseley, who opened the *Terra Oddities* exhibition and featured in one of the student projects.

The history of Australian overland travel informed the studio, looking at itinerant figures such as Reg Sprigg (geologist), The Leyland Brothers (explorer film makers), Australia's Muslim cameleers (transport) and Len Beadell (post WWII surveyor

and road builder). Beadell's outback surveying and road building were a kind of landscape architecture on a vast scale, his vehicles and equipment being intrinsic to his 'designs' and his survival.

Perhaps the most significant inspiration was Tom Kruse, the outback mailman who repeatedly made the epic mail run between Marree and Birdsville in a 1936 Leyland Badger. John Heyer's 1954 docudrama *The Back Of Beyond* was based on Kruse's journeys. The quality of Heyer's award-winning cinematography became our guiding star. We ordered the film from the National Film and Sound Archive in Canberra and staged a free screening at the Woomera Theatre.

Building our mobile studio began with the purchase of a second-hand steel 6x4 trailer late one night from a bloke in Frankston. The 2010 class then spent six weeks designing and constructing a plywood box to sit atop: a unit that could store our easels, paints, paper and other useful travel gear. The trailer started conversations with local people virtually everywhere we went. In teaching via an epic (educational) road trip we learned the importance not only of 'immersion' but also the need to 'expunge' – our preconceived ideas, our expectations; our everyday normal city existences.

This studio culminated in the exhibition, 'Terra Oddities Mobile Studio' at the University of Melbourne's Wunderlich Gallery. Our trailer was painstakingly dismantled and reassembled centre-stage among an energised if eclectic set of student design projects. The exhibition was like theatre, 'experiencing a road map', illustrating our passage along the remains of Woomera's vanishing history.

Andrew Saniga is Associate Professor in Landscape Architecture, Planning and Urbanism, the University of Melbourne.

Images:

All photographs are by Andrew Saniga, 2010.

01. Joanne Nataprawira paints ruins of a homestead north of Woomera, 2010.

02. Linas Vaiciulevicius with the mobile studio in Kingoonya, 2010.

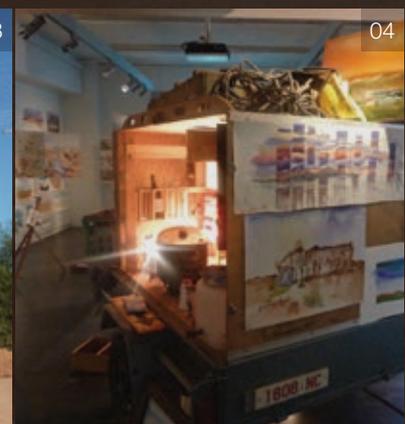
03. [Back row, left to right] Linas Vaiciulevicius, Alex Mendelssohn, Danius Kesminas, Brent Greene, Caitlin Brosnan, Emerald Wise, Kate Fitzgerald, Stephan Moravski, Justin Bolton, Tian You, Joanne Nataprawira. [Front row, left to right] Ruth Redden, Nayan Puri, Dee-Ann Simmons, Stephanie Kaul, Andrew Saniga.

04. Terra Oddities: mobile studio. Wunderlich Gallery, The University of Melbourne, July 2010.

05. Watercolour by Joanne Nataprawira, 2010.



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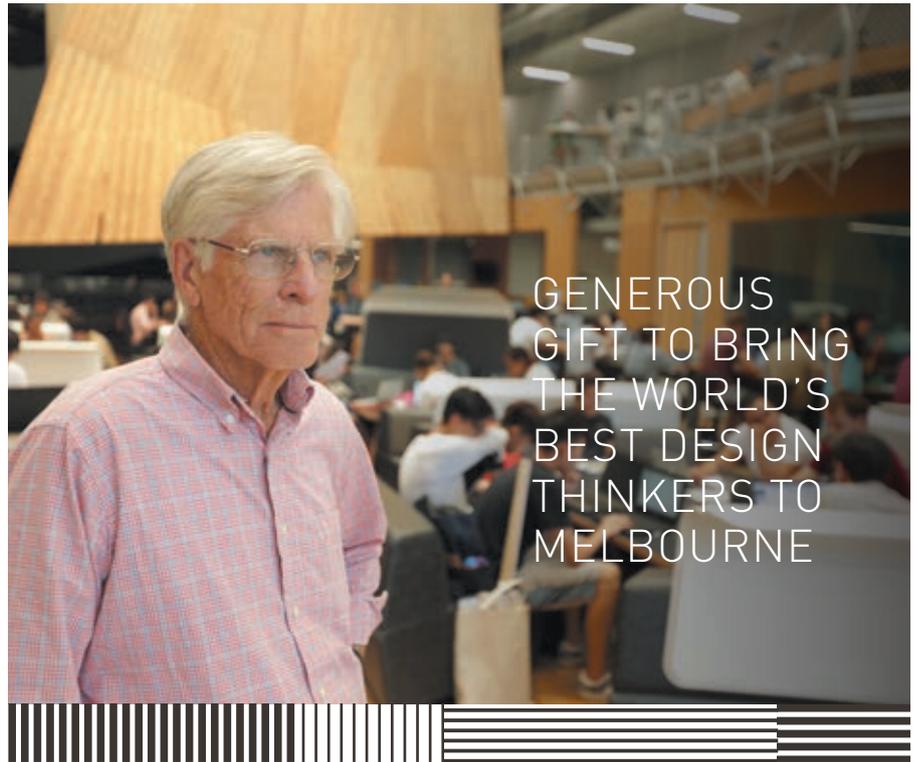
Up to \$999

Anona F Armstrong AM
Rebecca L Bond
Annmarie Brennan
Frederick J Coates & Faye Coates
Ranko Cosic
Margaret E Dengate
Elvira S Edmond
Philip J Goad
Elisabeth F Grove
David Grutzner
Llew Gwyther
Chris Harvey
Dominique Hes
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The Faculty also thanks the generous donors that have supported the Dean's Honours Awards and MSDx exhibition, supporting the Faculty's acknowledgement of academic excellence.

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GENEROUS
GIFT TO BRING
THE WORLD'S
BEST DESIGN
THINKERS TO
MELBOURNE

THE FACULTY OF ARCHITECTURE, BUILDING AND PLANNING HAS RECEIVED A GIFT OF \$1 MILLION FROM CREATIVE FUTURES, FACILITATED BY ALUMNI DR ROBERT TRESEDER AND PROFESSOR DARYL LE GREW.

The generous gift will provide the annual Robert Garland Treseder Fellowship, set to bring internationally acclaimed design and innovation trailblazers to work in residence at the University.

The gift is the largest donation to the Faculty of Architecture, Building and Planning at the University of Melbourne in its history.

The perpetual Fellowship will enable artists, business innovators, designers, policy leaders, start-ups, architects and scholars with a dedication to the development and promotion of design-based innovation to visit Melbourne.

As a Fellow in residence these thinkers and practitioners will contribute to the intellectual life of the city, presenting lectures and workshops. They will also have the opportunity to work in the Melbourne School of Design, with access to the gallery and state-of-the-art fabrication workshop to create and exhibit their work.

Dr Robert Treseder is a planning graduate of the University of Melbourne. He also taught at the University, lecturing in Communication Design and Environmental

Design. In the 1980s he was elected to the position of Chair of the Faculty of Arts Education for five terms and was appointed Head of the now-closed School of Art and Design for five years.

Dr Treseder has an enduring passion for design and is keen to support the continued growth of Melbourne's internationally-respected design community.

"I was interested in creating a design program for Melbourne that was fundamentally for the social good of the city," he said.

"I'm looking forward to seeing thinkers come to Melbourne. They think the same way we do, in terms of innovation. I'd like people here in Melbourne to have the chance to interact with the best".



The Robert Garland Treseder Fellowship gift is part of *Believe – the Campaign for the University of Melbourne*. The biggest undertaking for an Australian institution, Melbourne is aiming to raise \$1 billion in philanthropic investment by 2021 to change the lives of future generations.



01

BEEN & SEEN

01 EcoCity Launch

Dean Professor Julie Willis chatting with Stan Krpan, CEO of Sustainability Victoria, at the launch of the EcoCity World Summit on 10 April in our Dulux Gallery. The Summit will take place 12–14 July 2017.

02 50th Reunion

Since 2011 we have supported the enthusiastic work of alumni to plan and run the 50th reunion for commencing year students. Pictured are those who dared to enter through the Faculty's doors in 1966. An enthusiastic thanks to Bill Henning (BArch 1972) and the members of the organising committee of the 1966 Reunion, who made this wonderful event possible.

03 Women of ABP Network

In December 2016 we hosted more than 80 alumnae for the launch of the Women of ABP Network. The network is supported by the Faculty and led by five ABP graduates who wish to support recent graduates and alumnae to advance their careers. The Network has already held an event this year and is planning to hold two more. Get in touch with the Network via Facebook. Pictured: Lucy Cuthbertson (March 2009) chatting to a group that includes Fiona Dunster (BBldg 1994).

04 Dean's Honours Awards

Current student and inaugural recipient of the Tarkett Positive Legacy Design Award, Brigit Skilbeck, surrounded by delighted family, benefactors and Faculty members. From left to right: Dr Robert Crawford; Mariana Thomas of Tarkett Australia, who presented the award; Mrs and Mr Skilbeck; Brigit Skilbeck; Dr Dominique Hes and Ewan Oglivy (MArch 1983).

06 Young Singapore ABP Alumni Gathering

In April 2017 we held a reunion for recent Singapore ABP alumni. Ruby Lai-Chuah (BArch (Hons) 1976) spoke about her career, providing advice based on her expertise and experience. The event was held in collaboration with the ABP Singapore Alumni Network which aims to connect Singapore ABP alumni across disciplines, facilitating networking and career progression. The Network can be contacted on Facebook.

05 Bus Tour

Every year the Faculty invites benefactors to join the Annual ABP Supporters Bus Tour. The tour includes two buildings of architectural significance and lunch, where guests have the opportunity to wax lyrical about all things ABP and catch up with old friends and classmates. The 2016 tour visited the Walsh Street House (pictured) designed by Robin Boyd and the Seccull House designed by Guilford Bell. The Advancement Team offers special thanks to Professor Philip Goad (PhD 1993), who has made this an event unmissable for four years running.



02



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06

INSIDE THE FACULTY

OCTOBER 2016 – MARCH 2017

NEWS AND PEOPLE

Last November, **Julie Willis** officially started her new role as Dean of the Faculty of Architecture, Building and Planning. Willis brings a wealth of knowledge and experience to the role, and has held numerous leadership positions at the university since she arrived in 1998. Most recently she was the Pro Vice Chancellor (research and practice capability). Willis is a professor of architecture and a respected scholar and architectural historian. She is an author and editor of the *Encyclopedia of Australian Architecture*.

Rob Adams, Julie Eizenberg and Peter Watts were each awarded an Honorary Doctorate by the University of Melbourne in December 2016. The announcement was made before the University community at a special graduation ceremony. The Doctor of Architecture is one of the highest academic honours bestowed by the University, and recognises the substantial achievements of each recipient.

Associate Professor in Urban Planning, and Director of the Bachelor of Environments, **Alan March** has been named the 2016 Victorian Planner of the Year at the Planning Institute of Australia's Awards for Planning Excellence held last November. The award recognised Alan's outstanding contribution to improved State planning practice regarding bushfire vulnerability, disaster risks and resilience. He was also recognised for his leadership in education, and research across urban design, planning law, bushfire risk reduction and disaster risk reduction.

Carolyn Whitzman was also recognised and was awarded a Fellowship for her longstanding commitment to, and demonstrated leadership within, the planning profession.

PhD student **Claire Boulange** received the Award for Excellence in an Outstanding Tertiary Student Project at the same awards for her impressive doctoral thesis, *The Walkability Planning Support System*. Claire has developed an interactive, computer-based tool to predict the probability of walking as a mode of transport. The tool evaluates variables such as residential density, land use mix and street connectivity to determine whether the built environment will help or hinder walkability.

Congratulations to **Hannah Lewi** and **Justyna Karakiewicz** who have both been promoted to Professor. Congratulations also go out to **Robert Crawford, Chris Heywood** and **Andrew Saniga** who have all been promoted to Associate Professor.

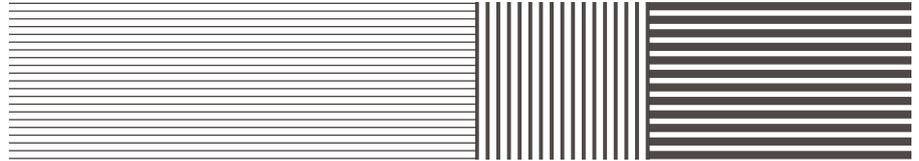
2016 saw the launch of the **Made Possible by Melbourne** campaign, a University-wide campaign showcasing the world-changing research taking place at the University of Melbourne. Specially-designed and manufactured installations were spread across the CBD, creating an exhibition that used models and interactive elements to enhance public engagement with each research story.

The Faculty of Architecture, Building and Planning was involved in two of the twelve research projects profiled by the campaign. *Rearranging the Way We*

Learn featured research by ABP's LEARN Research group into re-imagining class room design, whilst *Growing Greener Cities*, a collaboration with ABP's Thrive Research Hub, investigated lowering city temperatures and energy costs through green roofs. After completion of the *Made Possible by Melbourne* CBD exhibition, the installations were displayed in the Dulux Gallery here at the Melbourne School of Design over January and February.

Professor **Mark Stevenson** was lead author for a three paper series published by *The Lancet*. The series focuses on research that for the first time quantifies the health outcomes that could be gained through changes to urban design and the transport system. The authors identify the health gains that could be achieved if cities encouraged a modal shift from private motor vehicle use to active transport namely bicycling and walking, and increased public transport use, services and amenities.

The Faculty of Architecture, Building and Planning also featured prominently at Melbourne Design Week, an initiative by the Victorian Government to strengthen, support and promote the state's design industry. As part of Melbourne Design Week, **Alan Pert** hosted an Open House and exhibition celebrating the life and works of émigré architect Ernest Fooks. **Jefa Greenaway** posed the question "Does Blak Design Matter?" in a sold-out seminar where he, along with a panel, explored the innovations of Indigenous-led design, and what constitutes meaningful Indigenous design.



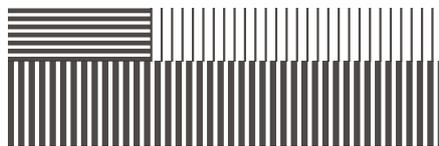
RECENT EVENTS

Pholiota: Unlocked

Master of Architecture students led by Philip Goad constructed a full-scale replica of *Pholiota*, the tiny 1920s Eaglemont home of Walter Burley Griffin and Marion Mahony, in the Dulux Gallery. The students created the 1:1 replica using the same innovative Knitlock system of interlocking bricks the Griffin's invented and patented as the future for Australian suburbia. The exhibition formed part of Cultural Collisions at Melbourne Festival.

MSDx Exhibition

The Faculty's annual end of year exhibition, MSDx, once again took centre stage throughout November and December. The exhibition showcased over 400 pieces of student work and transformed four floors of our award-winning building into a gallery space full of innovation and new narratives. The wide array of creative work on display presented visitors with an opportunity to see what the future of innovation in architecture, landscape architecture, urban planning, construction and urban design could look like.



Dean's Lecture Series, October 2016 and April 2017

The Faculty of Architecture Building and Planning hosted the final Dean's Lecture of 2016, which was presented by special guest **Judith Innes**, Professor Emerita of City and Regional Planning, UC Berkeley. Prof Innes discussed the challenges of planning in complexity, and highlighted the benefits of resolving complex planning problems through collaboration with public agencies, private entities, NGOs and other stakeholders. These collaborations are better suited than bureaucracy or legislative process for dealing with complexity, rapid change, and uncertainty because they are more flexible, inclusive and better informed.

Frankfurt based architect and Stuttgart university Professor **Achim Menges** kicked off the 2017 series as the first Dean's Lecture speaker for the year. Menges explored the development of integral design processes at the intersection of morphogenetic design computation, biomimetic engineering and robotic fabrication that enables a highly articulated, performative built environment. Prof Menges encouraged the audience to rethink *how* we build, and regard form, material, structure and environment not as separate aspects, but rather as complex interrelations that are embedded in and explored through integral computational processes.

