



THE UNIVERSITY OF
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Faculty of
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Attrium



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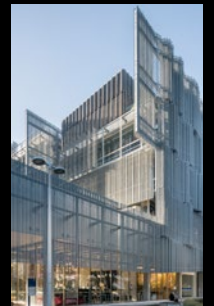
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Inside the Faculty



From the Dean Julie Willis

It's been a busy start to the year for the Faculty. MSD has been buzzing with activity, from guest lectures to exhibitions to the exciting and foundational work of teaching the next generation of designers and creators.



The year started with the first of our Dean's Lectures, where Assistant Professor Heather Dorries from the University of Toronto revealed how Indigenous knowledge can revitalise our urban centres in the face of settler colonial urbanism.

Our second Dean's Lecture for the year, featuring historian, critic, curator and Professor of Architecture at MIT Ana Miljački, delved into the curatorial and pedagogical work of MIT's renowned Critical Broadcasting Lab.

There were amazing exhibitions on display at the Dulux Gallery. 'Baggarrook-al Biik-u – She is of Country' invited visitors to experience Country through the eyes of First Nations woman Dr Mandy Nicholson, Wurundjeri, Dja Dja wurrung and Ngurai Illum wurrung. You can get an insight into the exhibition visuals on p8. This was followed by 'Beyond Housing', celebrating the work of Design Studio Epsilon, the undergraduate capstone design subject for Melbourne School of Design's Bachelor of Design students majoring in Architecture. It showcased 32 student works produced over the past four years.

Other events included a public lecture from Dr Tania Sengupta, Associate Professor of Architectural History and Theory at the Bartlett

School of Architecture, University College London, on spatial imaginations of colonial and imperial built environments in India. We also held a presentation of Studio_ITO's research agenda that aims to critically analyse and articulate the over-extraction of natural resources in the global south.

The University of Melbourne hosted two design hubs as part of Melbourne Design Week 2024, activating iconic design spaces Melbourne Connect and MSD for 11 days of events. With a focus on sustainability, ethics and technology, MSD showcased the latest in design thinking and creation with a range of events to inspire everyone from the design-curious to the design professional, including workshops, talks and installations.

We recently celebrated our annual MSDx Winter opening party. From the basement to the rooftop, the creative minds of our students transformed the building into a vibrant gallery space. Beginning with a Smoking Ceremony, the night featured pop-up conversations between tutors and students, alongside projections, gallery tours and waste materials workshops. It was wonderful to welcome so many family, friends and industry guests into our building.

In this edition of Atrium, you'll find the story behind the research driven design of Victoria's only children's hospice, Very Special Kids – a project led by Deputy Dean Alan Pert (p4). We travel to Jakarta to explore the award-winning and community-saving architecture of MSD alumni Kamil Muhammad (p16).

Elsewhere, you can read how Landscape Architecture masters student Chris Tankard applied his research into some of Japan's oldest markets to his work with local community group Save Preston Market (p12). Find out how Associate Professor Hemanta Doloi's blue sky vision for India's rural villages can help save the world (p16).

Closer to home, see how MSD student Hugh Foster's time as part of the award-winning Bower Studio led him to develop an elegant cooling solution for the remote community of Kalkaringi (p18). Olympic runner Catriona Li Bisset, talks us through her unconventional academic trajectory, graduating with high distinctions in both her Master of Architecture and her diploma in Chinese language in 2023 after seven years of part-time study (p14).

I hope you enjoy this edition of Atrium and I look forward to sharing even more of our achievements and adventures with you later in the year.



Built from research: How MSD collaborated to create a state-of-the-art children's hospice

Situated on Glenferrie Road in the Melbourne suburb of Malvern, Very Special Kids is the only hospice in Victoria dedicated to respite and end-of-life care for children since it opened its doors in 1996. While a vital service for children, young people and their families, by 2016 it was in desperate need of modernising.

This is where Professor Alan Pert, Deputy Dean of the Faculty of Architecture, Building and Planning, stepped in, with research support from Dr Rebecca McLaughlan, to reimagine the facility from the ground up, taking a research-first approach to every design element. As the project developed, architect Andrew Simpson joined the collaborative effort, which led to the establishment of Parallel Practice. Barbara Bamford from Bamford Architects also came on board to help see the project through from concept to completion.

Established by Sister Margaret Noone, the first iteration of the hospice at Very Special Kids House was representative of its era,

both in design and function. At that time, children born with life-limiting conditions were not expected to live into their teens and there were limited medical aids to assist with their quality of life. Thankfully, a lot has changed since then.

Medical advancements and life-changing supports have meant children with complex and life-limiting conditions are living longer, often into adulthood. A [UK survey](#) found the number of young people with life-limiting conditions living to age 19 has increased significantly from 921 in 2001/02 to 3,075 in 2017/18.

THE REIMAGINED VERY SPECIAL KIDS HOUSE



While babies, children and adolescents with complex conditions are living longer, their needs are more complex – young people are often leaving ICU, and indeed hospital altogether, with significant amounts of equipment. In this era, palliative care has shifted from hospitals to homes. While a positive development in many cases, it has placed an increased burden on families and the carers who assist them.

Very Special Kids needed to modernise in order to meet the needs of the growing number of children accessing palliative care outside hospital settings. An ambitious redesign was required, but change in any context, particularly for such a loved organisation, can be hard.

When asked about embarking on the redesign process, Very Special Kids CEO Michael Wasley offered this advice to healthcare providers, “One of the first steps is to be open to change. Our original hospice was built in 1996 by our first employee Sister Margaret and was Australia’s first children’s hospice. After 25 years of operation, we knew the space was not addressing the complex needs of children of varied age, size and ability. It became clear that we needed to start afresh to best meet the advanced needs of the children in our care.”

The task before Alan and the research team was to clearly understand how the hospice could improve on delivering essential care that allowed children to live comfortable, active lives, that in turn maximised their quality of life.

They needed to understand the problems and barriers that limited the care offer and make specific recommendations aimed at providing leading-edge paediatric palliative and hospice care. It was vital that the design offered both improved clinical care capacity, while still presenting as a home-like environment.

Alan and the team set about conducting interviews, surveys and workshops with family members, nurses, therapists, and many others across the Very Special Kids community, to better understand the needs of people working and staying in such a complex care environment.

Following interviews with nursing staff from Very Special Kids, they revealed that when delivered well, palliative care was more about living than dying. In its current state, Very Special Kids House couldn’t offer purpose-built spaces for children with complex health needs.

The building was cluttered, with minimal storage for the growing range of supportive equipment that children with complex needs required. It was also designed for much younger children, with decoration and play equipment geared towards babies, toddlers, and primary school-aged children – adding an element of exclusion for the older teens and families who were using the facility in growing numbers.

There was also a need to improve privacy and dignity, not only for children and their families but for staff who had no dedicated space to withdraw to when the emotional and physical toll of their role became momentarily too great. This also extended to the end-of-life and after death stages of care, with no purpose-built areas designed for families to not only grieve but to create loving memories.

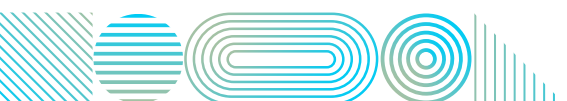
Alan and the team took their on-the-ground consultation data, consumer-led feedback, plus 30-hours of onsite observational studies and combined it with extensive research on leading paediatric palliative care, value-driven design, and heritage considerations. Their research findings informed the creation of an evidence-based design for a new hospice to be built on the existing site.

MUSIC THERAPY ROOM AND OUTDOOR PLAY SPACE



“Very Special Kids was no longer adequately equipped to cater for the large amounts of clinical equipment, such as piped oxygen, ceiling hoists, ventilators, and central venous lines, that comes with children living longer, more active lives.”

– Alan Pert



HYDROTHERAPY POOL



Construction began in mid-2021 and by November 2023, a world-class children's hospice built from research was a reality. Very Special Kids House is unique in Australia and remains Victoria's only hospice for children.

The state-of-the-art facility is a bright home-away-from-home featuring spaces for music and art therapy, a wheelchair-accessible playground, a hydrotherapy pool, and even has a resident therapy dog named Jaffa. The central courtyard, which is key to the spatial organisation of the building, has a permanent sculpture by interdisciplinary Kamilaroi, Gamilaraay, Gummaroi artist Reko Rennie.

Importantly, the research doesn't stop now that the new hospice has opened its doors. A critical and underutilised aspect of architectural design is conducting a before and after analysis – finding out what happens when the building stops being a design on paper and starts being a lived-in environment.

Christhina Candido, Associate Professor in Environmental and Sustainable Design at the Faculty of Architecture, Building and Planning, works in the field of Post-Occupancy Evaluation. She believes much more can be gained from continuing to assess the performance of the hospice and how it does, and doesn't, work for children, families and staff.

“

“Part of our ongoing commitment to Very Special Kids is ensuring it grows with the people who use it. Are there improvements we can make? Was there something we missed in the original design? Is the building working?”

– Christhina Candido



REDESIGNED ROOMS FEEL MORE LIKE HOME



Feedback from Very Special Kids following completion of the build has been vital. One key takeaway is the impact that freedom of choice has had on the children staying in the hospice.

While each therapy room has been purpose built, they can also be adapted to meet age-appropriate needs. For example, a teen can spend time playing a video game in the multimedia room, while a younger child does creative therapy in the music and art therapy room. The bedroom design also offers children a greater sense of privacy, with each room having an individual ensuite and their own personal TV if they need quiet time to unwind.

The hydrotherapy pool has been a firm favourite for many children and families. In addition to the emotional benefits, aquatic

AERIAL VIEW OF VERY SPECIAL KIDS HOUSE



The design research team from Parallel Practice would like to thank members of the Very Special Kids community, including the Board, staff members, management, fundraising team, bereavement support, volunteers, patients and families for their engagement and participation with this project. The researchers would also like to acknowledge the support of the Department of Health and Human Services, and staff and students from the Melbourne School of Design.

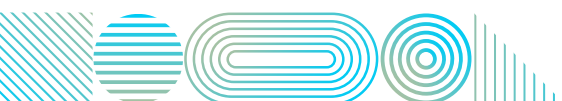
physiotherapy can also help soothe pain and manage symptoms.

Just as Christhina expected, unexpected problems have arisen, such as the need to improve accessibility between the hospice building and external areas such as family accommodation.

But so have unexpected surprises. Access to natural light has had a greater impact than staff had hoped for, making each room feel inviting and warm. This is particularly true for the Balam Balam suite (“butterfly” in Woi wurrung) – a dedicated space offering families greater privacy for after death care. Very Special Kids have received feedback from families that the space has offered them comfort, privacy and a sense of safety during the most difficult time.

Another pleasant surprise is that Very Special Kids now has capacity for siblings to play or decompress in areas including the soft play area, playground and lounge room. Staff have reported that young family members are even helping Very Special Kids’ chef in the kitchen, allowing for vital memory-making opportunities during the death of their sibling.

The creation of Very Special Kids House is not meant to stop with one building. Alan hopes that this design can be used as the model or prototype for future projects, “Creating safe and welcoming spaces for end-of-life care is such a privilege, and one that I don’t take lightly. I hope that not just our design, but our research-first design process, can be replicated across the health sector. The patient must always come first.”



An invitation to explore Country





For our first exhibition of 2024, we were invited to experience Country through the eyes of Dr Mandy Nicholson, Wurundjeri, Dja Dja wurrung and Ngurai Illum wurrung.

‘Baggarrook-al Biik-u – She is of Country’, dove into Country’s many layers – below, on, water, wind, sky and star – holding space for the Baban Darrang or Mother Tree and its conjuring of cultural survival.

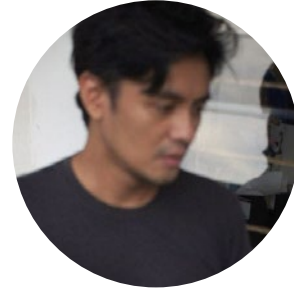
This important survey of work curated by the Wurundjeri artist, Traditional Custodian of Naarm and Senior Lecturer in First Peoples Perspectives in Design was celebrated at a launch featuring a performance by the Djirri Djirri dance group. Part of her mentorship work with First Nations young girls, the group was created by Mandy in 2013 and incorporates learning and teaching of culture, language, dance, and maintenance of ceremonial practices.

IMAGES COURTESY OF DR MANDY NICHOLSON
EVENT PHOTOGRAPHY: JAMES RAFFERTY



From the ground up: saving Jakarta's settlements through co-design

Architecture is inherently political for **Kamil Muhammad**, an alum of the Melbourne School of Design who obtained his Master of Architecture in 2014. Now a Jakarta-based architect, Kamil is director of the design and research studio pppooolll, co-founder of Architecture Sans Frontieres-Indonesia and part of the team behind Housing Rights in Jakarta, an advocacy group that was awarded the 2024 World Habitat Awards Gold Medal for their work to save settlements, known as kampungs, from developers.



FORMERLY A KAMPUNG, THE KUNIR HOUSING PROJECT WAS BUILT IN COLLABORATION WITH RESIDENTS



By working with residents, Housing Rights in Jakarta has successfully halted the evictions of 256 people across three riverbank kampungs, and helped 400 families, who had already been evicted, return to their neighbourhood to live in new apartments.

Climate change, rapid urbanisation and the impacts of community displacement, mean that architecture advocacy work like Kamil's is needed in developing urban centres across the globe. "What I've been convinced of is that architecture sits at the junction of many other things in life, in the complexities of the social, the political, the environmental," said Kamil with gentle earnestness.

Limited by preexisting bureaucratic structures, urban development in Jakarta takes a top-down approach to housing, equating quantity of built structures with quality of outcomes. Kamil rejects this status quo, preferring to work with communities to help them design and build their own homes and community structures that serve their localised needs. And his activism has had tangible outcomes, securing regulatory changes that protect all kampung residents from eviction.

"What has to change [...] is that you have to be able to work with the communities first, rather than the buildings. So, the architecture is not about the design, the architecture is about being there, the pedagogy of the making, the design with the communities."

Kamil and his team work not only to empower at-risk communities but to develop capacity so communities can build their own structures in the future using locally sourced materials.

Bamboo is plentiful throughout Indonesia and is the key material used in many of Kamil's community projects. But harvesting bamboo requires local knowledge and an ability to work with the rhythms of the earth.

"For example," said Kamil, "bamboo cannot be cut down just anytime. You have to wait until after the full moon," which is when the starch content is at its lowest and the bamboo is easier to harvest.

"With these sorts of things, you have to be there and it's not easier [than modern methods of building] but that is the point of doing this. It takes time. It takes communal effort and that's what makes it worth it."

"We shifted all this work to the local communities so that they could turn this into an economic activity for themselves. A viable, income generating activity, so they have their own small companies that work with bamboo construction."

By giving communities the tools to be their own creators, in some senses, Kamil is making the traditional role of the architect a relic of the past.

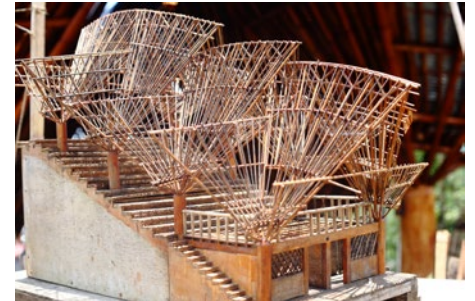
Kamil is insistent that this kind of co-creative architecture is only possible through embedding yourself within the community.

"I hate to be extractive, simply just taking the knowledge from people who live there, from people in the rural areas. Because a lot of this work requires you to be there for a long time.

"It means long-term collaborations, long-term assistance, and simply gaining trust. It's about building this relationship. And so, you have to be there for enough time for you to be able to have real talk, real chat and real work together."

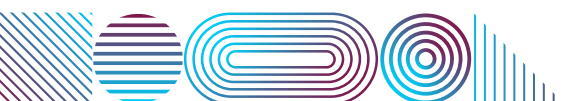
When asked what he'd like to see in the future of architectural pedagogy, Kamil was quick to place people above design. "Sometimes architects say that we try to educate people on what good architecture is. But I think [the people of Jakarta's kampungs] educated me more about existing spatial and social injustice."

TOP TO BOTTOM: MODEL OF BAMBOO CHURCH, STREET VIEW OF KUNIR HOUSING PROJECT, CROSS SECTION OF KUNIR HOUSING DESIGN



“

There's so much discussion about design led, design first. This flipping of community first is really vital. Architects need to be more convinced that what they do means something and they have to be advocates of that.”



Landscape architecture as community preservation

Chris Tankard, a Landscape Architecture masters student at the Melbourne School of Design, was awarded the [Steve Calhoun Scholarship](#). The scholarship supports landscape architecture students to travel across the globe to undertake field work.

We spoke to Chris about his trip to study one of Japan's oldest surviving markets, what saving Preston Market means to his community, and why landscape architecture can sometimes feel like anthropology.



Why Japan?

The framing [of my thesis] was using Japan as a case study for market preservation. [Nishiki Market](#) has been around since 700 AD and was officially a market since the 1600s. What are they doing that we're not able to grasp? What is it that allows them to organise their markets in a way that they can preserve these spaces? They have this market atmosphere that is kind

of intangible and hard to pin down. [Nishiki Market] is still used by locals, so it hasn't just become a tourist destination.

The scholarship [enabled me to] understand how the market functions on the ground. Doing fieldwork to try to understand what the design elements are that make Nishiki Market work and then trying to take that back and apply that to Preston Market.

What was your biggest takeaway from that trip?

The most important thing was just perspective. It helped me understand the way that Asian markets are designed. [European markets] are great markets, but there are lessons to be learned from other regions that aren't rooted in most of the market design literature.



Tell us about Save Preston Market.

I'm part of [Save Preston Market](#) group, and we get labelled as "nimby," sometimes because there's a general consensus that we're anti market development, but really what we're "anti" is the type of market development that they're proposing.

The owners [of Preston Market] mainly do retail shopping centres and residential stuff. And so, unsurprisingly, their original proposal was [to build] 3,080 apartments in that one little block. They talk about replacing the market with a Coles.

What the community wants, at least the part of the community that I'm from, is a community centric space. And none of the options that [the Preston Market owners] put forward are that at all.

What's your vision for the market?

My design is about how to incorporate these different, competing interests. A site needs to be functional; it needs to be profitable – we understand that. And because it's privately owned, it needs to function as a commercial operation. But there are other ways to do that that don't involve demolishing the market and replacing it with a Coles.

The Asian model would use multi-layered development that's truly mixed use. The bottom floor would be market space, and you can fit other things on top of that. And so, you're embedding all of the needs of the market space into a single spatial arrangement.

Successful markets are the sum of many parts. How do you factor that in?

It's very difficult to pin down the landscape components of [my thesis] because it bleeds into so many other things. What I'm looking at is almost anthropological.

LEFT PAGE: NISHIKI MARKET

To make projects successful, it's not about sitting in the studio. If I want this work to be robust, it needs to engage with planning and architecture, and it needs to engage with all these other disciplines that are broadly apart.

How do you bring these complex intersections back to landscape design?

The way I'm approaching the landscape part is to ask, "How have we gone about preserving markets in Australia thus far?" And almost all of those approaches *haven't* included landscape.

If you want to get a heritage overlay on something, that something tends to be a built structure. We use architecture to justify that to a planner.

I'm making the case that the built form of the market is irrelevant to what happens within that market. And that's what makes it special, it's the activities that happen within that space. And to design something that allows for those activities, that's landscape.

That's the only component that's missing when we talk about protecting markets.

What do you see happening if Preston Market is redeveloped?

The community function that the market serves [wouldn't be] served anymore.

I think it becomes very tempting to focus on just "Where will people buy the things?" The informality [of markets] is a big component. You can have a conversation with a person who is intimately connected with whatever it is that they're selling, and often what they're selling is personal and important to them.

Having that experience is worth more than just the exchange of goods. Having the social, convivial atmosphere that you're in when you're buying those goods is, for a lot of people, a very important part of their week.

TOP TO BOTTOM: PHOTO OF TSUKIJI MARKET TAKEN SOMETIME BETWEEN 1955 AND 1964, CHRIS AT PRESTON MARKET, NAKAMISE SHOPPING STREET WHICH DATES BACK TO THE 17TH CENTURY

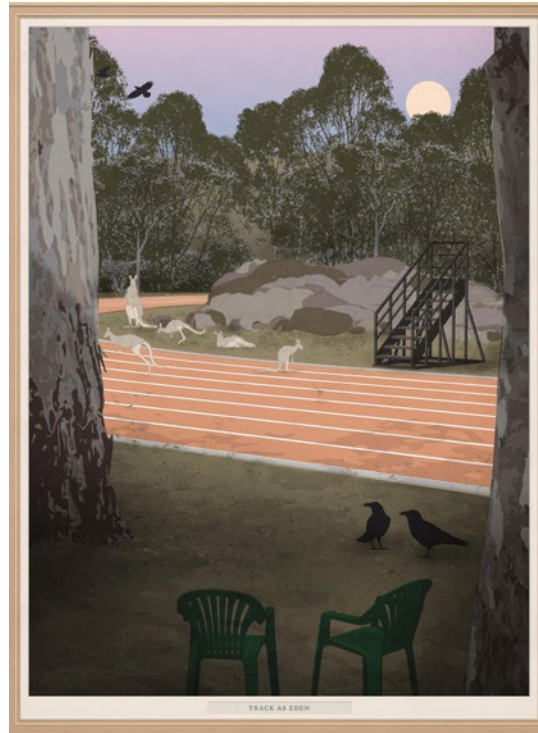


Finding your own pace: a runner's unconventional approach to studying architecture



Catriona Li Bisset received her Master of Architecture from the Melbourne School of Design after seven years of part-time study. Defying the expectations of a standard academic trajectory, Catriona chose to balance her career as a professional athlete alongside her studies. Working at her own pace, she competed in the Tokyo Olympics, the World Championships and the Commonwealth Games, graduating in 2023 with high distinctions in both her Master of Architecture and her diploma in Chinese language.

She shared her advice with us on advocating for yourself and honouring your skills outside the classroom, while acknowledging that taking time away from studying is a privilege not everyone has access to.



Tell us a bit about your education journey?

I did my bachelor's degree [in architecture] at UNSW. Then, I worked full time for two years in Sydney in architecture firms before I moved to Melbourne to start my masters full time.

I'd always been a keen runner as a kid. When I started full-time work it meant that I had a bit more routine and I could pick up the running again, but I had no real aspirations for where it would go.

It was definitely a real shock and identity shift for me in the second year of my masters when I was given the opportunity to become a professional athlete. I think in some ways, why I really embraced the athlete's life [was because] I didn't really know what I was doing.

How did you find juggling your personas as a runner and an architect?

I felt like I was an architecture student, and then I was a professional runner, and then I had to figure out that I was both of these things. I wasn't just two separate people.

I think my thesis, which I did on athletics tracks, was a really interesting culmination of all these years of this push and pull. I had to overcome this internalised stigma of not wanting this to be a gimmick and actually acknowledge all of my important expertise as a sports person.



Tell us about your thesis.

I studied athletics tracks around the world and in Melbourne. There's so much thinking and research around the mega infrastructure of the Olympics and these big spectacle events but I found very little [around] community sport, particularly athletics tracks. I spoke to my long-term supervisor, [Hannah Robertson](#), [about] how can I use this thesis as a way of becoming the architect that I want to be in the rest of my life.

I'm really passionate about participatory design. I love interviewing people and asking people about their experiences of space. I had this amazing privilege of [having] access to this massive network of Olympians, Paralympians, people across the world.

What role did your running play during your studies?

I feel like the running offered me this outlet of competition and fulfillment. And then also just the obvious lifestyle benefits of moving your body, which is not something that's prioritised like academic pursuits [are].

Over those couple of years, I guess I shifted from being a student who did casual running to being a professional runner who did part-time uni.

What are your reflections on choosing to study over an extended period?

I got to mature. I [didn't] put all of my self-worth into the outcomes of my assignments. I think a lot of students really struggle if they don't have that balance to separate themselves from their work. You put a lot of yourself into creative subjects and it is really hard to not take things personally.

And because it is subjective in a lot of ways, it is also really hard with a creative field to be really strong in your own beliefs and feelings, [and] how you want to do things.

I think [running] gave me that sort of courage and independence outside of the studies to really think about how I wanted to do things as an architect.

What advice would you give to students thinking about slowing down or taking time off?

It's a really tricky one because I don't think I really consciously made a lot of the choices that I did. [People] think there's this magic moment where you suddenly become elite enough or smart enough or special enough that you can take a break or can do something different.

But whose permission are you looking for? I think that was such a big thing for me that I tell a lot of my friends as well. No one needs to give me permission.

It's literally me standing in the way of doing the thing I want to, and so that was a huge one for me. I just have to advocate for myself.

Perhaps it's understanding that asking to step away for a bit isn't as scary as students might think it is?

It does feel really scary. [Higher education] feels like it's this big machine that you have to fight against, but I think the culture of the uni in general is becoming a lot more accommodating to people wanting to do different things.

The language around mental health is getting a lot better and people are being more educated around that. I would validate anyone's feelings of fear. It's a really big ask for a lot of students, especially if English is a second language.

LEFT PAGE: TRACK AS EDEN BY CATRIONA LI BISSET

BELOW: CATRIONA COMPETING IN THE WOMEN'S 800M AT THIS YEAR'S WORLD INDOOR CHAMPIONSHIPS IN GLASGOW

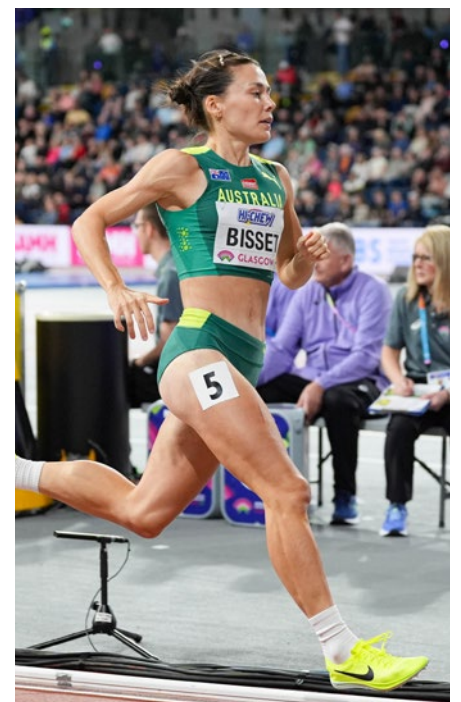
I just want to reinforce everyone has a different approach and if you just want to go through your degree and bang it out, go for it. I think that is completely valid. I don't think there's any one right way of doing it.

You can ask for other things, but there is a degree of privilege that comes with that, whether that's being very articulate or very good at advocating for yourself.

What's next for you?

I'm preparing for the Olympics. Looking into collaborating with artists and other architects around installation projects that we can do at athletics tracks and other community sport venues – exploring those ideas around sport and public space and how we can better support that relationship between the private and public within the sporting context.

I don't think I would have been ready to become the architect that I'm looking to be now if I hadn't spent that large amount of time exploring these other parts of my life.



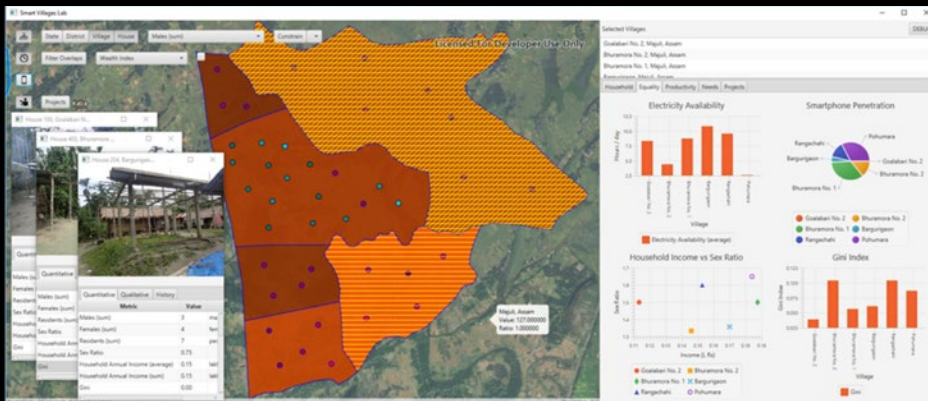
Smart Villages empowering rural communities

Associate Professor Hemanta Doloï points to a simple graph on the table in front of him. It shows a green circle with 40 per cent written below it and a red circle with 60 per cent. This is the ratio of rural to urban populations the world needs to sustain itself and slow the effects of climate change.



TOP: INDIA IS EXPANDING BRICK-AND-MORTAR HOUSING INTO RURAL AREAS

BOTTOM: DATA VISUALISATIONS USING THE SMART VILLAGES APP



As rural communities across the globe succumb to urbanisation, cultural degradation and urban migration, the UN predicts that urban populations will grow to 68 per cent by 2050, tipping this delicate but vital balance into the red. Hemanta, a recent recipient of the Nelson Mandela Leadership Award, has a blue-sky vision on how to reverse this trend.

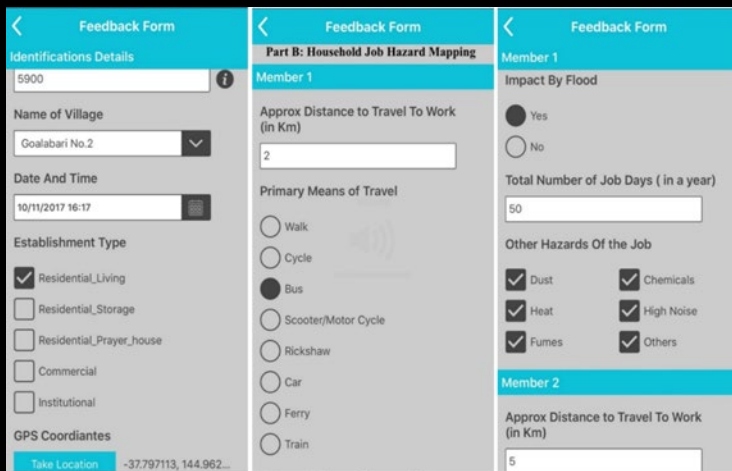
Together with a team of experts from the Faculty of Architecture, Building and Planning's Smart Villages Lab, Hemanta is working with the Government of Assam in northeastern India to empower rural communities across the state to not only stay in their hometowns, where their cultural and familial roots run deep, but help them thrive using bespoke planning solutions.

"We cannot bring one single-size approach everywhere. Looking at the Indian government's Housing for All program [worth over \$17 billion AUD], they are simply expanding the brick-and-mortar model into very rural pockets, destroying the heritage, destroying the villages, destroying everything. At the same time, brick and mortar houses are never modernising those people," explains Hemanta.

When asked what the homes supplied by India's Housing for All program were being used for, Hemanta replied "they keep their animals in those little brick and mortar houses."



SMART VILLAGES USE LOCATION-SPECIFIC SURVEY FORMS TO GATHER DATA



Smart Villages uses hyper localised, culturally specific data collection to feed back to local and state-level policy makers to prevent this kind of cookie cutter approach to rural development. Using the [UN's 17 sustainability goals](#) as benchmarks, the data identifies the areas where government planning improvements can be made village by village, while ensuring their cultural heritage and community bonds are maintained.

“These people have been living there for many thousands of years without any issue. They had no problem with the food. The natural disasters, flood comes, whatever comes, they have knowledge, they have power. What we are doing, we are developing the urban sprawl.

“If we keep doing that, what’s going to happen is that this 60 per cent,” Hemanta explains, pointing to the large red circle of urban development on the piece of paper in front of him, “is going to be 100 per cent one day and this world is not going to be sustainable.”

Smart Villages started as a pilot project in 2017, collecting data in 26 villages across Assam. This proof of concept led to the creation of a data collection app. Working alongside people who live in the communities they’re surveying, Hemanta

and his team have since collected localised data from 2,727 villages and approximately 2,600 households.

“We’ve got to make sure that these people are all understood at the bottom up, at the grassroots level.” The Smart Villages Lab hopes to collect data from a further 26,000 villages, creating tailored, efficient and climate conscious planning recommendations for each one.

“We have to have big data in terms of who lives there, what do they have, what they do not have, what are their immediate needs, what’s initially being upgraded, and how we can empower them in a progressive manner?” said Hemanta.

Using access to health services as an example, Hemanta explains that the impulse urban government officials have to build large hospitals to address the problem, while well meaning, is misplaced. Instead of access to a physical structure that draws on scant resources and impacts on the natural environment, Hemanta suggests access to digital telehealth with designated urban hospitals would be more effective – thus changing the planning recommendation from a traditional hospital to reliable broadband access. “So instead of building physical structures, it’s about just ensuring that accessibility,” said Hemanta.

By understanding the micro, Smart Villages can have huge policy implications on the macro. Though currently based in Assam, Hemanta believes that scaling up Smart Villages to a global level, understanding what every rural community needs, is the best way to reestablish the mutually beneficial ratio of 40:60. Hemanta believes that by working as a global ecosystem, respecting what both urban and rural communities have to offer each other, we have the capacity to improve the lives of everyone.

“I can afford it, I can have the fine dining, but that fine dining is at the cost of people back in rural [areas]. Your luxurious flight from Singapore to New York is being countered by the heavy lifting of housing people in Africa.”

Hemanta did not deny the grand, idealistic scale of his vision. “I don’t want to say all or nothing because that sounds too reductive, but we all have to be moving in the same direction.”

If enough support can be garnered for Smart Villages, the next step is to bring this village-by-village approach to the rest of rural India. After that, the world.



Sustainable solutions built for Country



ON COUNTRY AT KALKARINGI



As part of his Masters of Architecture final year research project, Melbourne School of Design student **Hugh Foster** has developed an elegant cooling solution for the remote community of Kalkaringi.



Located approximately 550km southwest of Darwin, Kalkaringi's average temperature sits at a scorching 34 degrees. With electricity supplied by unreliable and costly generators, the Karungkarni Art Centre, and the Gurindji artists who work within it, don't have access to reliable cooling.

With art being one of the region's primary economic sectors, the Art Centre is both a cultural hub and a core pillar of Gurindji financial sovereignty. Access to safe, sustainable, and location-specific cooling options are vital to help sustain artists' livelihoods and cultivate a broader sense of cultural coming together.

It is exactly this problem that Foster, who has also worked in the construction industry, hopes to address with his proposed evaporative cooling wall, designed as part of the Faculty's award-winning Bower Studio.

Putting the Bower Studio ethos of meaningful engagement, listening and understanding into practice, Foster has worked both alongside and within the historic Kalkaringi community throughout his masters program.

In 2023, Foster participated in the Karungkarni Art Centre extension project. "It's one of the best university experiences I've had," said Foster, his face lighting up. It's during this time, staying on Country, that Foster learned what the community needed to improve their Art Centre and how he could work with Gurindji to deliver it. "The consulting part is so important," said Foster.

In simple terms, "they have problems with power, but they have an abundance of water," explained Foster. This spurred him to think creatively, returning to ancient cooling design principles from as early as 500 BC. Inspired by traditional Persian and Indian thermal cooling architecture together with modern interpretations from studios including Emerging Objects, Arquitectura SAS and ETH Zurich, Foster began testing his own evaporative cooling wall prototypes.

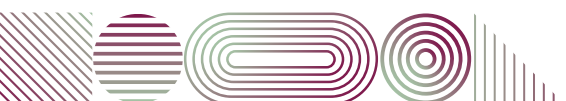
"The proposal had to cover the functional aspects, but the aesthetic aspects fed from my time on Country... trying to reference the local landscape, use materials that were functional, available and pragmatic," said Foster.

What followed was the creation of three prototypes constructed onsite at Melbourne School of Design. Foster utilised VR to construct millimetre-perfect cooling walls in gentle wave formations and thermal imaging to ascertain the heat retention of various materials. Each prototype resulted in a cooling of almost 3 degrees, with all the walls crafted using different types of donated or inexpensive bricks that not only reflect the Kalkaringi landscape but are easy to transport and build onsite.

Foster now begins the wait to see if one of his prototypes will be accepted as this year's Bower Studio project. When asked what's next in his journey as both a future architect and builder, Foster said "I'd love to try and balance between architecture and construction. I think for me, social, economic and cultural sustainability are the three pillars that I would want to design and build around."

TOP AND BOTTOM: COOLING WALL PROTOTYPES

MIDDLE: KARUNGKARNI ART CENTRE



Inside the faculty

People and news

M. Reza Hosseini, Robert Crawford, and Tuan Ngo have signed with publisher Elsevier to develop one of the first academic books on the topic of regenerative design and construction.

Leire Asensio Villoria and **David Mah** have been invited for an artists residency at the University of California Davis for The China Shop: Conversations Between Artists and Scientists initiative.

Dan Hill has joined the editorial advisory board of Future Observatory journal, which launched its inaugural edition in May.

Creative Practitioner **Simona Falvo** was selected to participate in the prestigious 2024 Australian Institute of Architects Dulux Study Tour.

Hélène Frichot and **Emma Cheatle** edited a special issue of the *Journal of Architecture* dedicated to the legacy of inspiring teacher, theorist and architect Jennifer Bloomer. Including contributions from Karen Burns, Katie Lloyd Thomas, Jane Rendell, Doina Petrescu and other international scholars and practitioners.

Huey Wen Lim was awarded the CIB Keith Hampson ECR-Industry award 2023 for her research into the influence of prefabrication construction practices on mental health.

Michele Acuto and **Nicholas Phelps** have been welcomed as new fellows with the Academy of Social Sciences (ACSS) in the UK.

Christhina Candido was awarded the 2023 Changemaker Award from the International WELL Building Institute (IWBI) in recognition of her pioneering studies in WELL certified workplaces within APAC. Out of 25,000 applicants globally, only 50 individuals received an award and only ten under the Changemaker category. Christhina was the only academic to win across all categories.

Mark Stevenson was the keynote speaker for the seminar Sustainable Transport: The Role of City Design in Achieving Zero Emissions at Singapore Management University.



Events and exhibitions

Dean's Lecture Series:

Planning the End of the World: Indigenous Urbanism and the Art of Refusal

In the first Dean's Lecture of the year, Assistant Professor Heather Dorries from the University of Toronto revealed how Indigenous knowledge can revitalise our urban centres in the face of settler colonial urbanism.

Baggarrook-al Biik-u – She is of Country

Our first exhibition of 2024 invited visitors to experience Country through the eyes of Dr Mandy Nicholson, Wurundjeri, Dja Dja wurrung and Ngurai Illum wurrung. The exhibition delved into Country's many layers – below, on, water, wind, sky and star – and held space for the Baban Darrang or Mother Tree and its conjuring of cultural survival. An important survey of work curated by the Wurundjeri artist, Traditional Custodian of Naarm and Senior Lecturer in First Peoples Perspectives in Design.

Dean's Lecture Series: Collective Repair

Ana Miljački, historian, critic, curator and Professor of Architecture at MIT, presented the curatorial and pedagogical work of MIT's Critical Broadcasting Lab (CBL). Established in 2018, the CBL critiques contemporary architecture, exposes its deep histories, and cultivates political thinking around architectural practice.

Beyond Housing

This exhibition invited us to consider the links between architectural design practice, research, and education. Celebrating the work of the Design Studio Epsilon, the undergraduate capstone design subject for Melbourne School of Design's Bachelor of Design students majoring in Architecture, it showcased 32 selected student works produced over the past four years.

MSD x Melbourne Design Week 2024

Taking on this year's themes of ecology, ethics and energy, University of Melbourne students and academics used their skills to drive positive change, reimagine existing systems, and offer innovative solutions to pressing global change. MSD came alive with 11 days of events including talks, workshops and installations.

MSDx Winter: Opening Party

From the basement to the rooftop, the creative minds of our students transformed the building into a vibrant gallery space for our annual MSDx Winter opening party. Beginning with a Smoking Ceremony, the night featured pop-up conversations between tutors and students, projections, gallery tours and waste materials workshops. Family, friends and industry guests enjoyed DJs, warm eats and cool drinks as they wandered through the exhibition.

Golden Blue: Celebrating Earth's Natural Resources – Sand & Water

This free public lecture presented Studio_ITO's research agenda that aims to critically analyse and articulate the over-extraction of natural resources in the global south, most particularly in post-colonial South-East Asian nations where illegal extraction has exponentially increased in the last two decades to keep pace with the ever-growing demand fuelled by population growth.

State Space and Lived Lives in the Colonial Margins

Associate Professor of Architectural History and Theory at the Bartlett School of Architecture, University College London, Dr Tania Sengupta, gave a public lecture on the complex 'life-worlds' of governmental architecture in colonial India. Dr Sengupta joined the Australian Centre for Architectural History, Urban and Cultural Heritage for the month of April, supported by the Macgeorge Bequest at the University of Melbourne.





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