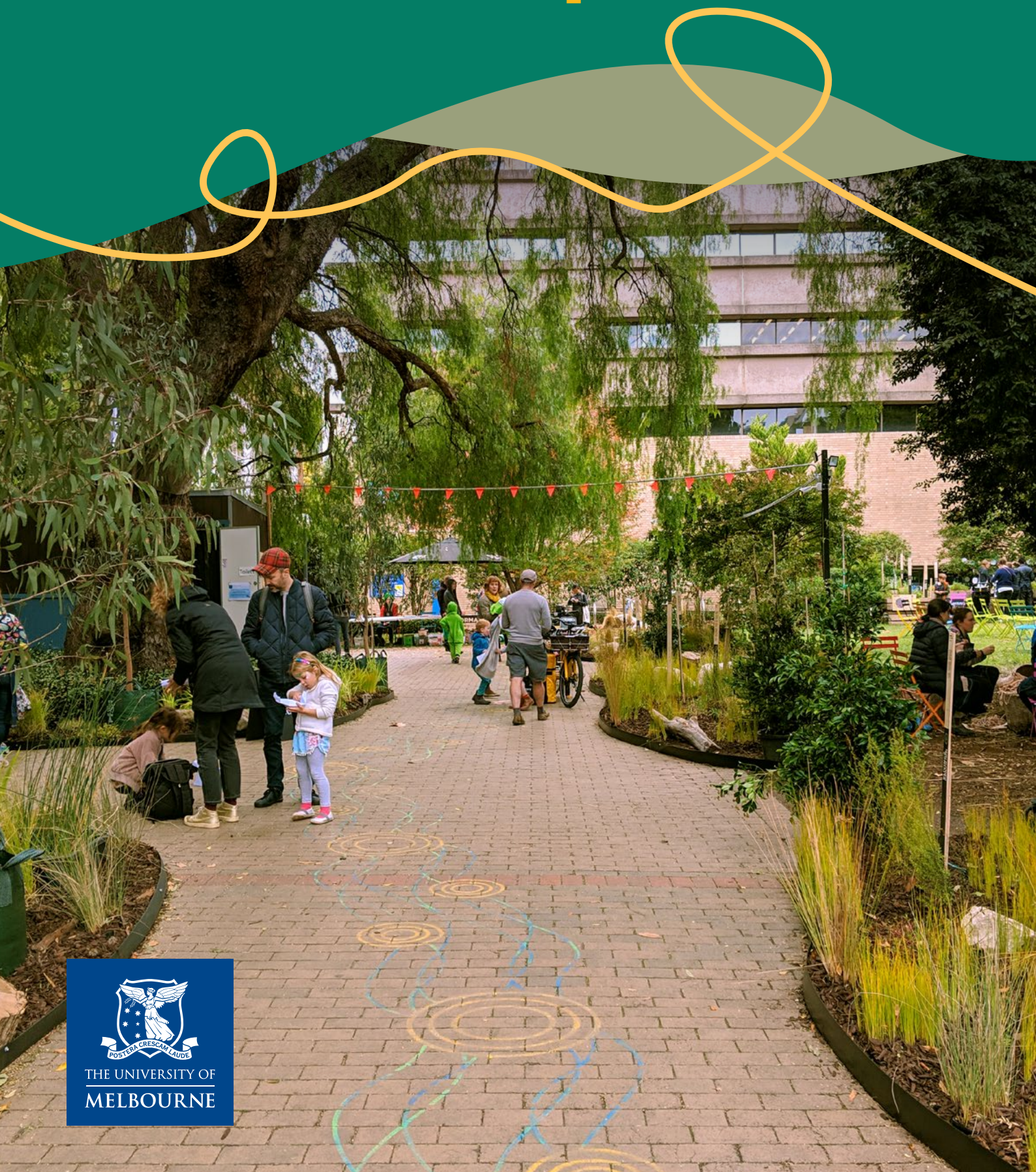


# The Living Pavilion Research Report





Partners and volunteers at the plant installation of The Living Pavilion. Photo by Alison Fong

### Producing Partners:



The University of Melbourne is a proud partner of The Living Pavilion, made possible by Thrive Research Hub of the Faculty of Architecture, Building and Planning, and the New Student Precinct Project



### Major Partners:



### Poducers and Partners

The Living Pavilion was a co-production and collaboration with Clean Air and Urban Landscapes Hub (CAUL) of the National Environmental Science Program, THRIVE Hub (Faculty of Architecture, Building and Planning), the New Student Precinct of the University of Melbourne's Parkville campus, and CLIMARTE's ART+CLIMATE=CHANGE 2019 Festival.

The Living Pavilion's major horticultural and design partners were Australian Institute of Landscape Architects (AILA) and Ecodynamics. Other partners of The Living Pavilion included: Next Wave, Place Agency, BILI Nursery, 226 Strategic, Graduate Student Association (GSA), The Living Stage, Garawana Creative, Melbourne Sustainable Society Institute and Sustainability Team @Unimelb.

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Cover photo by Isabel Kimpton

## Acknowledgment of Country

The Living Pavilion project partners and collaborators would like to acknowledge the Traditional Custodians of the land and waterways on which the project took place, the Wurundjeri peoples of the Woi Wurrung language group, part of the greater Eastern Kulin Nations. We pay our respects to Wurundjeri Elders, past, present and emerging.

We honour the deep spiritual, cultural and customary connections of the Traditional Custodians to the landscape and ecology of the land on which The Living Pavilion is located. We acknowledge that this land, of which we are beneficiaries, was never ceded and endeavour to reflect and take consistent action to address this harmful circumstance.

We are especially grateful for the contributions of many First Peoples involved in our project and their generosity to share their culture and knowledge with us. Without them, The Living Pavilion would simply not have been possible.

*Kyaa Nicholson from The Djirri Djirri Dance Group.  
Photo by Sarah Fisher*



**THE LIVING  
PAVILION**

*The Living Pavilion logo design was created by our graphic designer and illustrator Dixon Patten, Director at Bayila Creative. Dixon is a proud Yorta Yorta and Gunnai man, and has family bloodlines from Gunditjmarra, Dhudhuroa, Wiradjuri, Yuin, Wemba Wemba, Barapa Barapa, Monaro.*

*The Living Pavilion logo represents people coming together to connect Indigenous knowledge, ecological science, sustainable design and participatory arts. The circle in the middle represents a meeting space. The water represents the creek that once flowed through the space and signifies journey and life. The plants represent flora and fauna and connection to Country and place.*

# Executive Summary

This report provides a summary of the design, programming and research conducted at The Living Pavilion, a regenerative placemaking project which took place at the University of Melbourne as part of CLIMARTE's 'ART+CLIMATE=CHANGE' festival (1-17 May 2019). The Living Pavilion was a living laboratory and temporary event space featuring a landscape design of 40,000 Kulin Nation plants that celebrated Indigenous knowledge, ecological science and sustainable design through participatory arts practice. A key aim was to identify how temporary event spaces can act as 'testing grounds' for long-term potential of place.

The report features both an overview of process, design and programming of The Living Pavilion (Part 1) and the results of the transdisciplinary research that occurred alongside the project (Part 2). It documents the impact of the project through an assessment of place activation, Indigenous knowledge transfer, biodiversity benefit, pedagogical potential and social-ecological connection, as well as the capacity for these findings to inform future opportunities for the University site.

The project incorporated a transdisciplinary research approach, including the use of

a qualitative and quantitative social research methods, such as: observations, digital surveys, paper-based surveys, focus groups and interviews, and biodiversity observations gathered at various points before, during and after the festival. A key source of data were anonymous online surveys, which gathered the opinions and views of 190 visitors.

A summary of the key findings is as follows:

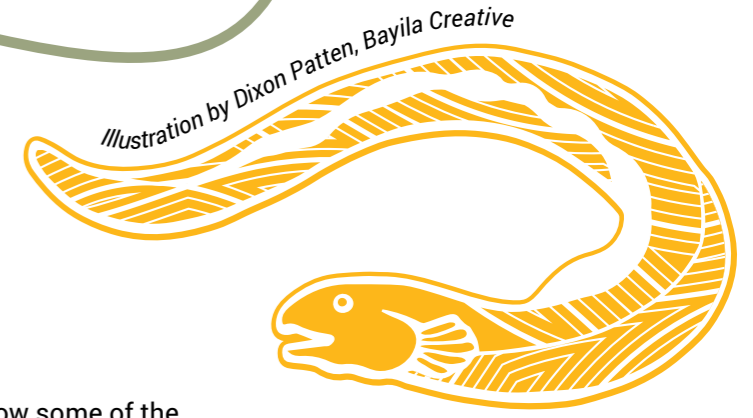
- Design and programming choices which foregrounded Indigenous themes (both ecological and cultural) were the most popular spaces and events, with many participants expressing a desire and willingness to learn more about First Nations perspectives;
- The Living Pavilion provided multiple avenues for teaching and learning across a diversity of age ranges, disciplines and 'walks of life' through plant signage, workshops and talks and performances, with over 300 people involved in the co-creation process;
- The influx of 40,000 Kulin Nation plants and Indigenous content was a major drawcard for attracting the wider community (51% of visitors) which in turn helped to break down barriers and create a 'sense of community' on campus, with 69% of survey participants stating that they met new people;
- The Living Pavilion was successful in enhancing nature connection, with 77% of survey participants saying that they experienced an increased 'oneness with nature' and 88% stating that they felt more relaxed and de-stressed while visiting;
- Biodiversity surveys revealed how the temporary design opened up new niches and resources for native pollinators, with 27% of insect species found during the event inhabiting Kulin Nation plants only;
- The Living Pavilion assisted in inspiring future design and programming strategies, with the temporary event space providing opportunities to assess people's aesthetic responses to the plant selection, spatial design and programming for long-term potential.

It is hoped that the findings of the report will not only help identify further placemaking strategies for the University, but also the potential of temporary event spaces more broadly to act as 'testing grounds' for creating thriving socio-ecological places in the long-term.



Participants at the Kokedama workshop led by Bili Nursery.  
Photo by Isabel Kimpton

# Foreword by Zena Cumpston



Across Australia there is very little acknowledgment in urban areas of the connection these places have and have had to Aboriginal peoples over thousands of generations. Unceded sovereignty, histories, custodianship, and belonging have been actively erased, hidden and denied. But Aboriginal people are very much still here. And our holistic approach to managing all living things, developed and passed down over deep time, have been catastrophically under-represented in strategies of countering the ecological challenges we all face.

The Living Pavilion worked to forefront the University of Melbourne's Parkville campus as an Aboriginal place, a place of belonging. The Parkville campus is built on the unceded lands of the Wurundjeri peoples of the Woi Wurrung language group who have belonged to and been custodians of these lands for 65,000+ years. The Wurundjeri people continue to survive and to thrive and to expertly express and fulfil their responsibilities of custodianship, beautifully evidenced by their conviction and strength which drove the realisation of the 2017 Yarra River Protection (Wilip-gin Birrarung murrn) Act.

Wurundjeri Elder Aunty Di Kerr, in her beautiful and nuanced speeches given as part of her Welcome to Country ceremonies, often speaks of the Creator Bunjil's Law. In parallel with the true meaning of 'Wominjeka' as a word that does not prosaically mean 'Welcome' but instead something more like 'come, but with purpose', Aunty Di reminds us we must comply with Bunjil's Law to be safe on this Country. "We must not harm the waterways and the land nor do harm to any of Bunjil's children". I reflect on her words as I have come to learn and try to tell the story of the 'Bouverie Creek' which once flowed through the site of The Living Pavilion. Like many of the swamps, creeks and rivers which were once dotted all over what is now our city centre, this creek was covered over, negated, annulled, denied. This creek was once a vital part of the Wurundjeri world and the ecosystem of the mighty Birrarung, acting as a lung to clean and renew, a pathway, a water source for all living things, a place of abundance, teeming life. Now concrete. Do not harm the waterways or the land.

*"... 'Wominjeka' as a word that does not prosaically mean 'Welcome' but instead something more like 'come, but with purpose'..."*

The Living Pavilion saw not only the 'Bouverie Creek' daylighted, but also the breathtaking influx of 40,000 plants native to the Kulin peoples literally breathe new (ancient) life into the site. In reimagining this part of the Parkville Campus, we were not attempting to recreate the landscape before disruption, but instead seeking to corrupt the imposed landscape to reveal hidden stories of this Wurundjeri place.

When our plants are reinstated within the environments they have thrived in for thousands of generations cultural stories are reactivated. The opening up of cultural narratives invites all peoples to learn more of Country they call home.

I hope the stories being told, through aspects such as the design, research and programming, help a wide audience to see this 'urban' space in a new context.

—  
**Zena Cumpston**

Associate Producer, Lead Artist and Lead Researcher of The Living Pavilion

Research Fellow, Clean Air and Urban Landscapes Hub

Proud Barkandji Woman

To come to know some of the hidden stories of this place. To understand that, especially in terms of our ecologies, the balance has been tipping the wrong way for only a little over 200 years, a drop in the ocean of deep time. That all land in Australia is Aboriginal land, whether urban or remote, and that Aboriginal culture and people are living, strong, dynamic and intrinsically connected to and embedded in place, in ALL places in Australia.

I hope that the legacy of The Living Pavilion acts as a place of learning and reflection, promoting ideas and discussion about the ways in which we connect to each other, to Country and its multilayered histories. I finish with more powerful words from Wurundjeri Elder Aunty Di Kerr:

"When we look after each other and we look after Country, Country truly looks after us".

*"When we look after each other and we look after Country, Country truly looks after us"*



Project Co-producers  
(from left to right) Tanja Beer,  
**Zena Cumpston** and Cathy Oke  
at the Closing Ceremony.  
Photo by Alison Fong

## Foreword by Tanja Beer

The Living Pavilion is the seventh iteration of a series of projects entitled 'The Living Stage' that I developed during my PhD candidature at the University of Melbourne from 2012 - 2016. The Living Stage combines horticulture, sustainable design and community engagement to transform urban spaces into accessible, equitable and thriving ecological and social gathering places. Since its inception in 2013, The Living Stage concept has progressively become more engaged in placemaking tactics through the participation of local communities in creative processes, and the desire to enhance the connectivity and integration of more-than-human places in response to climate change, social inequity, food scarcity and biodiversity loss.

Part event space, part garden and part horticultural demonstration, The Living Stage is a celebration of what is possible when we embrace the potential of social, cultural and ecological potential of place. Since making its debut at the Castlemaine State Festival in 2013,

the concept has travelled to Cardiff, Glasgow, Armidale, New York and Lorne. As each living stage evolves out of a direct response to the localities of site, ecology and community, no project is ever the same. Yet they share clear commonalities: the celebration of multisensory elements, effective and multi-level engagement with audiences, and a legacy that stretches on long after the final performance.

While The Living Pavilion was our seventh iteration of The Living Stage series, it was our first Indigenous-led project. Co-produced by Dr Cathy Oke (Knowledge Broker, CAUL hub), Barkandji woman Zena Cumpston (Research Fellow, CAUL Hub) and myself, in collaboration with the New Student Precinct and the ART+CLIMATE=CHANGE festival, The Living Pavilion was a call to the need for First Nations perspectives, histories and culture to take centre stage in the face of increasing ecological uncertainty.

*"...the celebration of multisensory elements, effective and multi-level engagement with audiences, and a legacy that stretches on long after the final performance"*



The Living Pavilion was also an example of Regenerative Placemaking, an emerging concept that aims to build social-ecological connection, capacity & capability in people and places, to support more-than-human communities to renew, evolve, and thrive. It was a placemaking initiative that acknowledged humans – as well as their developments, social structures and cultural concerns – as an inherent and inseparable part of ecosystems. This Vision has also driven a strong transdisciplinary research base – including the use of a variety of different research methods that occurred before, during and after the festival – to identify how temporary event spaces have the capacity to create thriving socio-ecological places.

Guided by the University's vision for transdisciplinary practice, sustainability and connection to community and society, the project forged networks between multiple faculties, research hubs and chancellery, and brought Indigenous, scientific and artistic perspective together to forge new modes of communication between these diverse fields.

As well as demonstrating how Universities can bring multiple ways of knowing and doing into practice, this report highlights the importance of bringing Indigenous knowledge systems into placemaking and their potential to steer us towards a more hopeful future. The Living Pavilion is only a small example of what is possible when we bring First Nations people and perspectives into urban spaces.

*“While The Living Pavilion was our seventh iteration of The Living Stage series, it was our first Indigenous-led project”*

—  
**Dr Tanja Beer**

Lead Designer, Co-producer and Researcher of The Living Pavilion  
Faculty of Architecture, Building and Planning  
The University of Melbourne

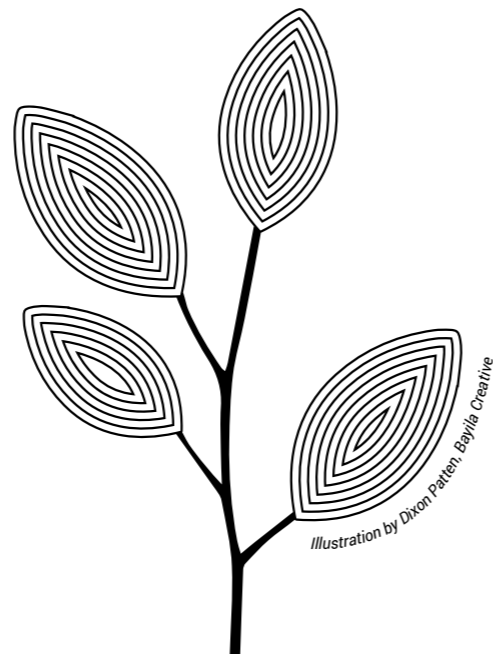


Illustration by Dixon Patten, Bayila Creative



Tanja Beer (right) and Amelia Leavesley (left) during a preliminary Planting Workshop in October 2018.  
Photo by Tanja Beer

# Part 1: The Project



Signage at The Living Pavilion. Illustrations by Dixon Patten of Bayila Creative, research and words by Zena Cumpston, design and production by 226 Strategic and Print on Wood. Photo by Sarah Fisher





Volunteer at the plant installation.  
Photo by Alison Fong

The Living Pavilion (1-17 May 2019) was a recyclable, biodegradable, edible and biodiverse event space that took place on the Western side of the 1888 building (Grattan Street entrance) of the University of Melbourne's Parkville Campus. Part celebration, part horticulture demonstration and part living lab, The Living Pavilion was a platform for revealing and celebrating past, current and future ecologies as well as hosting events and performances by local Indigenous and non-Indigenous leaders, artists, knowledge-sharers and scientists.

The landscape design transformed a seemingly unspectacular part of the campus into a haven of biodiversity and Indigenous stories through the installation of over 40,000 Kulin Nation plants, artworks, gathering spaces and soundscapes. It brought together Indigenous knowledge systems, community arts, performance, music, sustainable design and ecological science to showcase how transdisciplinary initiatives can sow the seeds of community vitalisation and environmental stewardship. In particular, The Living Pavilion aimed to create an environment where the generous sharing of Indigenous stories and culture gives meaning to place.

A signature project of the University's Reconciliation Action Plan, the project was a contribution to the University of Melbourne's commitment to strengthening and deepening cultural enterprise and reparation, establishing innovative channels for engaging students, staff and the wider public across a variety of interests. The Living Pavilion was opened by Vice-Chancellor Professor Duncan Maskell and Lord Mayor Sally Capp, with a stirring and generous Welcome to Country by Aunty Di Kerr (Wurundjeri Elder), and performance from Mandy Nicholson and The Djirri Djirri Dance Group. It hosted 44 events and performances by local Indigenous and non-Indigenous leaders, artists and scientists and attracted thousands of visitors across the University and beyond. Over 100 staff and students from multiple faculties were directly involved in the research, design, implementation and evaluation of the project (for credit or extra-curricular activities), including the Faculty of Architecture, Building and Planning, Faculty of Science, and the Faculty of Fine Arts and Music, allowing opportunities for cross-faculty interaction and collaboration.

*"Indigenous stories and meaning of place can help better connect place with people..".*

# Regenerative Placemaking

Co-designed shared spaces that inspire social and environmental connection are becoming increasingly important in modern societies, where loneliness, nature deficit disorder, biodiversity loss, pollution and eco-anxiety drive disaffection, particularly among the young. Placemaking is a multi-disciplinary approach to the planning, design, governance and management of public spaces. Its purposeful and community-led engagement process can lead to an increase in health, happiness and wellbeing.

Despite its potential, current approaches to placemaking often fall short of authentically, critically and meaningfully integrating and affirming a site's socio-ecological layers. Historically human-centric, there has been a growing shift towards a regenerative approach that integrates bio-sensitive design into placemaking practices.

Further, placemaking practices in Australia rarely highlight Traditional Ownership and Indigenous perspectives of place, particularly in urban spaces. By failing to make space for Indigenous people and perspectives, we continue to inflict the damage of colonisation and miss opportunities to establish a true connection to place and Country.

Regenerative Placemaking is an emerging concept that aims to foster social-ecological connection, capacity and capability in people and places, to support more-than-human communities to thrive. A key imperative of The Living Pavilion was to use regenerative placemaking as a strategy to assert Indigenous sovereignty, enhance connection to place and strengthen biodiversity in urban spaces.



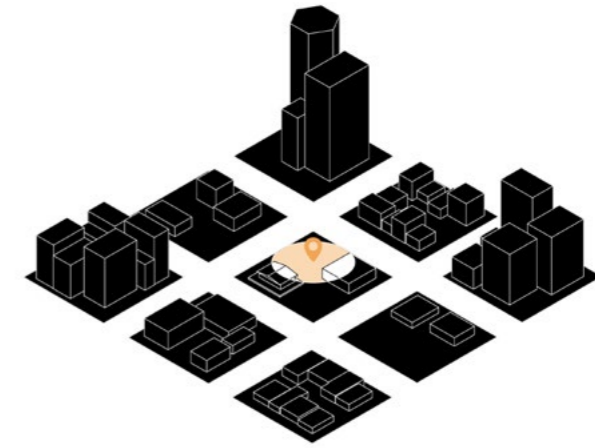
Assistant Designer, Pia Guillatt during the plant installation.  
Photo by Alison Fong

We represent regenerative placemaking as a looping spiral that emerges from a particular place. Inspired by regenerative development and placemaking practices, 'regenerative placemaking' starts by listening to the place by finding the key patterns and attributes of the more-than-human communities living within that space.

Here, the notion of the 'event space' (The Living Pavilion) can act as effective approach to test design and programming strategies for the long-term potential of the place. This small and temporary initiative can create ripples of inspiration that take the intervention beyond the physical borders of the site to enhance not only the capacity and capability of that particular place (University campus), but also its neighbouring communities (the wider city).

—  
For more watch the video  
by Place Agency: [youtu.be/uuliojf1NLO](https://youtu.be/uuliojf1NLO)

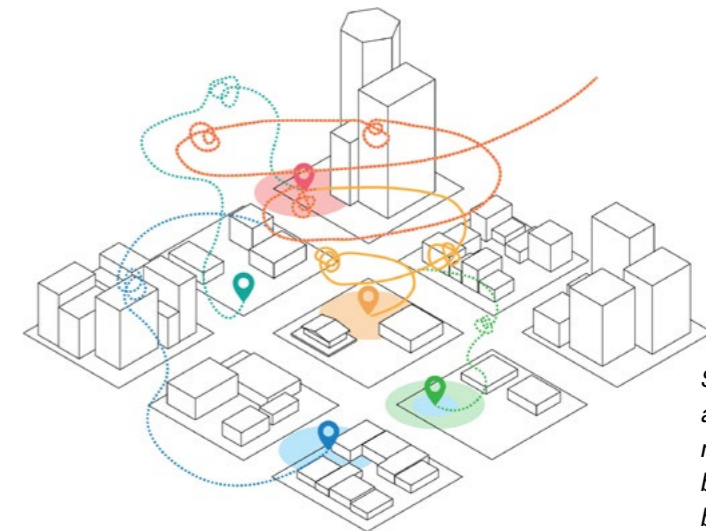
Diagrams by Nazanin Moghadam Tabrizi



Regenerative placemaking starts by listening to place.



Temporary event spaces can act as a testing ground for activating long term potential.



Small and temporary activations can create ripples of inspiration beyond the physical boundaries of the site.



Zena Cumpston leading the plant installation during site preparation.  
Photo by Alison Fong

## Project Governance and Indigenous Engagement Strategy

The Living Pavilion was a signature project of the New Student Precinct (NSP), a major infrastructure initiative, involving the redevelopment of nine buildings at the University's Parkville campus. The development of this hard infrastructure involves a 'co-creation' approach in which students are being engaged through a variety of consultation activities to inform the Precinct's direction and design. This has allowed space for more temporary smaller-scale interventions such as The Living Pavilion to become a testing ground for exploring ideas of what a First Nations-led co-creation process might entail for the NSP, including new aesthetics and approaches to urban greening that test, evolve and enrich the narrative of the University campus.

The Living Pavilion aimed to forefront and celebrate the Parkville site as a Wurundjeri place, telling the hidden stories which illuminate the cultural connections and continued custodianship of Wurundjeri peoples. Thus, a key

part of The Living Pavilion process entailed adopting an Indigenous Engagement and Participation Strategy that was committed to ensuring that the Aboriginal collaborators be meaningfully involved in the governance and decision-making processes of the project.

The Living Pavilion's planning, creative development process and program curation followed the Clean Air and Urban Landscapes Hub's (CAUL) Indigenous Engagement and Participation Strategy (IEP) and the Three-Category Approach, developed as part of the National Environmental Science Program. The Living Pavilion worked with the Category 1 approach (co-design), which is the highest form of First Nations engagement identified by the Hub, where projects are 'co-designed with Indigenous people, organisations and communities' with respect to First Nations priorities and values (Clean Air and Urban Landscapes Hub 2015/2019).

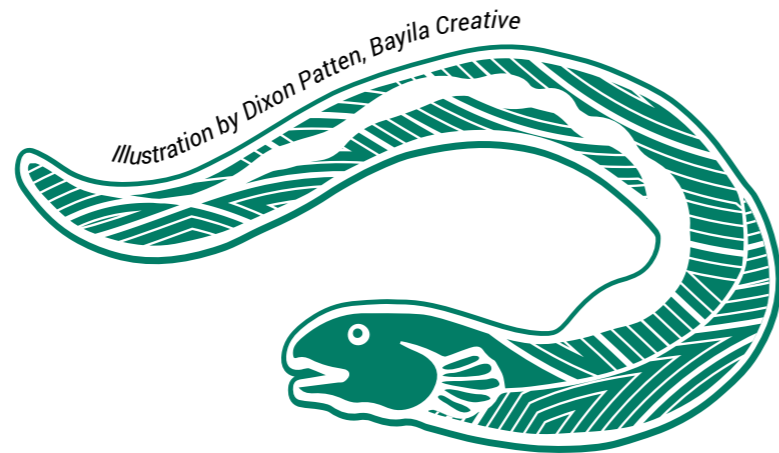


The IEP includes five objectives for engaging with a First Nations led approach, including:

1. Ensuring that research is relevant and beneficial to Indigenous Australians;
2. Ensuring the research respects Indigenous priorities and values;
3. Providing opportunities for First Nations employment and development;
4. Effectively communicating research results with Indigenous Australians, and;
5. Ensuring meaningful First Nations participation in project governance.

This approach was aligned with the NSP's Indigenous engagement framework and design pillars (New Student Precinct 2019) which include: Indigenous leadership engaged in change; Indigenous contribution to place making; Reciprocal and purposeful partnerships, and; a platform for national engagement.

The IEP's mandate of ensuring meaningful First Nations participation in project governance was central to The Living Pavilion process. Inviting 39 First Nations artists, researchers and practitioners to be a vital part of the design and programming of the space was a crucial part of working with the Category 1 approach. The process included conducting a Cultural Competency Training Workshop lead by Gunditjmara man Rueben Berg (of RJHB Consulting) for all staff and volunteers as part of ensuring a safe, positive and informed space for Indigenous people.



Baabapul-kwii Bush Foods workshop hosted by Cassie Leatham. Image by Sarah Fisher

# Creative Development



The Living Pavilion Creative Development workshop.  
Photo by Amelia Leavesley

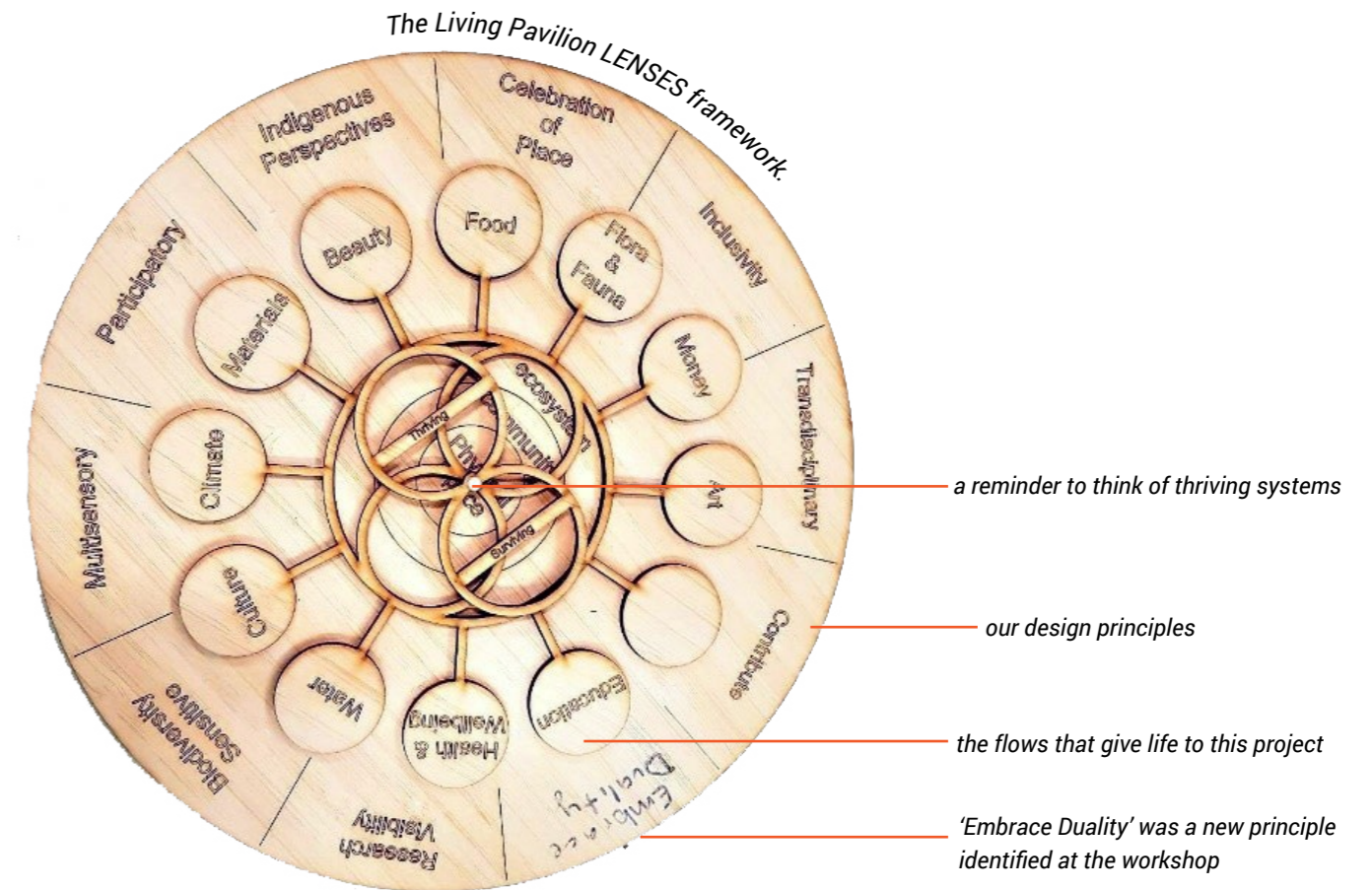
The Living Pavilion began with a three-day creative development event in July 2018 where the producers worked with a consortium of over 22 stakeholders, both Indigenous and non-Indigenous, students, academic and professional staff, across the University, industry and community sectors. These participants were instrumental in conceptualising the design, programming and research strategy of the project. Responding to the ambitions of the Category 1 Indigenous Engagement and Participation (IEP) framework, the aim of the workshop was to launch opportunities for First Peoples to be involved in the decision-making process of The Living Pavilion across the creative development, research and programming.

As part of the workshop, The Living Pavilion team used the LENSES<sup>1</sup> framework to brainstorm interdisciplinary and participatory processes for exploring the environmental, economic, social and cultural potential of place. A key outcome of the workshop was the desire to develop an event space that would forefront Wurundjeri perspectives on campus by 'making the invisible, visible'. Using design, storytelling, performance, historical research, the uncovering of hidden histories and the reinstatement of Kulin Nation ecologies, the aim of The Living Pavilion was to assert the University of Melbourne as a powerfully and undoubtedly Aboriginal, and more specifically, Wurundjeri place.

*“Using design, storytelling, performance, historical research, the uncovering of hidden histories and the reinstatement of the Kulin Nation ecologies..”*

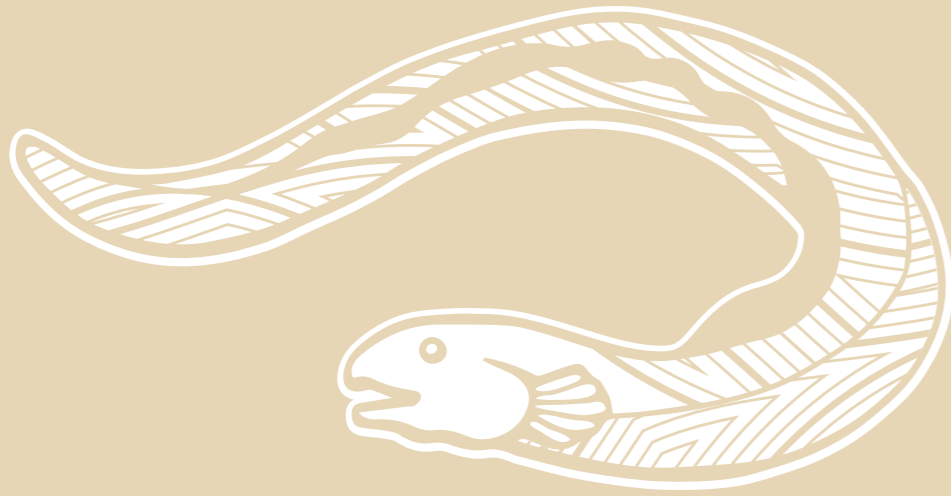
After the initial creative development workshop was finalised, the project team had identified a collection of key values and principles relevant for the project. Bringing in Indigenous perspectives of place, the site was reimagined from an Indigenous perspective through a workshop which was led by Zena Cumpston in collaboration with Charles Solomon of Garawana Creative (Indigenous landscape designer of Ngarigo heritage), Landscaping Social Enterprise Ecodynamics and the Australian Institute of Landscape Architects.

The notion of uncovering hidden stories of place became instrumental to the design and programming vision of the event space, including workshops and performances that could affirm Indigenous perspectives, knowledge systems and histories. At the heart of the project was the notion of using research, art, design, dance, music, horticultural practice, and arts-science activities to showcase how Indigenous led, transdisciplinary initiatives could begin to decolonise urban spaces.



<sup>1</sup> LENSES is a regenerative systems-based framework that emphasises cyclic (rather than linear) processes to designing positive futures by focusing on values and flows that promote thriving socio-ecological communities. This framework uses a series of workshops where LENSES facilitators guide participants through a step-by-step visual ideation process of uncovering the potential of a project that incorporates multiple viewpoints, interconnected systems and nested wholes. Also see: [clearabundance.org/lenses](http://clearabundance.org/lenses)

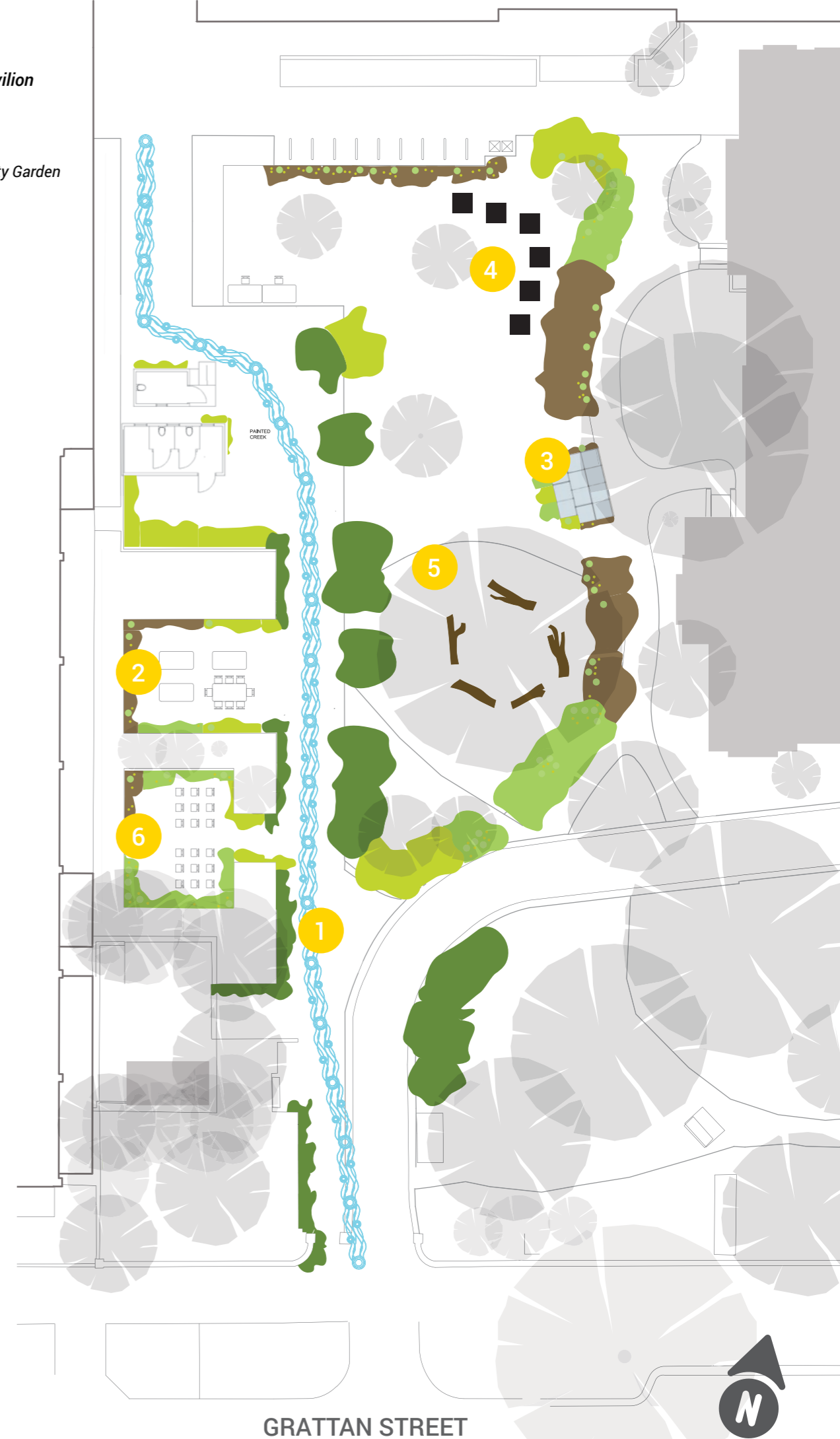
# The Living Pavilion Design



Bouverie Creek and eel pattern illustrations by Dixon Patten of Bayila Creative.

## Map of The Living Pavilion

1. Bouverie Creek
2. Makers Space
3. Main Stage
4. Indigenous Community Garden
5. Gathering Tree
6. Performance Space



GRATTAN STREET



# Story of Place

by Zena Cumpston

The Parkville campus is built on the unceded lands of the Wurundjeri Willam peoples of the Woi Wurrung language group who belong to and have been custodians of these lands for 65,000+ years. Before disruption the Woi Wurrung took cues from all around them for all of their activities and subsistence. Cues to know when it was time to hunt for or farm certain foods, time to move to higher ground for protection, time for ceremony, time to move to different areas for abundant food sources. Such cues came from multiple sources such as the stars, the blossoming or appearance of plants, the movement of animals, the cycles of insects and birds, as well as changes in the weather. The signs and signals of nature, informed by thousands of generations of careful observation, form maps that tell how to survive and thrive and to pass this knowledge to future generations.

These codes for living are enabled by custodianship embedded in all aspects of Country.

The Country on which we now stand once featured a waterway, known by colonists as 'Bouverie Creek' which would have provided important resources for Wurundjeri people, including the Short-finned Eel (*Anguilla australis*) which can still be found swimming through the stormwater pipes underneath the pavement.

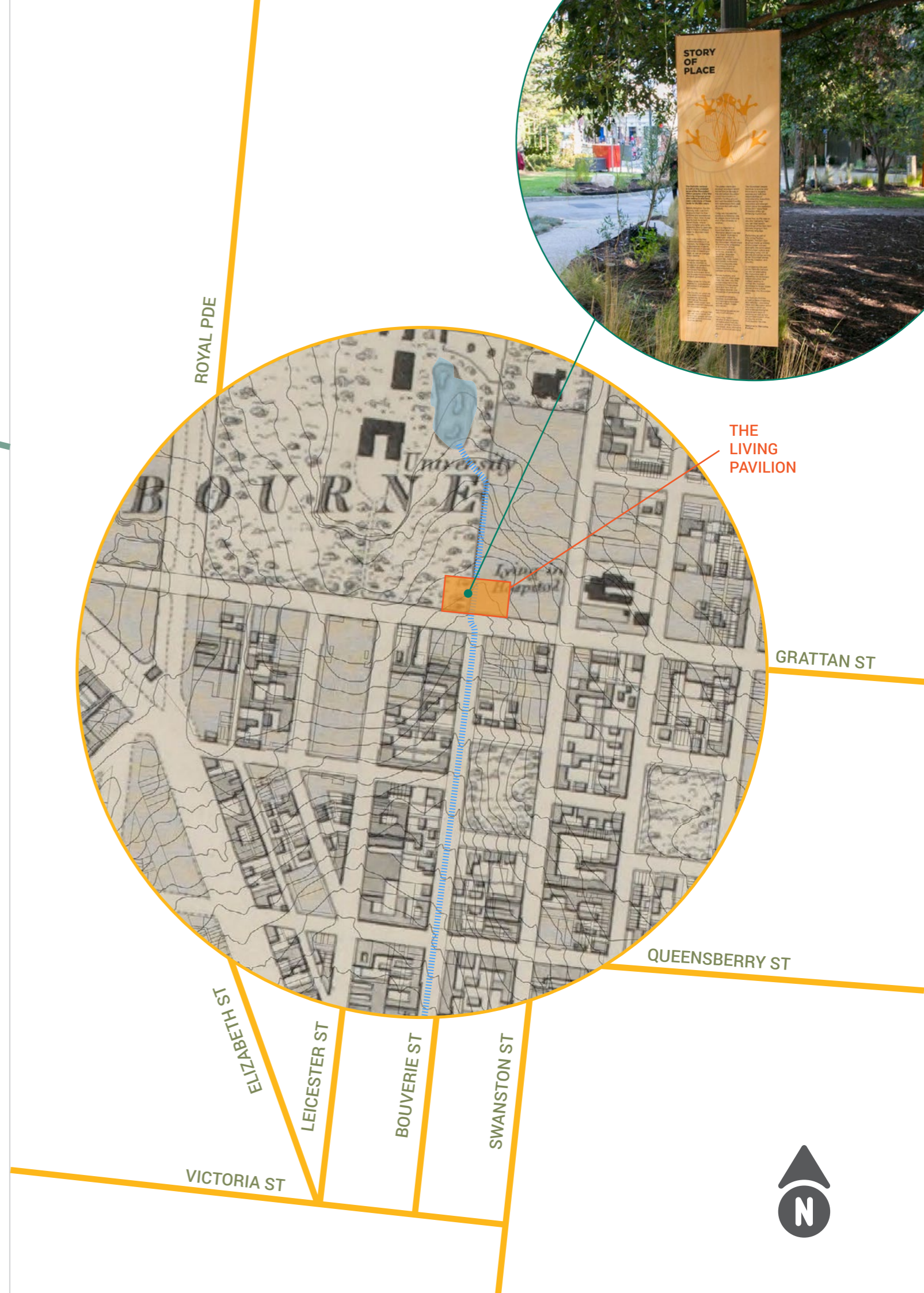
Near this site, at Royal Park, it is well documented that Wurundjeri people camped and held cultural business such as dances. The grassy plains and eucalypt woodland which formed the landscape of this site before disruption would have made it a plentiful hunting ground as well as well-traversed Country with waterways often used as convenient pathways of travel.



Illustration by Dixon Patten, Bayila Creative

**Center**  
Map showing approximate route of Bouverie Creek.  
Image by Lyons + Koning Eizenberg Architecture with NMBW Architecture Studio, Architects EAT, Greenaway Architects and Aspect Studio with GLAS, New Student Precinct Project, The University of Melbourne

**Top right**  
Signage at The Living Pavilion.  
Illustrations by Dixon Patten of Bayila Creative, research and words by Zena Cumpston, design and production by 226 Strategic and Print on Wood.  
Photo by Alison Fong



Today we may see this space as a transitory one, as people move from one end of the university to another. But it is important to know that what non-Aboriginal people may see as a 'space' is always meaningful 'place' to Aboriginal people such as the Wurundjeri, whose ways of knowing are embedded in all aspects of their expansive traditional territories, enacted by songlines, language, seasons, ceremony, economies, trade routes, and holistic world views which incorporate deep knowledge of and an interconnectedness between all living things.

In re-imagining this part of the Parkville Campus for The Living Pavilion we were not attempting the impossible task of recreating the landscape before disruption, but instead seeking to corrupt the imposed landscape to reveal hidden stories of this cultural landscape, this Wurundjeri place.

*"...it is important to know that what non-Aboriginal people may see as a 'space' is always meaningful 'place' to Aboriginal people..."*

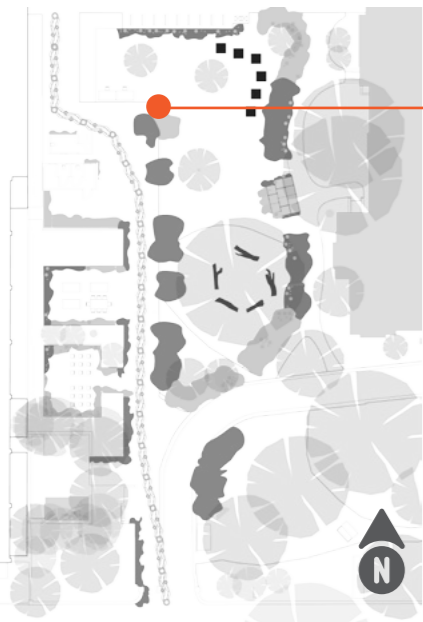
*Early renders created by The Living Pavilion team.*





# Spatial Design

A central focus of the event space (ca. 32m x 62m in size) was the reactivation of cultural stories through the temporary landscape design of 40,000 Kulin Nation plants that were reinstated on the University site. The influx of 40,000 plants were also accompanied by more than 60 signs (carefully researched and curated by Zena Cumpston) which articulated the plants from an Aboriginal perspective and explored their many cultural, nutritional, technological and medicinal uses. It acted as a portal through which to understand Indigenous ecological knowledge and to acknowledge First Peoples' careful custodianship of Country. The interpretive signage provided an opportunity for stories of place to be visually portrayed throughout the event space.



Visitors were able to learn about the story of place through signage placed around The Living Pavilion. Illustrations by Dixon Patten of Bayila Creative, research and words by Zena Cumpston, design and production by 226 Strategic and Print on Wood. Photos by Sarah Fisher (in circle) and Isabel Kimpton

Another feature of The Living Pavilion design was the reclaiming of Bouverie Creek through a mural design by Yorta Yorta and Gunnai artist Dixon Patten of Bayila Creative, which aimed to 'daylight' the waterway piped underneath the site. The creek design by Dixon represented the idea of people coming together to connect with Country and place: the circles depicting meeting spaces while the flowing lines highlighted the creek that once flowed through the space; both a signifier for journey and life. A key imperative was also to highlight the eel story underneath the pavement through strategic signage.



*Before*  
Grattan St entrance.  
Photo by Tanja Beer (in circle)

*After*  
Bouverie Creek artwork by Dixon Patten of Bayila Creative.  
Photo by Alison Fong



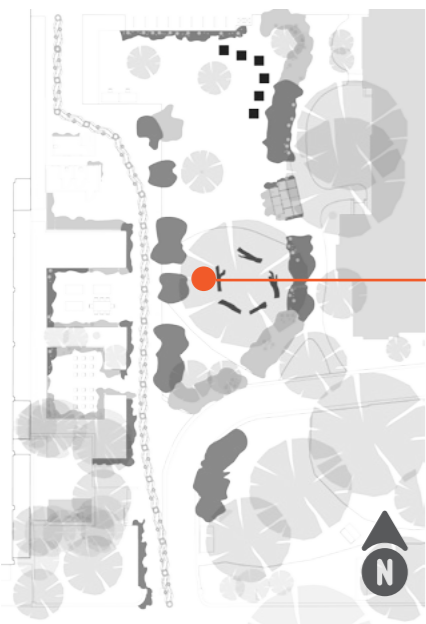
The diversity of native plants on display also included an Indigenous Community Garden that was filled with edible and medicinal plants of multiple purposes for Aboriginal people. Zena Cumpston led the curation of the garden design with Wemba Wemba-Wergaia man and cultural educator Dean Stewart also providing consultancy. A primary focus of this space was to showcase indigenous foods and tell stories of the Kulin Nation plants, as well as acknowledging other important foods from Aboriginal communities further afield.



Before  
Space before installation.  
Photo by Alison Fong (in circle)

After  
Community garden after installation of plants.  
Photo by Alison Fong

There were also two other spaces that created opportunities for interaction across art, science and Indigenous knowledge: The Gathering Tree and The Makers Space. These spaces focused on sharing culture, technologies and craft through hands-on making with two First Nations artists taking centre stage. Katie West (of Yindjibarndi heritage) and Steph Beaupark (of Ngugi heritage) conducted their residencies under the Lily Pilly tree, creating beautiful woven artworks that were hung in the space. Steph made strings from Spiny headed mat rush (*Lomandra longifolia*) while Katie constructed a net from naturally dyed calico, both inviting visitors to join them in the weaving process. The intention of showcasing First Nations art-making on the site was to reinforce and make visible Aboriginal culture and cultural practices as living and continuous.

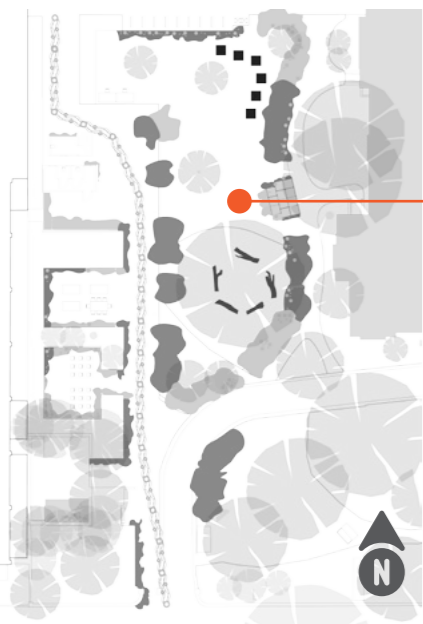


*Before*  
Space before installation.  
Photo by Tanja Beer (in circle)

*After*  
Weaving under the Gathering Tree.  
Photo by Alison Fong

The central feature of the event space was The Main Stage, which became a plant-lined platform for major events and celebrations and included Opening and Closing Night performances by The Djirri Djirri Dance Group and The Merindas (led by Jawoyn woman Candice Lorrae and Nyoongar Ballardong Whadjuk woman Kristel Kickett). It was also a space for sharing ideas and cross-cultural dialogue through small-scale performances, conversations and symposiums across art, science and Indigenous knowledge.

Together, the various components of The Living Pavilion aimed to use spatial design and programming to highlight some of the hidden ecological and cultural stories of the site. Through its strategic spatial design, The Living Pavilion offered an opportunity to test possibilities for the future student precinct site, bringing Indigenous meanings of place into view and disrupting an otherwise unrelentingly colonial landscape.



*Before*  
Space before installation.  
Photo by Tanja Beer (in circle)

*After*  
CAUL Hub Talk "Indigenous City"  
hosted at The Main Stage.  
Photo by Isabel Kimpton

# Sound Design

Sound was an integral part of The Living Pavilion design, bringing in local ecology that had once been on the site as well as the voices of Traditional Owners, singing in Woi Wurrung language. The nature soundscape coupled with the abundance of greenery created a magical visual-aural landscape which effectively transformed the space into a lush oasis in the heart of the University campus.

## *Mandy Nicholson and The Djirri Djirri Dance Group*

The Gathering Tree provided a space for listening and contemplation, with recordings of contemporary Wurundjeri songs in Woi Wurrung language created by Wurundjeri woman Mandy Nicholson and The Djirri Djirri Dance Group. The Djirri Djirri Dance Group sing in Woi Wurrung language and give voice to Wurundjeri ways of knowing, seeing and belonging to Country. Mandy Nicholson, who leads the Djirri Djirri's, is an emerging Wurundjeri leader who also provided much important guidance throughout the development of The Living Pavilion design and programming. The Djirri Djirri's recorded several of their songs of Country, Creation and Culture which played on rotation under the Lily Pilly tree.



*Mandy Nicholson at the Opening Ceremony.  
Photo by Sarah Fisher*

## Ecological Soundscape and Music (by Faculty of Fine Arts Interactive Composition students)

Under the guidance of the Faculty of Fine Arts and Music Professor Mark Pollard and Lachlan Wooden, Interactive Composition students produced a series of evocative soundscapes that aimed to recreate the waterway ecology through sound. The sound design included an 18-speaker sonic reimagining of the site, including a variety of frog and bird calls, sounds of flowing water and weather variation. The meditative soundscape created a feeling of being in a botanical garden or a regional park near a stream.



Map featuring the locations of all Faculty of Fine Art student installations.

## Frog Soundscape (by Dr Kirsten Parris)

The frog soundscape was a creative installation that provided a portal through which listeners could connect with the past – and possibly future – biodiversity of the Bouverie Creek and the Melbourne region more broadly. The soundscape created by urban ecologist Dr Kirsten Parris highlighted the amazing variety of frog calls and the ways in which frog activity changes throughout the year. The frog seasons were aligned with the Wurundjeri seasons of Poorneet (Tadpole season) – frog spring; Buath Gurru (Grass-flowering season) and Garrawang (Kangaroo-apple season) – frog summer; and Waring (Wombat season) – frog autumn and winter. The installation demonstrated the power of engaging visitors with nature through sound and the experiences were further illuminated by workshops which invited participants to learn more.

### Connecting with nature through sound

Created by Dr Kirsten Parris, The University of Melbourne

Frog soundscape at The Living Pavilion represents four seasons of frogs in Melbourne, arranged along the re-imagined Bouverie Creek. This creative installation provides a portal through which listeners can connect with the past – and possibly future – biodiversity of the site. The soundscape highlights the amazing variety of frog calls and the ways in which frog activity changes throughout the year. Listen out for other sounds of nature too!

#### Spring

Spring is a busy time for Melbourne's frogs, and five species are featured in this component of the soundscape – the spotted marsh frog (click), the southern brown tree frog (weep weep weep), the common eastern froglet (ker-rick ker-rick), the pobblebonk or banjo frog (bonk) and the quieter striped marsh frog (tock).

#### Summer

The southern brown treefrog and pobblebonk are still calling, but faster now as the weather is warmer. Summer brings the calls of two additional species – the distinctive growling of the growling grass frog (now an endangered species) and the maniacal cackle of the emerald-spotted tree frog. A boobook owl can sometimes be heard.

#### Autumn

A light rain is falling and the autumn-breeding frogs are starting to call. The southern brood frog (squelch) and the Victorian smooth froglet (arruk-pip-pip-pip-pip-pip-pip-pip) both lay their eggs in moist nests on land, where they develop partially before being washed into a stream or wetland. Also in evidence are the common eastern froglet and the occasional powerful owl.

#### Winter

Only two species of frogs are braving the winter weather: the southern brown tree frog and the common eastern froglet. Both are calling slowly – as ectotherms (or cold-blooded animals), the body temperature of frogs drops in winter and all their metabolic processes operate more slowly. Don't miss the thunderstorm!

Seasons represented in the frog soundscape.  
Text extracted from *The Living Pavilion program*

Kirsten Parris is an Associate Professor of Urban Ecology at The University of Melbourne, and the Leader of the National Environmental Science Program's Research Hub for Clean Air and Urban Landscapes (CAUL).

For more information about the CAUL Hub, go to [nespurban.edu.au](http://nespurban.edu.au)



Zena Cumpston with volunteers during plant installation.  
Photo by Isabel Kimpton

# Botanical Exhibition

by Zena Cumpston

The Living Pavilion featured an outdoor plant exhibition of 40,000 Kulin Nation plants which I curated, in collaboration with landscape designer Charles Solomon. I researched the multiple cultural, medicinal and culinary uses of the plants which were then presented through strategic plant signage as part of the event space. Each plant sign began with common names most favoured by Aboriginal people, as well as the Latin botanical names. As well as focusing on native species, the community garden also featured some important plants from Aboriginal communities further afield. This aimed to highlight the University of Melbourne as a place which is home to many diverse peoples.

The Living Pavilion aimed to make visible the complex ecological knowledge that has been an important factor in Australia's First Peoples' place as the

oldest continuous culture in the world. Through the cultivation and custodianship of native plants, Australia's Indigenous communities have been accessing highly nutritious foods, powerful medicines, developing complex technologies, practicing aquaculture, making bread, farming and caring for Country over many millennia. The knowledge held and the scientific skill used to obtain these knowledges is testament to complex methods of integrated land and species management which centres around sustainable cultural practices informed by a holistic understanding of Country and all living things within it. Australia's First Peoples have been nurturing and peacefully interacting with their lands longer than any other living and continuous culture in the world.

Signage illustrations by Dixon Patten of Bayila Creative, research and words by Zena Cumpston, design and production 226 Strategic and Print on Wood.  
Photo by Sarah Fisher



## COASTAL PIG FACE

*Carpobrotus rossii*

Coastal Pig Face is commonly found on sand dunes and cliffs along the Victorian, South Australian and Tasmanian coastlines.

It also favours sandy soils around coastal lakes and marshes, and is occasionally found slightly inland.

Coastal Pig Face is one of the many edible succulents eaten by diverse groups of Aboriginal people. In late summer, it bears sweet fruit and when the petals have dropped from the fruit, the pulp and seeds can be sucked out, tasting a bit like a pleasantly salty apple.

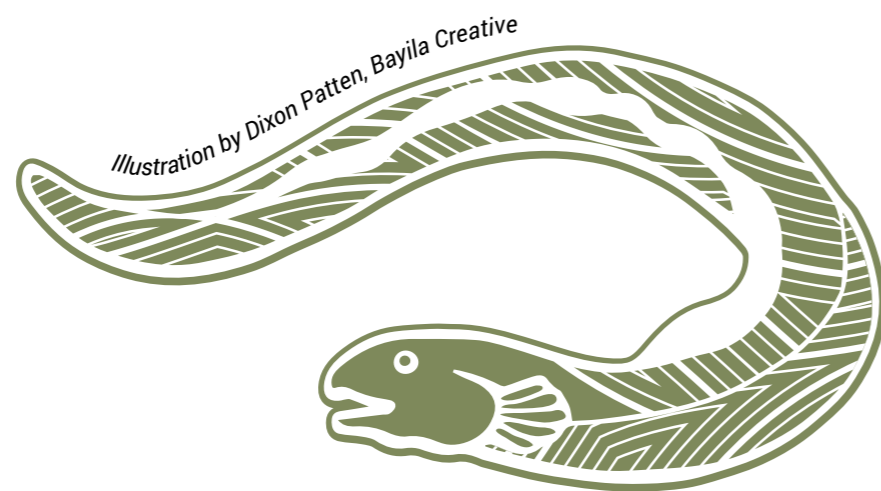
The leaves are also edible as a vegetable, and Aboriginal peoples were known to use them as a salty accompaniment to various cooked meats.

The juice from the leaves can also be used to relieve insect bites.



Only relatively recently, through the illuminating work of writers such as Bruce Pascoe, Bill Gammage and the remarkable lifetime work of ethnobiologist Dr Beth Gott, have the wider Australian public become aware of the skill and breadth of Aboriginal ecological knowledge and practices. Here in Victoria, it is known that the peoples of the Kulin Nations utilised and had intimate scientific knowledge of more than 1,000 species of plants. Because of the ravages of colonisation, it is extremely likely there were many more which have remained unrecorded. One of the first core aspects of culture and economy to be catastrophically affected was access to Country and traditional staple foods. Many of the First Peoples' most important plants were wiped out in very little time with the introduction of foreign animals which ate many staple food sources almost entirely out of existence.

As well as their importance in the place- and people-specific cultural contexts they belong within, The Living Pavilion aimed to highlight how Australian indigenous plants should be recognised as some of the most sustainable and nutrient-rich crops which can be grown, requiring little water and having no need for fertilisers. Many indigenous plants grow in diverse climates across Australia. Climate-tolerant endemic plants are potentially very important food sources in a future that undoubtedly includes climate fluctuations which may be catastrophic to many of the introduced species which are currently heavily relied upon.



*Kulin Nation plants at The Living Pavilion.  
Photo by Isabel Kimpton*

# The Living Pavilion Plant List

## Indigenous Community Garden Plant List

Devised by Dean Stewart with Bili Nursery

Grey Saltbush (*Atriplex Cinerea*)

Vanilla Lily (*Arthropodium milleflorum*)

Chocolate Lily (*Arthropodium strictum*)

Midyim/Midgen Berry (*Austromyrtus Dulcis*)

Apple Berry (*Billardiera scandens*)

Bulbine Lily (*Bulbine bulbosa*)

Coastal Pig Face (*Carpobrotus rossii*)

Ruby Saltbush (*Enchylaena tomentosa*)

Murnong (*Wurundjeri*)/ Yam Daisy (*Microseris Lanceolata*)

Kangaroo Grass (*Themeda triandra*)

Nodding Saltbush (*Einadia nutans*)

River Mint (*Mentha australis*)

Native Thyme (*Prostanthera incisa*)

Coast Beard-heath (*Leucopogon parviflorus*)

Slender Mint (*Mentha diemenica*)

Bower Spinach (*Tetragonia implexicoma*)

New Zealand Spinach/Warrigal Greens (*Tetragonia tetragonioides*)

Native flax (*Linum marginale*)

Weeping Grass (*Microlaena stipoides*)

Old Man's Weed (*Centipeda cunninghamii*)

Island Celery (*Apium insulare*)

–

Visit [westgatebiodiversity.org.au](http://westgatebiodiversity.org.au) for more details.

## 40,000 Kulin Nation Plant List

Devised by Zena Cumpston and Charles Solomon with Ecodynamics

Marsh Club-rush (*Bolboschoenus medianus*)

Knobby Club-rush (*Ficinia nodosa*)

Hollow Rush (*Juncus amabilis*)

Rush (*Juncus flavidus*)

Green Rush (*Juncus gregiflorus*)

Broom Rush (*Juncus sarophorus*)

Fen Sedge (*Carex gaudichaudiana*)

White Correa (*Correa alba*)

Ruby Saltbush (*Enchylaena tomentosa*)

Spiny-headed Mat-rush (*Lomandra longifolia*)

Tussock Grass (*Poa poiformis*)

Kangaroo Grass (*Themeda triandra*)

Tall Sedge (*Carex appressa*)

Paroo Lily/Flax Lily (*Dianella caerulea*)

Pale Flax-lily (*Dianella longifolia*)

Wattle Mat-rush (*Lomandra filiformis*)

Wallaby Grass (*Rytidosperma spp*)

Sticky Everlasting Daisy (*Xerochrysum viscosum*)

Hop Wattle (*Acacia stricta*)

Gold Dust Wattle (*Acacia acinacea*)

Lightwood/Hickory Wattle (*Acacia implexa*)

Black Sheoak (*Allocasuarina littoralis*)

Coast Banksia (*Banksia integrifolia*)

Silver Banksia (*Banksia marginate*)

Common Spike-rush (*Eleocharis acuta*)

Common Wheat-grass (*Elymus scabrus*)

Hop Goodenia (*Goodenia ovata*)

Wooly Grevillia (*Grevillea lanigera*)

Common Boobialla (*Myoporum insulare*)

Nardoo (*Marsilea drummondii*)

–

Visit [nespurban.edu.au](http://nespurban.edu.au) for further plant cultural and ecological history prepared by Zena Cumpston.



**Top**  
Nardoo (*Marsilea drummondii*).  
Photo by Sarah Fisher



**Middle**  
Bulbine lily (*Bulbine bulbosa*).  
Photo by Christina Renowden



**Bottom**  
Plant installations at The Living Pavilion.  
Photo by Alison Fong

# Program

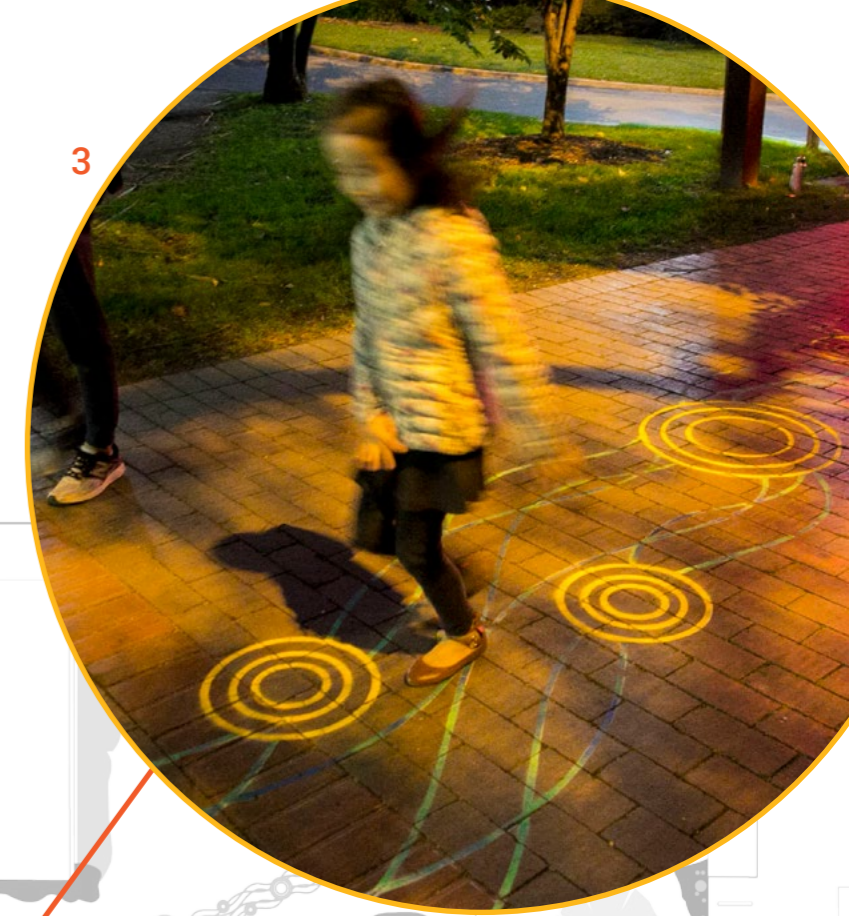
While temporary interventions can play an important role in developing stronger relationships to place, it is critical that the programming is meaningful to maximise the placemaking benefits. The Living Pavilion included a total of 44 events over the three-week period, with over 1800 people registering for the events which included creative workshops, performances, live music, talks and readings across Indigenous culture, ecology and climate change. The following pages provide only a snapshot of the key artists and events.



1



2



3



6



5



4

1. Ecofeminist gatherings led by Dr Hayley Singer. Photo by Isabel Kimpton

2. Participants creating their own Native Kokedama. Led by Bili Nursery. Photo by Isabel Kimpton

3. People interacting with the Bouverie Creek. Photo by Alison Fong

4. Baabapul-kwii Bush Foods workshop hosted by Cassie Leatham. Image by Sarah Fisher

5. Kyaa Nicholson from The Djirri Djirri Dance Group at the Opening Ceremony. Photo by Alison Fong

6. Close up of plant weaving. Photo by Sarah Fisher



## Artists in Residence: Stephanie Beaupark

Stephanie Beaupark is a Ngugi installation artist who works with traditional and contemporary Indigenous textile methods and eco dyes of Australia. Beaupark utilises her art-making practice as a mode of communication to decolonise science and reclaim Indigenous culture and identity as an essential aspect of scientific research. For The Living Pavilion, Stephanie worked with participants under the Lily Pilly tree to create a participatory installation using Indigenous rope making and weaving techniques, forming a web-like immersive space made of found plant materials.

### From the artist:

In Aboriginal culture weaving is a very social practice, it is particularly a women's practice to work in weaving circles. Weaving circles are beautifully intimate experiences with a focus not only on the physical craft and learning from each other but also on social connection – an opportunity to get to know each other more deeply, pass on knowledge, as well as pass on stories and lessons. In the context of my art practice, the process of teaching weaving is used to create deeper connection to the natural world and understanding of Indigenous culture and art within non-Indigenous people. The process of making the rope creates tight physical bonds in the material as well as intimate social bonds between the people working together.

*Stephanie Beaupark teaching Indigenous weaving techniques using Spiny-headed Mat-rush (*Lomandra longifolia*).  
Photo by Sarah Fisher*

## Artists in Residence: Katie West

Katie West is a Yindjibarndi woman, with an interdisciplinary practice that explores the renewal of human connections with and within the natural environment. Katie's Fishing Net was completed under the Lilly Pilly tree during The Living Pavilion and was then hung over The Makers Space in the second week of festivities.

### From the artist:

This net making technique is from my mother's Yindjibarndi country. Our grandmothers would make nets to catch fresh water fish in the rivers and permanent pools, and fish to sustain our families.

Weaving fishing nets as a practice has been disrupted through the establishment of pastoral stations in the Pilbara region. Net making is an aspect of weaving knowledge, and women's knowledge, that was very close to being forgotten within our community. By chance we learned of the existence of this net (and an accompanying basket) in a museum collection. Now my sisters and nannas are learning this technique again through closely inspecting the images of these objects and the expertise of a fibre artist and a friend of the community (Fiona Gavino).



Katie West standing under her installation in The Makers Space.  
Photo by Tanja Beer

## The Orbweavers

Marita Dyson and Stuart Flanagan (The Orbweavers) are multidisciplinary artists working in song, performance and visual art. Their musical compositions and performances respond to history, natural science, material culture, memory and place. During their residency, The Orbweavers penned a song (Reeds/Rush) and created accompanying illustrations in response to Bouverie Creek, The Living Pavilion site and programs.

### From the artist:

Reeds/Rush makes reference to Zena Cumpston's detailed research which accompanied the 40,000 Kulin Nation plants installed at The Living Pavilion, and to the hidden waterway, known today as Bouverie Street Creek, that traverses the University site. We learned that the creek is fed by a wetland situated under the University oval, where four River Red Gums, which pre-date the University, still stand. The creek was put into a drain following disruption and colonisation, but water still follows this path, as it always has, flowing into the Elizabeth Street waterway which meets the Birrarung, and continues out into Narrm/Nerm/Port Phillip Bay. Luk(eels) still migrate through this waterway and have been seen beneath drain covers and in pools across the campus.

*Marita Dyson, from The Orbweavers performing on The Main Stage.  
Photo by Sarah Fisher*

# Participatory Workshops

The Living Pavilion incorporated a number of participatory workshops to build an integrated understanding of and being with place. The act of 'making' together (crafting, gardening, playing, dancing) was a key strategy for creating meaningful connections with place across audiences. We have only selected a few examples for this report.



Participants at the 'Ephemeral in Nature' ArtScience workshop.  
Photo by Luis Mata.

## Plant Workshops

Plant workshops were delivered by Zena Cumpston (Barkandji), Cassie Leatham (Taungurung/Wurundjeri) and Dean Stewart (Wemba Wemba/Wergaia). These workshops allowed participants not only to get their hands dirty and to take plants home, but also to expand their knowledge on the multitude of plant uses developed over time by Aboriginal people (e.g. cultural, medicinal, nutritional and technological). The workshops aimed to give participants the opportunity to learn directly from Aboriginal knowledge holders about the cultural and ecological importance of the native plants on display.



*Cassie Leatham hosting a bush foods workshop.  
Photo by Sarah Fisher.*



## Art Workshops

SPACE: Flow was led by artists from the Victorian College of the Arts' BFA Honours in Social Practice and Community Engagement, mentored by 3kps Creative Director Dr Bo Svoronos. Students and the public were invited to connect to Bouverie Creek through participatory action and to reflect on the sovereignty of waterways that continue to sustain life and habitat. Engaging with passers-by, the students prompted participants to reflect on the hidden waterways underneath their feet and consider what water sources mean to them.



Participants at SPACE: Flow.  
Photo by Sarah Fisher

## Dance Workshops

As well as hosting dance performances by The Djirri Djirri Dance Group (who led both the Opening and Closing ceremonies), choreographer Rheannan Port (Lama Lama, Ayapathu, Gugu Yalanji) presented an interactive dance workshop from The Main Stage of The Living Pavilion. Rheannan led participants from The Main Stage across the entire site to dance with the plants along Dixon Patten's Bouverie Creek mural, transforming the busy thoroughfare into a mesmerising performance space.



Participants at an interactive dance workshop led by Rheannan Port. Photo by Tanja Beer

# Music Performances

Music performances were an integral part of the Opening and Closing ceremony of The Living Pavilion led by Mandy Nicholson and The Djirri Djirri Dance Group with special First Nations guests, including The Merindas and Kalyani Mumtaz. The program also included a stirring classical music performance by Carla Blackwood and Thea Rossen (Faculty of Fine Arts and Music).

## *The Merindas*

Fresh Melbourne based female duo, The Merindas, are the synthesis of warrior queen, bringing an on-trend style of rhythmic, expressive and beautiful music dedicated to their cultural heritage. For The Living Pavilion, The Merindas created an atmospheric fusion of Indigenous, electro-tribal pop sounds in an extraordinary presentation of choreographed movement.

*The Merindas performing at the Closing Ceremony.  
Photo by Alison Fong*



## *Undercurrents*

*Undercurrents* was a classical music performance by Carla Blackwood and Thea Rossen that explored the tension between the built environment and the natural movements of water and nature. The title piece by Thea Rossen was a mass work for Melbourne Conservatorium staff and students created specifically for The Living Pavilion featuring the Federation Bells on loan from Museum Victoria.



*Melbourne Conservatorium staff and students performing Undercurrents. Photo by Tanja Beer*

# Frog Fest: Connecting Families with Nature in the City

Frog Fest at The Living Pavilion was a family-oriented festival created by Dr Kirsten Parris that connected people of all ages with Melbourne's frogs – a key component of our local biodiversity. The variety of frog-related activities included a frog soundscape that represented four seasons of frogs in Melbourne, arranged along the reimagined Bouverie Creek; frog craft, frog dress-ups and frog face-painting; and a frog choir that sang songs about frogs and/or using frog sounds.

More than 500 people attended Frog Fest over its three days, with approximately 250 participating in guided tours of the frog soundscape. A self-guided tour with program notes was also available, with one version for adults and one for children.

## *Frog craft and dress-ups*

A frog dress-up box on the main stage provided frog costumes for all ages, and these proved popular with children and adults alike. Frog craft included an activity for children to explore the life cycle of the frog through clay, making first an egg, then a tadpole, then a frog. A small display of live frogs sat on the table with the crafts, so visitors could see local frogs as well as hear them in the soundscape.

## *Frog choir*

Frog choir took place on the main stage two or three times per day, for anyone who was keen to participate. Each session started with the song 'Growl, growl, green frog' (composed by Kirsten Parris to the tune of 'Twinkle, Twinkle, Little Star') then proceeded to more complex pieces depending on the choristers and their ages/interests. Frog choir provided another avenue for connection to frogs and their ecology through music.

*"I loved the plants, the frog soundscape and being immersed in nature".*

*Participant from Frog Fest 1, May 4*

*"Very peaceful place to explore and listen to the frogs".*

*Participant from Frog Fest 2, May 5*



*Children dressed up as frogs for Frog Fest. Photo by Isabel Kimpton*



*Children dressed up and creating frog clay models at Frog Fest. Photo by Kirsten Parris*



*Families participating in the frog choir. Photo by Kirsten Parris*

# Installations and Happenings

Installations and Happenings is a new subject for the Bachelor of Design (Faculty of Architecture, Building and Planning) which explores the potential of small-scale participatory spatial interventions to reimagine public spaces. For The Living Pavilion, 26 students created nine temporary installations from bamboo that responded to the site and context of The Living Pavilion. For example, 'Bouverie Rain', was an interactive artwork that aimed to reconnect participants to Bouverie Creek through tactile and auditory play and discovery using natural, reusable and sustainable materials.



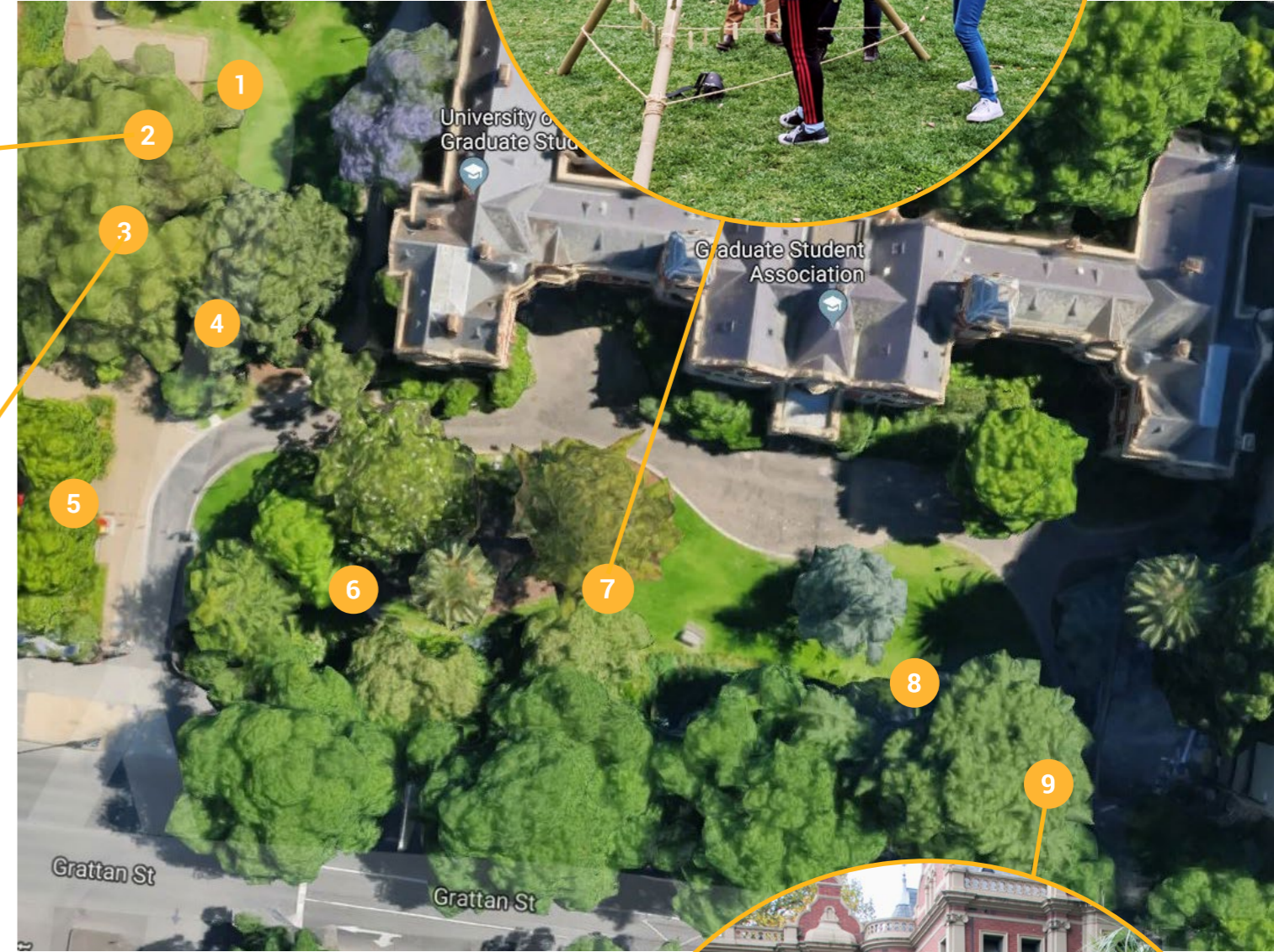
'Bouverie Rain' installation by Stephanie Lam, Hoi Yu Lo (Elsa) and Hoi Ying Chan (Iris). Photo by Alison Fong

Another example, 'Love Letters to Forgotten Plants' invited audiences to write love letters to damaged and unsellable plants. Participants were invited to take their newly found plant home, leaving behind a letter of what the 'forgotten' could be. These installations were set up for one afternoon as part of The Living Pavilion program, encouraging audiences and passersby to engage with their artworks and see the University of Melbourne's Parkville campus anew.



'Tightly Strung' installation by Simran Dhillon and Marcel Schloozis. Photo by Alison Fong

'Prayer Wheels' installation by Kash Ngan, Samantha Tseng and Cynthia Senangsyah. Photo by Cristina Hernandez-Santin



- Projects**
1. The Genesis
  2. Bouverie Rain
  3. Tightly Strung
  4. Mindfulness Painting
  5. The Living Soundscape
  6. The Glow
  7. Prayer Wheels
  8. Isolation
  9. Love Letters to Forgotten Plants

'Love Letters to Forgotten Plants' installation by Joshua Budgen, Lillie Paxton-White and Monique Hillier. Photo by Alison Fong

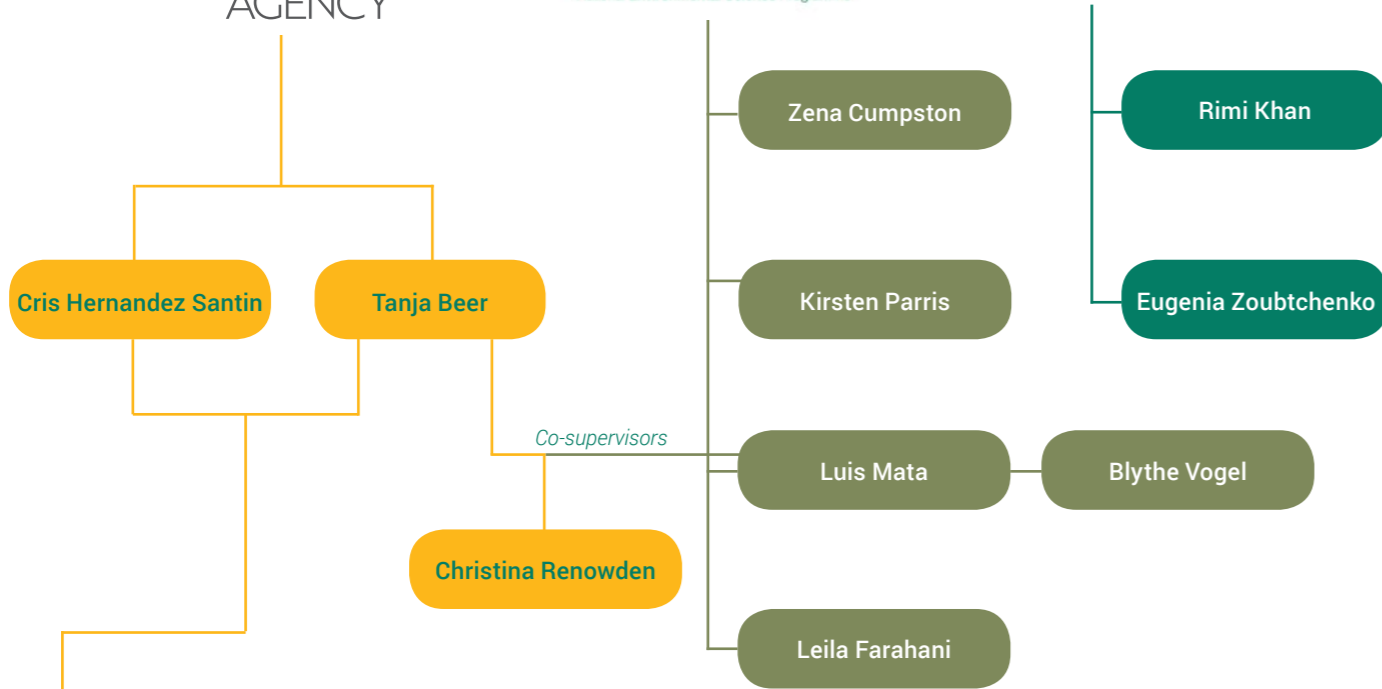


## Part 2: The Research

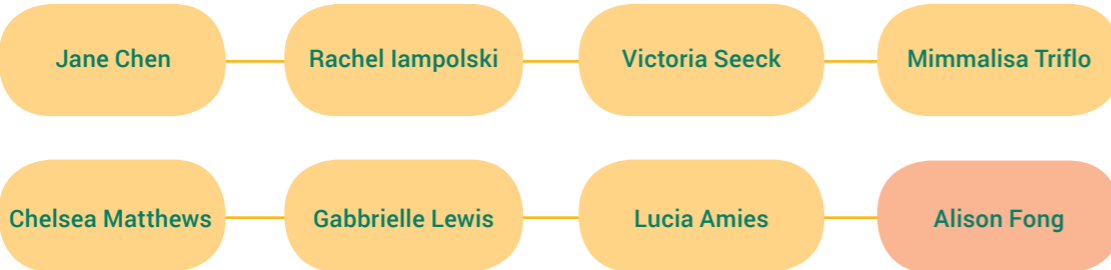


Participants at Christina Renowden's  
ArtScience workshop.  
Photo by Luis Mata

# The Living Pavilion Research Team



## The Living Pavilion student ambassadors



- Programming and research
- Documentation and communication

In addition to being a significant engagement project for the University of Melbourne, The Living Pavilion was designed as a living laboratory for conducting research across Indigenous knowledge, art, ecology, social sciences and placemaking. The project implemented a transdisciplinary research design informed by the collaborative efforts of staff and students of the University of Melbourne and RMIT University, including: the THRIVE Hub (Faculty of Architecture, Building and Planning, University of Melbourne), Clean Air and Urban Landscapes Hub (CAUL) of the National Environmental Science Program and The New Student Precinct (University of Melbourne). A key emphasis of The Living Pavilion was to bring multiple

viewpoints and expertise together to unite and expand knowledge production around regenerative placemaking. This included engaging a transdisciplinary team of ten researchers and seven student researchers who worked together to develop a cohesive research strategy and data gathering process that could inform their various fields of knowledge as well as contribute to broader socio-ecological perspectives of the project. In addition, the producers launched a Living Pavilion Ambassador (TLPA) program which engaged seven students in the gathering of social research data during the event, and one in the documentation and communication of the project.



*Drawing of a panel discussion by student ambassador Lucia Amies.*



# Research Design

## *How can temporary event spaces activate socio-ecological connection and forefront Indigenous sovereignty to inform future potential of place?*

The Living Pavilion was a transdisciplinary test for the capacity of temporary event spaces – ‘living labs’ – to activate community connection to place, celebrate bio- and cultural-diversity and forefront First Nations sovereignty. Through the co-creation of experiential environments, living labs allow participants to be part of an active process of systematic, problem-solving sequencing – co-creation, exploration, experimentation and evaluation. This means that the stakeholders are immersed in the creative process of scenario testing, and actively contribute to the co-designing and experiencing of their own potential futures.

The study was conducted through an umbrella research approach which included a number of themes acting as semi-independent projects that explored the social and ecological benefits of the place activation, the Indigenous and ecological knowledge transfer achieved and the legacy of the project to inform developments beyond the temporary event space. Our objectives were to:

1. Test new methodologies for evaluating temporary placemaking projects;
2. Examine ways in which event spaces can forefront Indigenous Place;
3. Evaluate the project’s potential in highlighting local ecologies and biodiversity benefit, and;
4. Explore the role of temporary event spaces in fostering a sense of place and community.

Together, these objectives supported our investigation into the potential of temporary event spaces to activate socio-ecological connection and affirm Indigenous sovereignty.

*Living labs is a research methodology that intentionally stages creative experiments in real-world settings allowing researchers to test new ideas or aesthetics within the intended context.*

## *Methods*

Using living labs as the overall methodology for the project, the study incorporated both qualitative and quantitative social research methods, including: observations, digital surveys, paper-based surveys, focus groups and interviews as well as biodiversity observations gathered at various points before, during and after the festival.

A key source of our data collection strategy were our anonymous online surveys, which gathered the opinions and views of 190 visitors. This social research instrument included 25 questions including: multiple choice; Likert scale (a five-point scale which allows individuals to express how much they agree or disagree with a particular statement), and; open-ended questions. The survey explored participants’ responses across five themes: participation in The Living Pavilion (what drew them to the event space), individual connection to place (place

attachment, social connection, nature connection, connection to Indigenous culture); place perspectives (favourite design elements and general feedback), place experience (programming, engagement and learnings) and demographic background.

Short anonymous paper-based questionnaires were also used to track participants’ experiences and learnings of the workshops. This survey had three distinct sections: the demographic background of the participant, general feedback on the workshop experience and key learnings from the workshop. Through the survey process, we also invited people to participate in interviews or focus groups to expand on their experience. We received 68 workshop respondents in total.



*Visitors filling in social surveys on the iPads. Photo by Alison Fong*

Focus-groups and interviews were also set up to gather in-depth data by members of the research team. This included six individual interviews with participants of the ArtScience workshops to delve into their experience and the ecological knowledge transfer (led by Christina Renowden), a focus group on Indigenous Knowledge transfer with three participants (led by Zena Cumpston and Rimi Khan), as well as two focus group discussions on the transdisciplinary research process and site observations with the 17 members of the research team (led by Dominique Hes and Cristina Hernandez-Santin).

The transdisciplinary focus groups gave the research team and The Living Pavilion Ambassadors an opportunity to share their fieldwork notes and observations as well as reflect on the research process. The field work notes, collated by seven of The Living Pavilion Ambassadors, represented 70 hours of site documentation,

including observations of how people interacted with the event space, as well as capturing conversations and individual reflections.

To evaluate the ecological benefit of the installation, insects were used as an indicator to identify if the installation provided the necessary resources for increased biodiversity. Dr Luis Mata and Christina Renowden completed flower-pollinator direct observation surveys for all Kulin Nation plant species that were in flower during The Living Pavilion, as well as each non-native, introduced plant species that was in flower before, during and after The Living Pavilion. The biodiversity team also conducted a series of standardised sweep-netting surveys using a 50cm diameter entomological net for both non-native and native plants before, during and after the project.



*Drawing of The Orbweavers by student ambassador Lucia Amies.*

## Placemaking Evaluation Framework

Event spaces have found a place within placemaking literature for their role in revitalising the social and economic activities of an area as well as aiding communities in developing stronger relationships through meaningful programming. The Living Pavilion provided a unique opportunity to explore how temporary event spaces can build holistic perception of place as well as influence the long-term design and programming of a particular site.

Placemaking is a worldwide movement that aims to enhance place attachment which can be defined as 'the emotional bond between person and place', a concept which has been previously linked to positive outcomes in health and community participation, civic behaviour and perceptions of safety.

A regenerative approach to placemaking (as highlighted in Part One) is one that moves beyond a human centred focus to integrate a site's ecological-socio-cultural layers. However, how do we know if a project has achieved a sense of place?

*Think of places as human bodies. Every person is unique, with different thoughts, values, experiences and thumbprints. The way in which these elements interact create the specific configuration that is us.*

*But we also have things in common: we all have a heartbeat, we breathe, we need to eat, etc. These things that we have in common are 'essential' attributes of place, meanwhile, the unique elements are 'place-specific'.*

*Cristina Hernandez-Santin*

### Three characteristics of a placemaking project

- Placing emphasis on deep engagement with the community of an area;
- Using relatively small projects to trigger long-term benefits;
- Improving life quality by developing social cohesion and place attachment to contribute to the planning and investment of public places.

<sup>1</sup> *Rating Place* is an ongoing research project. To this day, the researchers have completed four workshops, drawing expertise from 120 placemakers. See: [studios.placeagency.org.au/rating-place](https://studios.placeagency.org.au/rating-place)

## How can temporary event spaces activate socio-ecological connection and forefront Indigenous sovereignty to inform future potential?

### Heartbeats of place



- Connection to Indigenous Place
- Clear Identity
- Alignment with Nature
- Care and Place Attachment
- Equity
- Economic Viability

### Place specific themes



- Indigenous Knowledge Transfer
- Science Communication
- Climate Change Education
- Social Connection
- Ecological Benefit
- Informing Future Potential



- 1 Creating Place Activation
- 2 Developing Biodiversity Benefit
- 3 Enhancing Place Attachment
- 4 Generating Pedagogical Landscapes
- 5 Celebrating Indigenous Place
- 6 Informing Future Potential

Places are complex and dynamic systems which require a holistic analysis framed through multiple perspectives that include cultural, ecological, social, political and economic influences. The analysis of The Living Pavilion included a value-based approach inspired by the work of the Rating Place Project<sup>1</sup>. The first workshop (conducted in Sydney in August 2018) drew from the expertise of 35 placemaking experts and proposed six universal 'heartbeats of place' which included:

1. **Connection to Indigenous Place:** highlighting First Nations sovereignty, ecological knowledge, culture and identity;
2. **Clear Identity:** represented as a place that is distinctive and shares a narrative;
3. **Alignment with Nature:** ensuring adaptability and resilience to environmental changes;
4. **Care and Place Attachment:** where evidence of sense of belonging and stewardship are visible;
5. **Equity:** defined to incorporate accessibility, a diversity of experiences and dynamism that keep the site interesting and connected to the community;
6. **Economic viability:** where the funds and governance are available for the place keeping strategy.

As well as using the 'heartbeats of place' as an evaluation framework for The Living Pavilion, we also identified six values that were specifically relevant for this project, this place and this context. These included:

1. **Indigenous knowledge transfer:** highlighting First Nations sovereignty, ecological knowledge, culture and identity through strategic partnerships, design and programming which allowed Indigenous collaborators to take 'centre stage'. This included asserting Traditional Ownership through extensively and visibly acknowledging the site as a Wurundjeri place;
2. **Science Communication:** making ecological stories visible and transferring botanical and ecological knowledge through strategic design and programming;
3. **Climate change education:** providing opportunities to discuss issues around climate change and urban resilience, including demonstrating strategies for nature-based solutions;
4. **Social connection:** creating conversation-starting opportunities across disciplines and backgrounds to foster shared experiences and friendships across the University and beyond;
5. **Ecological benefit:** demonstrating an increase in biodiversity due to influx of native landscape;
6. **Informing future potential:** testing design and programming concepts that can influence the future landscape design and place-keeping strategy of the University.

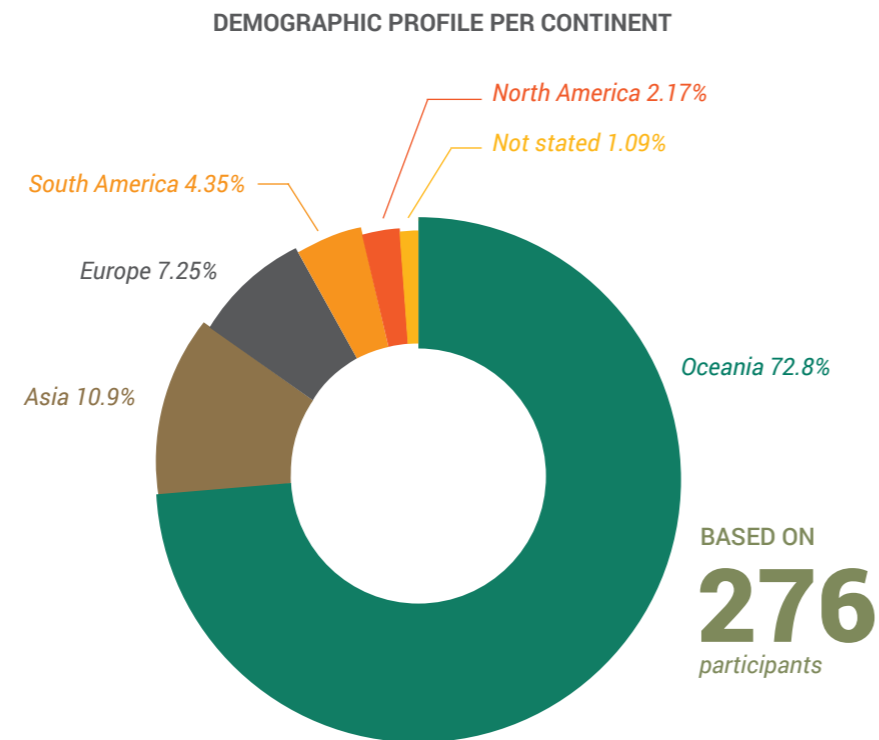
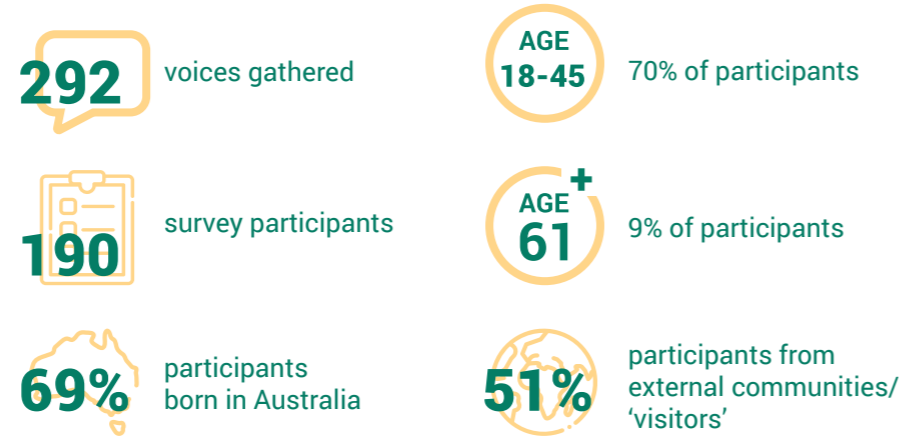
Together, the six 'heart beats' and six 'place-specific' values guided our analysis of The Living Pavilion. However, it is important to acknowledge that the emphasis on some values changed throughout the development of the project. For example, while the research originally included gathering data on the success of the Climate Change education program, we were unable to evaluate this topic due to insufficient information. In addition, the Economic Viability 'heart beat' was difficult to assess given the temporary nature of the project. Nevertheless, we consider all 12 values as important considerations for the future legacy of the design and programming of the Parkville site, including opportunities for how The Living Pavilion can influence or inform future programs conducted by the University.

# Research Results

## Demographic profile of survey respondents

Over the course of The Living Pavilion, the research team surveyed 292 respondents who shared their thoughts, opinions, reflections and learnings on the project. 190 respondents participated in the online social research instrument, with 68 workshop participants providing feedback on their experience, and 34 visitors adding their responses to our guest book. While the surveys and guestbook responses only provide a snapshot of the thousands of visitors that witnessed The Living Pavilion over the three weeks, these voices still provided an opportunity for us to understand the effect that the event space and programming had on its constituents. It is also worth noting that ~20% of the survey respondents (from 190 voices) considered themselves as part of The Living Pavilion team, either contributing to the research, design, programming of the project or volunteering or presenting at one of the events.

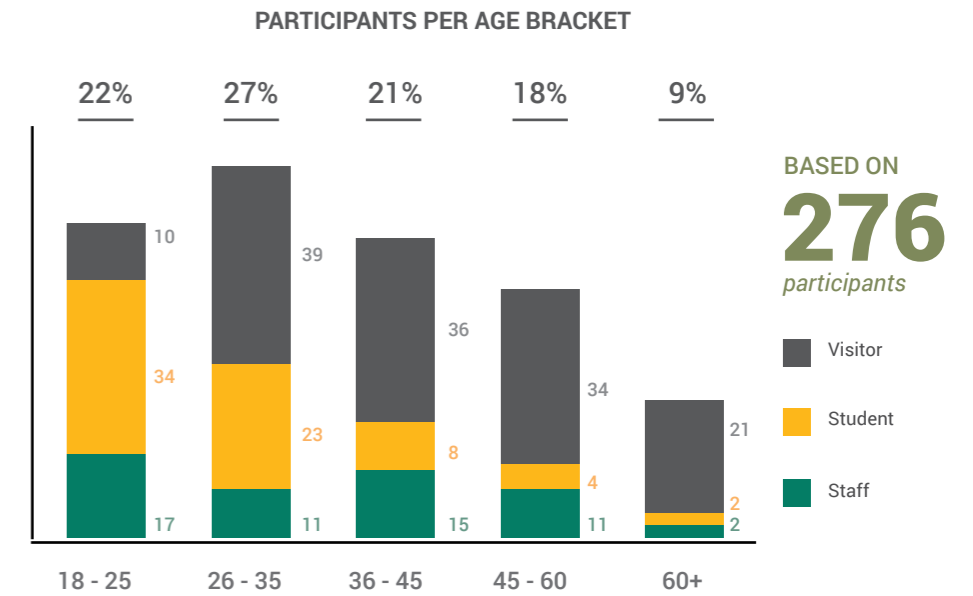
Across 3 weeks, people from over 30 different countries visited The Living Pavilion, of these, 72.8% were from Oceania including Australia (69.6%), New Zealand (2.5%) and Papua New Guinea (0.4%).<sup>2</sup> 11.3% of these identified themselves as having Aboriginal and/or Torres Strait Islander heritage.



<sup>2</sup> It is worth noting that these numbers are based on the voices coming from both the social research survey instrument and the workshop feedback forms, thus, it is possible that some of these people participated on both. For example, if we look specifically at the social survey instrument, the number of Australian born participants raises to 74%.

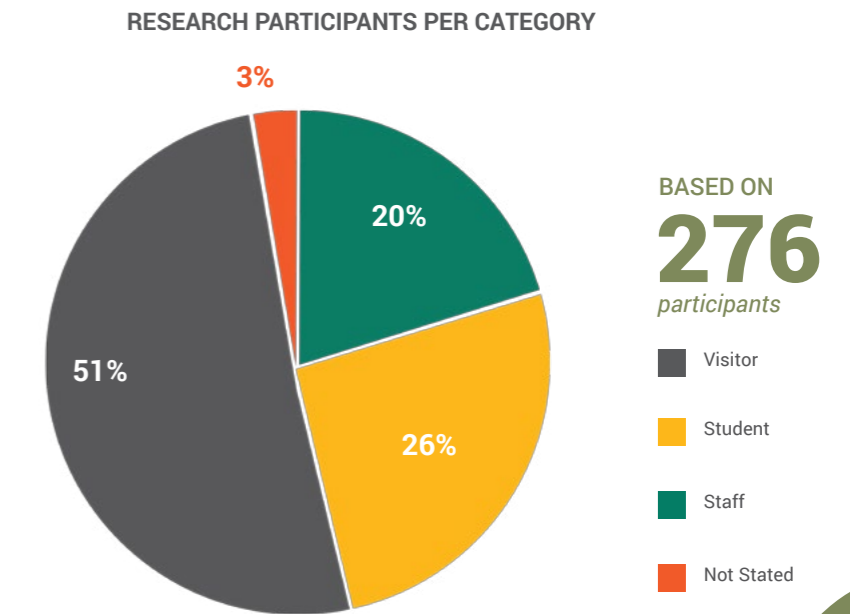
The Living Pavilion opened the University ground to the broader community, welcoming staff, students and visitors alike to engage with its design and program. Amongst the participants, there was an even spread between the external visitors (51%) and the internal community of staff (20%) and students (26%) involved in the various events offered by the event space.

The project engaged a wide audience from all backgrounds and age demographics. For instance, while almost half of the students belonged to the 18-25 age bracket, the large number of external visitors stabilised the distribution of our demographic profile allowing us to reach the 36+ age groups in ways that would have not been achieved solely with the internal community of the university. The project also attracted an older demographic (60+) of visitors (9%) providing opportunities for intergenerational exchange.



At the top of the graph, the percentages reflect the proportion of participants per age group based on 276 total participants.

The numbers alongside each bar represent the number of participants per category.



# Mapping The Success of The Living Pavilion

In undertaking the analysis of The Living Pavilion, we identified six key themes that emerged from the project, which work together to generate a deeper unfolding of place. These are: 1) Creating Place Activation; 2) Developing Biodiversity Benefit; 3) Enhancing Place Attachment; 4) Generating Pedagogical Landscapes; 5) Celebrating Indigenous Place, and; 6) Informing Future Potential.

Each theme moves from the more physical aspects of a placemaking project to more relational outcomes that respond to the key objective of placemaking as a process which enhances connection to place.

## Creating Place Activation

*How meaningful were the activations and experiences that were offered as part of The Living Pavilion?*

This explores the success of the design and programming of The Living Pavilion in providing an area for people to come together, learn and reflect through the celebration of Indigenous knowledge systems, art and science.

## Developing Biodiversity Benefit

*How did The Living Pavilion increase the diversity of native insect herbivores and pollinators?*

This acknowledges the vital role that The Living Pavilion played in bringing native flora into urban spaces to activate biodiversity.

## Enhancing Place Attachment

*How did The Living Pavilion foster social and nature connection?*

This emphasises The Living Pavilion's role in strengthening the emotional bonds between community and place to foster social-ecological relationships at the University.

## Celebrating Indigenous Place

*How did The Living Pavilion forefront and celebrate Indigenous place?*

This recognises the importance of The Living Pavilion as one which not only asserted First Nations sovereignty for all of Australia, but also specifically in connection with the University of Melbourne's Parkville campus being a Wurundjeri Place.

## Generating Pedagogical Landscapes

*How did The Living Pavilion act as a pedagogical landscape?*

'Generating pedagogical landscapes' showcases how The Living Pavilion acted as a place of embodied learning, particularly in regards to forefronting Indigenous knowledge systems and ecological science to students, staff and external visitors alike.

## Informing Future Potential

*How did The Living Pavilion inform the future potential of the site?*

This demonstrates how The Living Pavilion acted as a 'testing ground' for the future developments of the Parkville site.

# Creating Place Activation

by Tanja Beer and Cristina Hernandez-Santin

## How meaningful were the activations and experiences that were offered as part of The Living Pavilion?

The Living Pavilion site was activated through the temporary design and programming components coming together to create a holistic place experience and learning opportunity. This included a unique spatial design of 40,000 Kulin Nation plants and outdoor exhibition which featured a diverse program including ArtScience, weaving and planting workshops, music and dance performances. A key priority of our programming was to uncover hidden stories of place that would help connect our visitors to the rich ecological and Indigenous belonging of the site.

The potential benefit of temporary events as effective placemaking activations has been well documented in literature, however, in order for these activations to have meaning, the programming needs to be aligned with the values and aspirations of the community. We assessed people's responses to The Living Pavilion, analysing the popularity of the different spaces, programs and events.

The Living Pavilion offered a total of 44 events across 17 days, attracting thousands of visitors. From the events program, 22% of the events had an Indigenous focus, an additional 22% focused on climate change talks and discussions, 18% centred on fostering a connection to nature in the cities and the last 15% included celebrations such as the Opening and Closing event, or tours of the exhibition and sound design work. In terms of registrations, the most popular events were:

- **Opening and Closing ceremonies**, attracting over 150 people each;
- **Planting workshops**, engaging over 200 people in five different workshops, and;
- **Frog Fest**, a mini festival bringing hundreds of families together across two weekends to celebrate frog-related themes.



- Connection to Indigenous Place
- Clear Identity
- Alignment with Nature



- Equity
- Science Communication
- Climate Change Education
- Social Connection

**4.7**

Overall score



93% of participants gave the pavilion a score of 4/5

*"The Bouverie Creek has got to be the best part! Made the site just come to life".*

*Guest book entry*

These three events provided multi-sensory experiences that allowed people to engage with The Living Pavilion in an informative, celebratory and fun way and were the most successful in attracting both University wide and external participants. For example, the Opening and Closing ceremony were held outside work hours and brought our extensive team of collaborators together with their families and friends. The First Nations line up of free music performances were also a fantastic draw-card for students, staff and external visitors. The planting workshops were popular across age ranges primarily because of their unique Indigenous knowledge sharing and gardening focus, while Frog

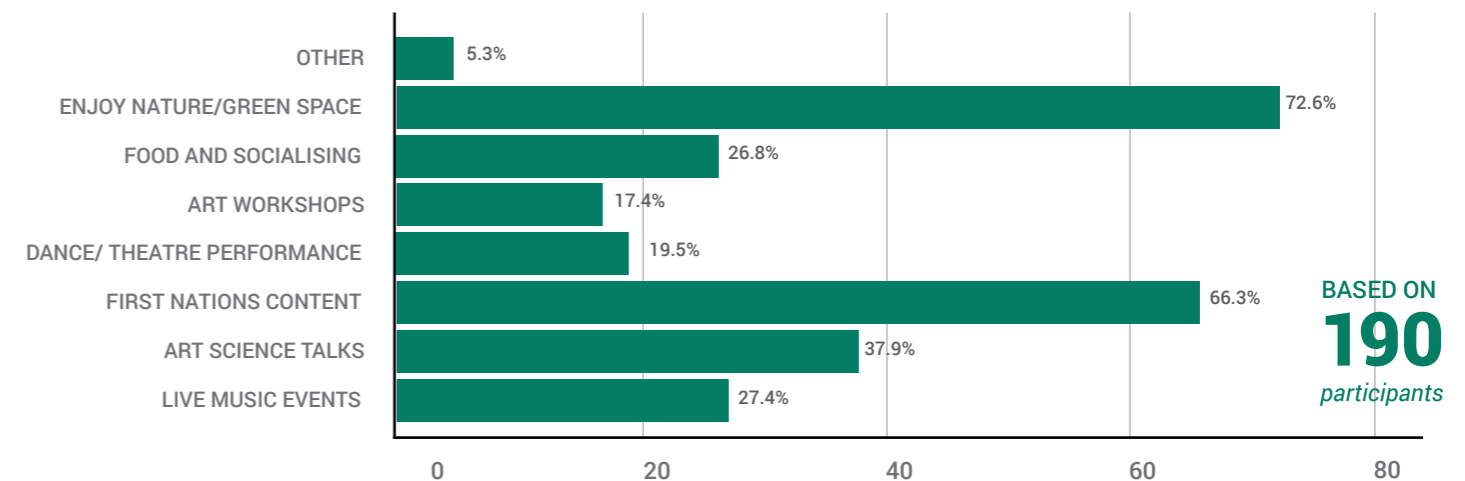
Fest (produced by Kirsten Parris from the University of Melbourne) was successful in opening up the University of Melbourne campus on weekends for families.

Through our social survey instrument, 190 participants were asked to provide information on the top three things that had brought them to The Living Pavilion. Between 65-73% of the participants stated First Nations content and greenery as the main reasons for their visit, particularly, their desire and interest to find more natural looking sites within the city, as well as more opportunities to connect with Indigenous knowledge systems.

*"Several visitors came to the site from the city (or afar) with the sole purpose to see the space and place of the pavilion"*

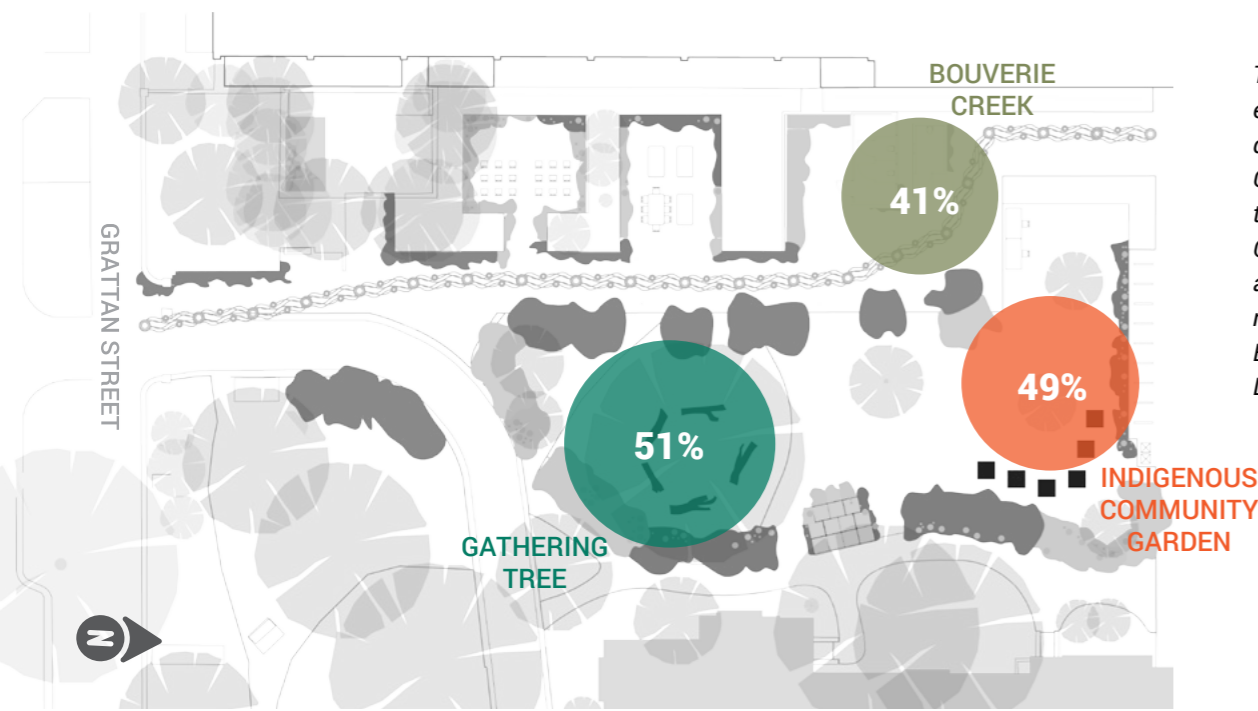
*Student ambassador*

KEY PROGRAMMING EXPERIENCES THAT ATTRACTED PEOPLE TO THIS EVENT



This graph shows the percentage of participants interested in particular experiences based on 190 people who participated in our online survey. Each person could choose up to three aspects of the offered activities.

POPULARITY OF DESIGN ELEMENTS



The top three elements of the design were the Gathering Tree, the Indigenous Community Garden and the artistic representation of Bouverie Creek by Dixon Patten.

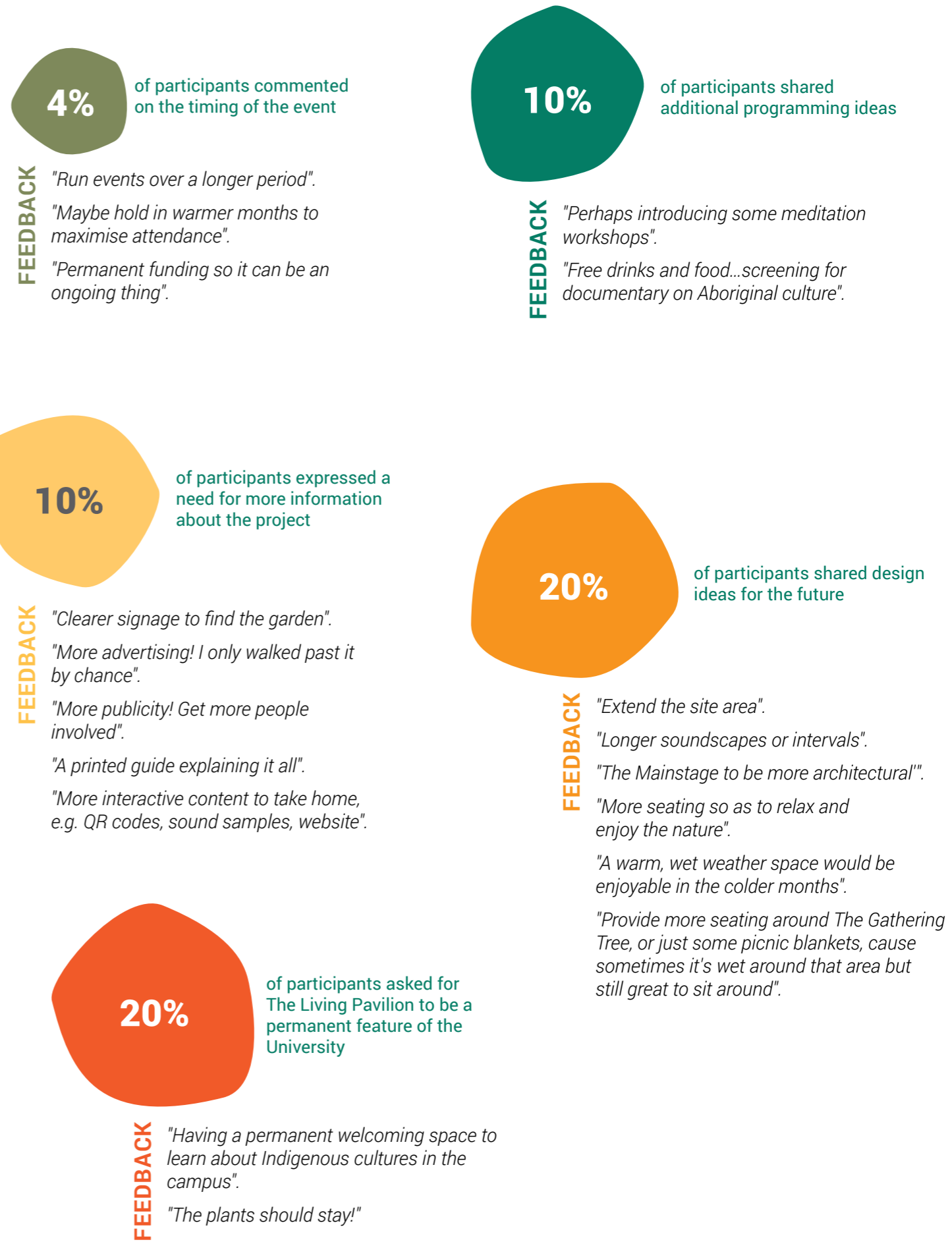
Similarly, First Nations content was a popular feature when exploring the top three elements of the design as indicated by the survey participants. These were: the Gathering Tree (featuring a soundscape by The Djirri Djirri's and weaving workshops by First Nations artists-in-residents Katie West and Steph Beupark), the Indigenous Community Garden (curated by Zena Cumpston and Dean Stewart, including workshops conducted by Zena, Cassie Leatham and Dixon Patten's artistic representation of Bouverie Creek).

Lastly, we invited people to provide written feedback on this initiative allowing us to explore what worked and what could be done differently in the future.

Of the 111 people that provided recommendations for improvement, 20% made design suggestions, including the addition of a worm farm, a shelter for inclement weather, and a larger space, 14% (26 people) specifically asked to make this space permanent while 4% wanted ongoing programming (i.e. a yearly festival or longer timeframe), including shifting it to a warmer season. 11% suggested the inclusion of more services such as food stalls, more events, and more seating while 10% suggested better communication or promotion about the event, including, incorporating signage outside of the site itself to help guide people to the festival.

Overall, our research demonstrated the significant interest of the University and external community in design and programming initiatives that forefront Indigenous place and native flora.

WHAT WOULD YOU CHANGE/IMPROVE ABOUT THE LIVING PAVILION?



# Developing Biodiversity Benefit

by Luis Mata, Christina Renowden and Blythe Vogel

## How did The Living Pavilion increase the diversity of native insect herbivores and pollinators?

People around the world are increasingly excited about bringing indigenous plants back into cities. Understanding the effects that increased plant food and habitat resources can have on non-plant biodiversity is important for the conceptualisation of any potential action aimed at bringing local, indigenous plants back. Few studies however have looked at exploring the ecological changes occurring after these actions take place using standardised methods.

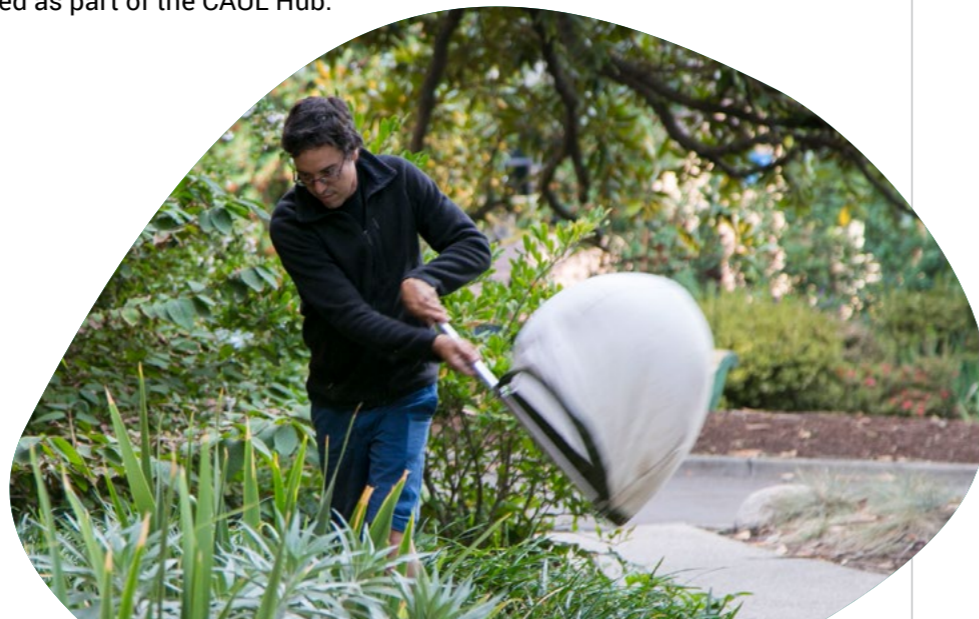
We're curious to see how the Kulin Nation plant species brought into the event space would integrate into the network of plant-insect interactions occurring at the site.

We're also interested in examining whether the short duration of The Living Pavilion would provide enough time for an insect community to become established on the Kulin Nation plants and, if so, whether this would lead to an increase in the site's overall insect diversity or simply mirror the diversity of the site's ornamental vegetation. We're also keen to learn whether the Kulin Nation plant species would incubate and/or attract different insect species compared to what was present on the ornamental vegetation. To this purpose we documented plant-insect interactions before, during and after The Living Pavilion using standardised survey protocols developed as part of the CAUL Hub.

• Alignment with Nature

• Science Communication  
• Ecological Benefit  
• Legacy: Informing Redevelopment

**27%** of all insect species recorded during The Living Pavilion interacted only with indigenous plants



Luis Mata conducting sweep netting surveys to observe insect biodiversity in Kulin Nation and introduced plants. Photo by Alison Fong

## TYPE OF INSECTS VISITING FLOWERS AT THE LIVING PAVILION

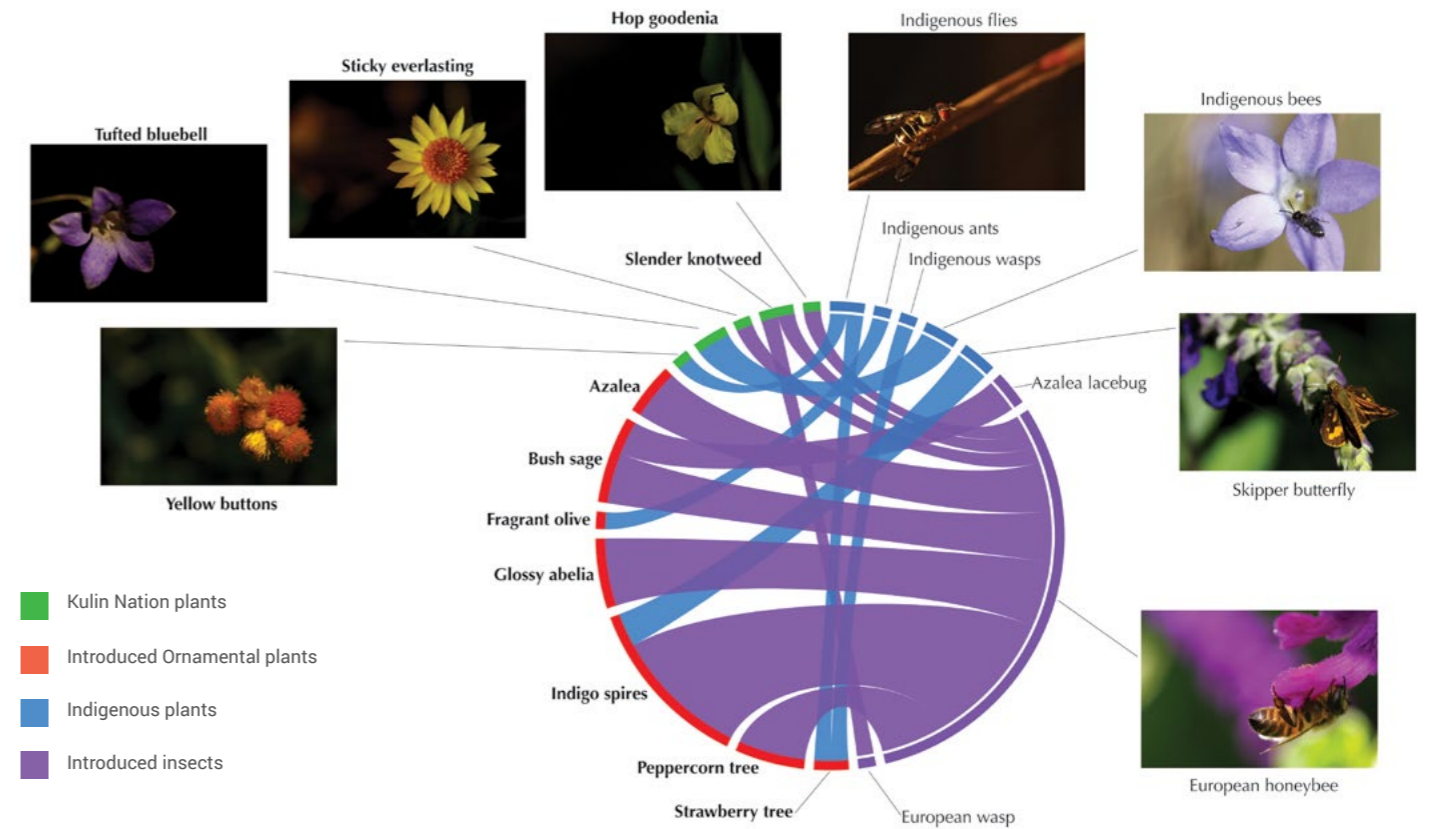


Figure by Luis Mata and Christina Renowden.

Above is a snapshot of what we found. The figure illustrates the interactions (blue and purple ribbons) between the Kulin Nation (i.e. indigenous) (green rectangles) and ornamental (i.e. introduced) (red rectangles) plants that were flowering during The Living Pavilion and their associated indigenous (blue rectangles) and introduced (purple rectangles) flower-visiting insect partners. As shown, all four types of expected interaction types were realised; that is, interactions between (1) indigenous plants and indigenous insects (e.g. tufted bluebell and indigenous bees); (2) indigenous plants and introduced insects (e.g. slender knotweed and European wasp); (3) introduced plants and indigenous insects (e.g. fragrant olive and indigenous ants); and (4) introduced plants and introduced insects (e.g. glossy abelia and European honeybee).

The findings depicted in this figure illustrate two key ideas with substantial implications for the way the site could be managed into the future. The first idea is that indigenous flowering plant species readily interacted with the site's flower-visiting insects, indicating that they may complement introduced plant species in future greening planned for the site. A perfect example is the tufted bluebell – the only plant species in which indigenous bees were seen visiting during The Living Pavilion. The second idea is that while some introduced plants interacted exclusively with introduced insects, others also interacted with indigenous insects. This latter group may be preferentially used to provide resources simultaneously to both indigenous and introduced insects. Take indigo spires for example, which while providing for European honeybees was the only plant during The Living Pavilion in which skipper butterflies were observed.

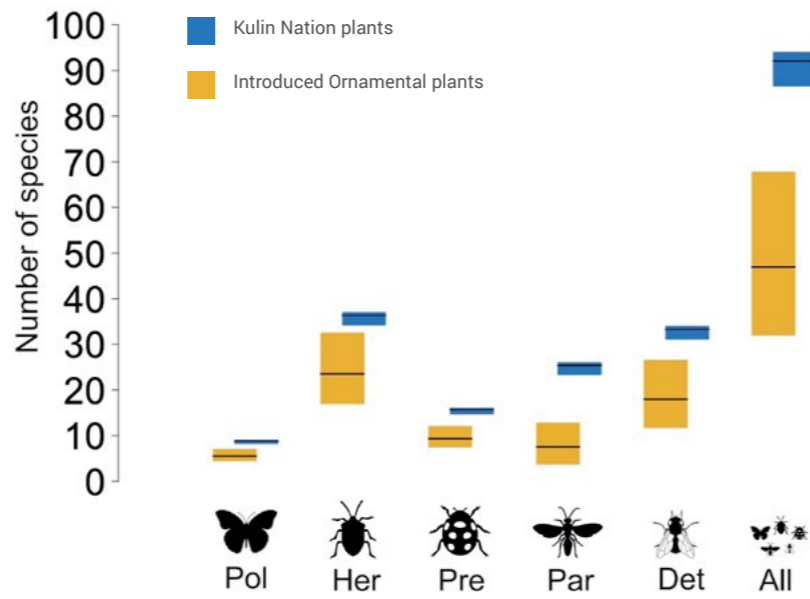
*"[I felt most connected to] the bees on site. As we are losing so many insects to climate change, it was amazing to see the plants were attracting insects to the site"*

Survey participant

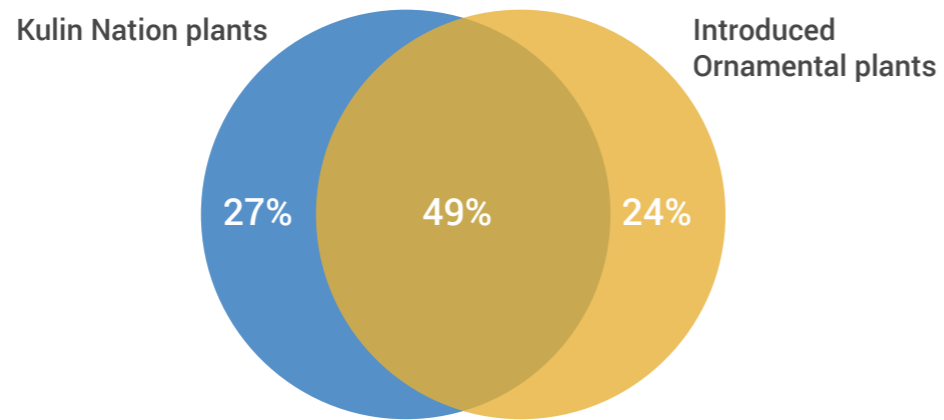


We also found that the indigenous plants greatly contributed to an increase in the site's overall insect diversity. As seen in the figure on the top, the site has substantially more insect species when the indigenous plants are present (blue boxes) than when only the ornamental vegetation is considered (yellow boxes). Indeed, for the whole insect community, and across the five studied functional groups (Pol: Pollinators; Her: Herbivores; Pre: Predators; Det: Detritivores), the insect species richness is at the minimum two, and sometimes as much as three, times higher thanks to the contribution of the indigenous plants. These findings imply that some of the insect species present during The Living Pavilion were either incubated with the indigenous plants that were brought into the site, or attracted from outside the site. This can be seen in the Venn diagram, which shows that as much as 27% of all the insect species recorded at the site were found exclusively living on the indigenous plants during the event.

**SPECIES RICHNESS PER INSECT FUNCTIONAL GROUP**

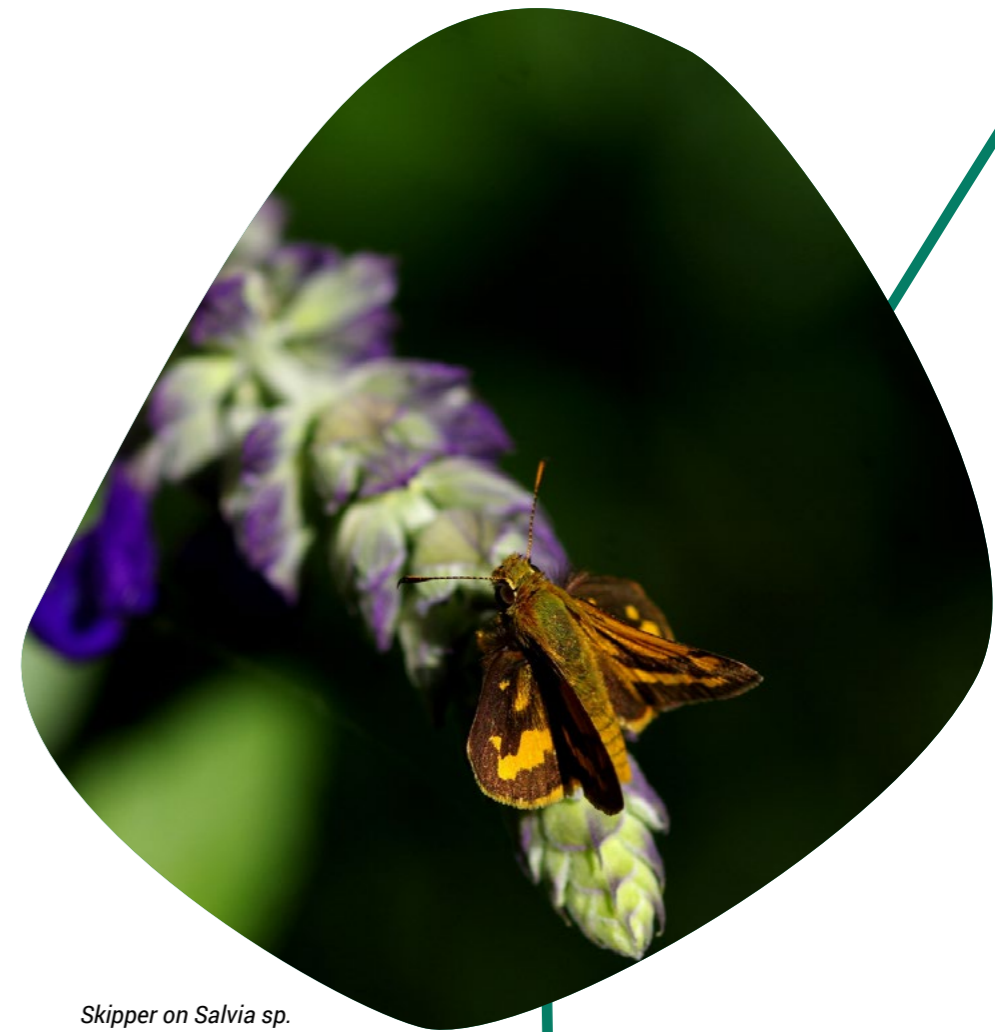


**OVERALL SPECIES RICHNESS AT THE LIVING PAVILION**



Figures by Luis Mata, Christina Renowden and Blythe Vogel.

Taken together these findings demonstrate how The Living Pavilion boosted and sustained a functionally diverse insect community. The observed increases in insect species richness across all functional groups were likely a product of the diverse array of food and habitat resources provided by the indigenous plant species. The Living Pavilion is an excellent example of how including indigenous plants into the design of small-scale, temporary urban greenspaces can provide biodiversity benefits and advances our understanding of how indigenous plants may contribute to bring nature back into cities.



Skipper on *Salvia* sp.  
Photo by Luis Mata



Tufted bluebell at The Living Pavilion.  
Photo by Luis Mata

# Enhancing Place Attachment

by Cristina Hernandez-Santin, Rachel Lampolski and Tanja Beer

Place attachment is a foundational concept of environmental psychology which is linked to positive outcomes for health, community participation, civic behaviour and perceptions of safety. Essentially, it is the connection that one feels towards a particular place and community that also influences one's identity, leading to increased wellbeing and active citizenship.

The Living Pavilion aimed to foster 'place attachment' by creating an interactive, accessible, biophilic and dynamic space for people to connect with the Parkville site. Adopting a co-creation strategy in fostering connection to place was a key part of this process. Place attachment was assessed through two themes: capacity to create social connection and ability to connect people to living systems or local environments.

## Fostering Social Connection

*How did The Living Pavilion foster social connection?*

The diversity and transience of students and staff on the University of Melbourne's Parkville campus means there is a need for spaces that allow for cultural exchange, social connection, friendship and collaboration. By transforming a thoroughfare between buildings into a captivating event space, The Living Pavilion encouraged visitors and passers-by to connect with each other in new ways. More than two-thirds of attendees (69%) stated that they met new people while they were at The Living Pavilion, demonstrating the project's contribution to social capital.



- Care and Place Attachment
- Clear Identity



- Social Connection

88%

of survey participants agreed, or strongly agreed that visiting The Living Pavilion gave them an opportunity to relax or de-stress

69%

stated that visiting The Living Pavilion gave them opportunities to meet new people

*"I liked the transformation of the space into somewhere I want to stay and gather in, as opposed to pass through".*

*Survey participant*



Gathering area near The Main Stage.  
Photo by Alison Fong

The event space provided opportunities for peaceful encounters and reflections. Visitors were frequently observed exploring the site alone, often taking time to sit, to read or to have their lunch. As The Living Pavilion progressed – and presumably coverage of it too – the numbers of university staff and students utilising the site as somewhere to have their coffee and lunch breaks increased.

The overwhelming majority of survey respondents (88%) stated that The Living Pavilion made them feel 'relaxed and de-stressed'. Visitors commented on the sense of 'tranquillity' and the 'peaceful' atmosphere of the space.

The Living Pavilion was considered to be both 'welcoming' – because it offered a variety of events, workshops and modes of engagement with the space – and 'intimate' – because it allowed visitors to reflect and meditate and engage with others at their own pace. Such spaces for relaxation and individual connection are becoming increasingly important at the University's campus, particularly in response to the wider context of rising academic pressure, and cultural and economic insecurity faced by many students and staff.

*"Have visited twice: to learn more and meet interesting people"*

*Survey participant*



Visitor reading under The Gathering Tree.  
Photo by Alison Fong

The Living Pavilion attracted a range of visitors from both inside and outside the University. The event played an important role in forging connections with communities that are often disconnected from the campus. Our research team vividly witnessed this transformation through an increased presence of outside visitors (47%), families, children and dogs within the area. The active presence of families changed the atmosphere of the site and showed how strongly The Living Pavilion helped blur the invisible lines that 'isolate' the university from the surrounding community. Passers-by would often stop and ask questions, while others brought their meetings outdoors to sit amongst the plants to catch the warmth of the sunshine as winter grew closer. Friendships and connections were also forged through the expansive project team who often visited The Living Pavilion outside of the times when they were volunteering or presenting, demonstrating a strong commitment to the project.

As indicated by our observations and surveys, The Living Pavilion contributed to the University of Melbourne's role as a cultural and civic actor and offered a significant platform for fostering social connection. A highlight was the presence of external visitors of different age groups and backgrounds who came through the Grattan Street entrance to engage with the botanical exhibition or take part in the events. This demonstrates how with effective design and programming, universities can become accessible, equitable and social gathering spaces that can break down mental and physical boundaries between the campus and its surrounds. Further, the future site of the New Student Precinct (Grattan Street entrance) has proved to be well-positioned for this to happen.

*"Love the atmosphere, really feels like the Uni is contributing to community! Rare and wonderful".*

*Guest book entry*

*"...many small children and babies were seen on the site...Even during talks and events, there would be babies and toddlers, either roaming the site or in a stroller".*

*Student ambassador*

## Fostering Nature Connection

### How did The Living Pavilion foster nature connection?

A key aim of The Living Pavilion was enabling visitors to feel connected to the environment around them, by creating a space to relax, learn and engage with its influx of 40,000 Kulin Nation plants. 73% of the survey participants highlighted 'enjoying nature or green spaces' as one of the main features that initially attracted them to the site, with 97% of respondents claiming that having nature in urban spaces was important to them.

77% of respondents also affirmed feeling a deep sense of oneness with the natural environment during their time spent at the event space. Possibly the clearest demonstrations of connection to place however, were the repeat visitors and consistent requests to make The Living Pavilion permanent.

77% of survey participants also stated that they had an intention to visit again, commonly referencing the 'beauty', 'good vibes' and 'calming' qualities of the site as well as opportunities to 'connect to nature' and 'learn new things on every visit' as some of the main reasons for their return visit.

One of the most surprising trends observed was the decrease in rubbish left on site over the course of the three weeks. Visible levels of rubbish that were normally accumulated by the end of the day – mostly single use plastic and food containers, left by visitors and (more so) passersby – dramatically decreased with each day of The Living Pavilion. This suggests an increased level of care of place, and for the natural environment more broadly.



- Connection to Indigenous Place
- Alignment with Nature
- Care and Place Attachment

**77%**

of survey participants said that they experienced an increased oneness with Nature

*"This space allows people to imagine an urban forest in a city and has interactive spaces and labels for people to engage with".*

*Survey participant*

*"Working in the city, it is soothing to spend time among plants".*

*Survey participant*



Volunteers during the installation of the Community Garden.  
Photo by Alison Fong

# Generating Pedagogical Landscapes

by Tanja Beer and Cristina Hernandez-Santin

## How did The Living Pavilion act as a pedagogical landscape?

The Living Pavilion's programming aimed to build knowledge about urban ecology and the potential of green spaces to cater and enhance local biodiversity through the signage, soundscapes, workshop, talks and performance events. The landscape was treated as a pedagogical space for educators to visit with their students as well as providing new knowledge to visitors from all walks of life.

This broad and comprehensive pedagogical approach supported teaching and learning activities across all levels of education (from kindergarten to Tertiary) and the multi-sensory characteristics of the design and programming made it accessible to a wide range of participants. For example, while the Opening and Closing ceremonies were about generating connections across audiences, the self-guided botanical exhibition offered an alternative model in which to engage visitors in the cultural and ecological stories of the Kulin Nation plants in a more reserved and reflective manner.

In addition to providing a pedagogical landscape through its exhibition, workshops, talks, performances, The Living Pavilion also created opportunities for student learning across a range of platforms. This included engaging over 100 students in the co-creation, development, implementation and programming of the space and over 180 children from the University's Early Learning Centre.



- Connection to Indigenous Place



- Indigenous Knowledge Transfer
- Science Communication
- Climate Change Education

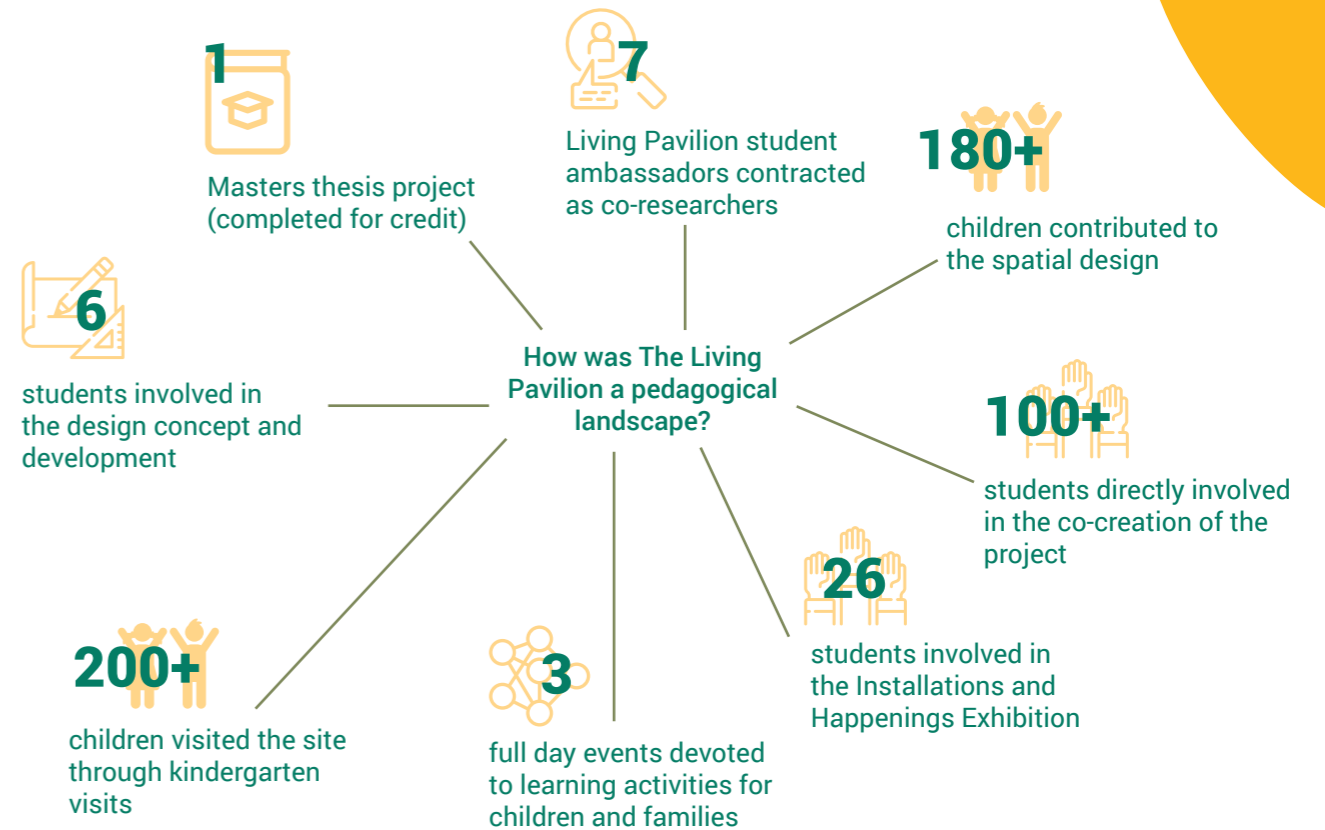
*"The information and booklet and signage is so beautiful and had so much information that I am keen to use when teaching culture at my children's school".*

Guest book entry

ELC kids installation at the Community Garden.  
Photo by Alison Fong



A key part of our pedagogical strategy included contracting seven Living Pavilion Ambassadors as 'co-researchers' or 'researchers in training', who were integral to executing the social research instrument during various points of The Living Pavilion, as well as monitoring their site observations and experiences of the project. This allowed us to achieve a good cross section of survey participants as well as gaining multiple perspective and responses to the project over the course of the three weeks.



The responses from the Ambassadors were overwhelmingly positive with many of them commenting on how the project not only enriched their experience at the University, but also contributed to their studies and made them feel connected to the campus community. Many of the students commented on how they felt a strong commitment to the project which prompted them to stay longer at the site or assist other team members, even when they were not contracted for those hours. They especially highlighted how the project provided a wonderful opportunity to meet new people across multiple disciplines and how the senior researchers made them feel like they were an integral part of a team and that this was very motivating.

A number of the ambassadors mentioned how the interdisciplinary nature of the project was 'really eye opening', particularly, working alongside the other students from different disciplines and viewpoints.

Overall, The Living Pavilion was successful in its ability to create a pedagogical landscape that was far-reaching, inclusive, accessible and equitable, creating diverse, enriching and positive experiences that not only contributed to teaching and learning on campus, but also within the city of Melbourne more broadly.

*"I would make it a permanent living stage and teaching space. It's important as an innovative space that brings Indigenous culture, history and ecology to the front".*  
Survey participant

*"Demonstrate[s] the University's commitment to reconciliation and socio-environmental sustainability – going beyond publishing reports to walk the talk and integrate Indigenous voices substantially in the fabric of our work as educators".*

Survey participant

*"The benefits of the social research surveys I was involved in allowed me to have intimate discussions and gain insights from those participating...I enjoyed the personal nature of this method".*

Student ambassador

*"[I] enjoyed combining art and science in my workshops and seeing this being a successful way to communicate and engage with participants in ecological science".*

Researcher

Collaborators at The Living Pavilion bump in.  
Photo by Alison Fong



# Celebrating Indigenous Place

by Zena Cumpston, Rimi Khan, Cristina Hernandez-Santin, Tanja Beer, and Kirstin Parris

## How did The Living Pavilion forefront and celebrate Indigenous place?

In the lead-up to The Living Pavilion, perceptions of the University's status as a colonial institution were tested among students. At a small cultural festival held on the New Student Precinct site, 75 students were asked, 'Is this an Aboriginal place?' The question was deliberately ambiguous and open-ended but allowed an insight into students' understandings of the University's connections to Aboriginal land, communities and culture.

Students who responded were culturally diverse, identifying with 22 different ethnic backgrounds, and two thirds of whom were enrolled as international students. None of the students surveyed identified as Aboriginal or Torres Strait Islander.

In general, there was a clear sense among students that the place they were in had some connection to Aboriginal belonging. Almost half of the students (45%) surveyed said 'yes' to the question, 'Is this an Aboriginal place'. About one-third (34%) were 'not sure', and about one-fifth (21%) said, 'no'. However, students who said that this was not an Aboriginal place, or were not sure, explained that although they believed it to be an Aboriginal place, they did not see this demonstrated or acknowledged by the University. That is, the question was interpreted by some students as, 'Does the University recognise this as an Aboriginal place?' to which a common response was, 'no'. For example, one student noted, "It's built on Aboriginal land. It's been acknowledged by the University, but more can be done".

- Clear Identity
- Alignment with Nature
- Connection to Indigenous Place

- Indigenous Knowledge Transfer

**84%** of survey participants agreed, or strongly agreed that they felt more connected to Indigenous culture by visiting The Living Pavilion

**40%** increase in people's perception of the site as an Aboriginal place

*"Traditional ownership unacknowledged and pushed beneath the surface is being brought forward. It has always and always will be an Aboriginal place, it is only now that we non Aboriginal folk are learning what that means...even a little bit. With respect".*

*Survey participant*

*Wurundjeri Seasons, designed by Jefa Greenway, Greenaway Architects. The original artwork is located at RMIT University's Melbourne City campus in the Indigenous Garden, Ngarara Place. Photo by Alison Fong*



Students' responses highlighted the importance of signage and official forms of acknowledgment for marking the University as an Aboriginal place. This influenced the importance of The Living Pavilion using signage to mark out Kulin Nation plants, to explain their cultural and ecological significance as an act of decolonising Western knowledge systems.

Central to the conceptual design of The Living Pavilion were informative and communicative elements, such as wayfinding and signage which discussed plants, Indigenous ecological knowledge, weather seasons and more. Visitors were most frequently observed engaging with these elements, with most stopping to read some, or all, of the signage, or referring to the information tent, often pausing or detouring from their route to do so. The strong learning outcomes were also echoed in the survey data, with 78% of survey participants collectively agreeing, or strongly agreeing, that their experience at The Living Pavilion exposed them to new aspects of Indigenous culture they did not know about prior to their visit.

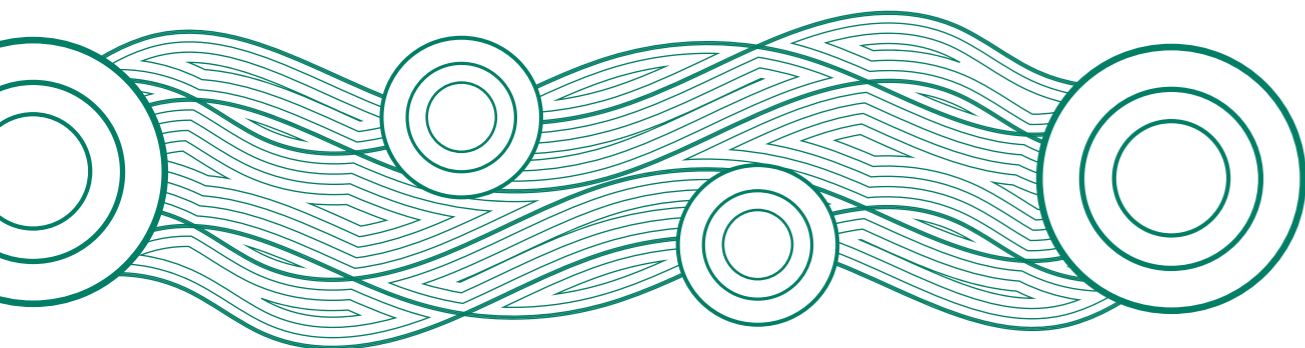
During The Living Pavilion, the question 'Is this an Aboriginal place?' was added to our social research instrument to determine whether the design and programming had any effect on influencing people's attitudes. A total of 85% of the participants surveyed stated that 'yes', this is an Aboriginal Place', marking a 40% increase from the pre-event study. Of the affirmative responses, 11% highlighted the cultural stories, significance and layered meaning of this place for Wurundjeri people; 33% felt that The Living Pavilion helped showcase the area as an Aboriginal place through the native plants, programming and signage; while 34% claimed that the site is Aboriginal because it is on Australian land, while also adding that 'sovereignty has never been ceded'; and the other percentage of affirmative respondents provided no explanation behind their 'yes' responses.

*"Highlighting the work of First Nations artists was what I felt was the most important part of this work, and the element that people connected with the most. This was shown by the amount of passersby that stopped and read all of Zena's signage, really taking in the stories".*

*The Living Pavilion team member*

*"I am a Martu woman from the desert community of Wiluna in WA and have been very impressed with this initiative and educating and preserving traditional plants".*

*Guest book entry*



*Illustration by Dixon Patten of Bayila Creative*

Of the remaining 15% of respondents, 3% declined to answer due to the ambiguity of the term or their lack of knowledge, while 22 participants (12%) said 'no'. Most of the participants who said 'no' highlighted that the University was not co-created with or is not owned by Aboriginal people and therefore they could not call this a truly 'Aboriginal place'. Others remarked how the dominant built environment surrounding the spaces did not indicate an 'Aboriginal place'.

Nevertheless, three respondents also demonstrated confusion over what constitutes an 'Aboriginal Place'. For example, one respondent commented: "It's out in the open, so it's got a festival vibe. I feel like most people are sitting on the coloured chairs, it would feel more like an Aboriginal site if people would sit on the ground or on mats and rugs", while another one stated "I think an Aboriginal place is more natural".

These comments indicate some of the challenges of reparation, including the lack of understanding (and assumptions) around contemporary Indigenous culture that still prevails.

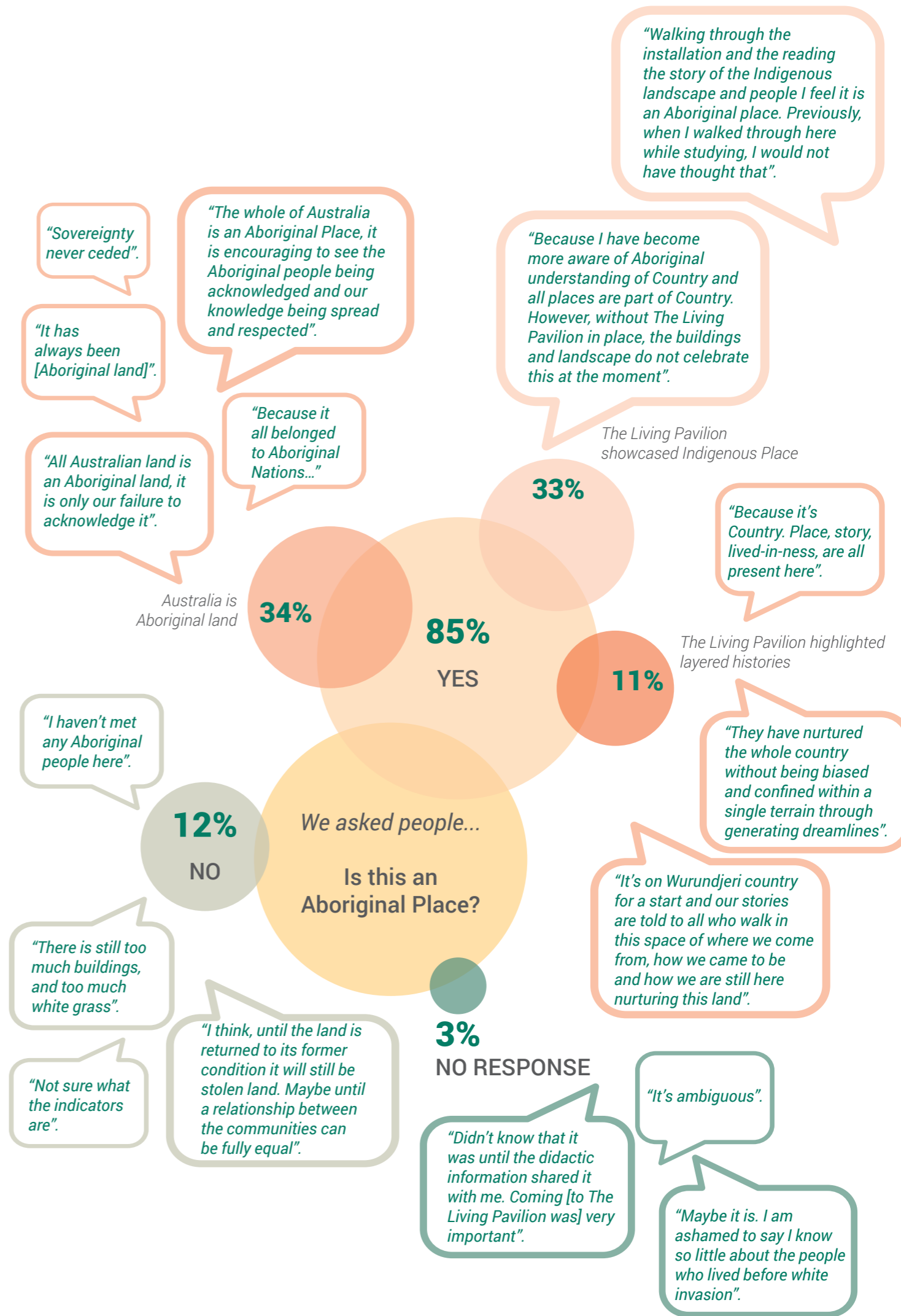
While there is still much work to be done, The Living Pavilion was successful in demonstrating how strategic signage, design and programming can highlight and assert Indigenous place and thereby reinforce First Nations sovereignty. This suggests that finding opportunities to bring these elements into the permanent design and programming strategy is a necessary part of asserting the University of Melbourne as a profoundly Wurundjeri Place.

*"It was an amazing learning experience for many people...where the knowledge has been felt through smelling the mint, hearing the sounds of The Djirri Djirri dancers, reading Zena's words, seeing Dixon's artwork under our feet, tasting the edible garden".*

*The Living Pavilion team member*



Volunteers installing the Bouverie Creek artwork by Dixon Patten of Bayila Creative. Photo by Alison Fong



# Informing future potential

by Tanja Beer and Cristina Hernandez-Santin

## How did The Living Pavilion inform the future potential of the site?

The Living Pavilion was a transdisciplinary test of the capacity of temporary event spaces to activate community connection, celebrate bio- and cultural-diversity and forefront First Nations sovereignty at the University of Melbourne. The Living Pavilion aimed to examine new ideas and aesthetics for the long-term plan and the future development of the New Student Precinct (NSP) site.

When respondents were asked what improvements that they would make to The Living Pavilion, 26 people specifically (and exclusively) commented that they would make the site permanent. This only further corroborated the countless comments that were made to the information desk attendees, staff and researchers throughout the event.

The landscape architect of the permanent site design for the New Student Precinct, Mark Gillingham, was first contacted about The Living Pavilion in July 2018. At this time the NSP was half way through schematic design so the main concepts for the permanent works were already well established. The types of experiences proposed by the NSP such as the creek, wetlands and native grasslands (with corresponding plant lists) also became part of The Living Pavilion design, and so the event space became a testing ground for the long-term plan. The temporary event space provided opportunities to assess people's responses to the plant selection, spatial design and programming for long-term potential. After The Living Pavilion, a selection of Kulin Nation plants from the project were introduced on the site to continue to assess their survival or seasonal benefits.

• Legacy: Informing Redevelopment

*"Make the exhibition a permanent place, including reinstating the creek and frog pond, eels and native plantings".*

*Survey participant*

*"The response of the public to seeing native plants in-situ was overwhelmingly positive. This has helped reinforce the benefit of bringing more native planting into the NSP".*

*Mark Gillingham  
(Landscape Architect of the New Student Precinct)*



These images show the progression of the conceptual designs for the New Student Precinct. The top one, delivered in early 2018 before The Living Pavilion, shows stronger boundaries between the hardscape and softscape elements of the design. The bottom one, created after The Living Pavilion (November 2019) shows how these boundaries have softened, creating a more natural feel. Please note that the design is still in progress and the concept will continue to shift and evolve in the near future.

Images by Lyons + Koning Eizenberg Architecture with NMBW Architecture Studio, Architects EAT, Greenaway Architects and Aspect Studio with GLAS, New Student Precinct Project, The University of Melbourne



During the three-week program of The Living Pavilion, Mark visited the site often to observe reactions to the different design features. The public's overwhelming support for the native vegetation highlighted its importance in the permanent landscape design, as did the integration of log seating under the Lilly Pilly tree (The Gathering Space) which was effective in bringing people into a previously underutilised space. As a result, the landscape designs were updated to include more native vegetation as well as log seating underneath the Lilly Pilly tree.

When analysing the progression of the New Student Precinct conceptual designs, original models depict the reintegration of the creek into the site through a hard-edged constructed wetland. However, in more recent renders, the wetland walkway entails softer undulating edges that are reminiscent of The Living Pavilion landscape design, including a greater influx of native grasses across the site. Another inspiration for the permanent design was The Living Pavilion soundscapes which triggered the inclusion of electricity outlets in the NSP design to allow for further sound opportunities.

The multi-sensory storytelling and knowledge sharing of The Living Pavilion also became an inspiration for permanent design and programming ideas, with aspirations to create opportunities for Indigenous performances and Welcome to Country ceremonies, as well as signage that would forefront Indigenous place. It is also hoped that biodiversity and insect surveys will continue as part of the evaluation activities of the landscape design to assess its ecological potential.

In summary, it is clear that The Living Pavilion acted as an effective testing ground for long-term planning, with design and programming ideas already being integrated into the aesthetic, ecological and cultural ideas of the landscape.

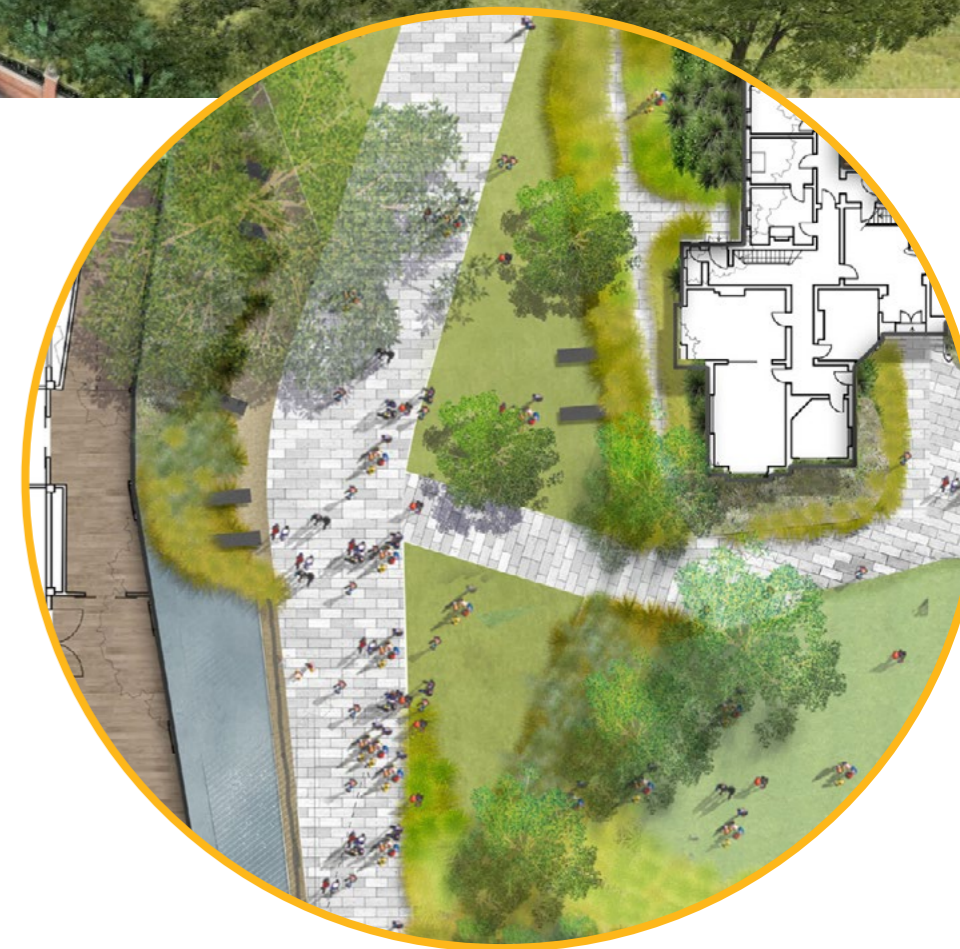
*"The Opening and Closing ceremonies of The Living Pavilion were really fun and showed how important it is to celebrate the achievements of projects...it would be great if we can celebrate the opening of the NSP one day with Indigenous ceremony and dancing".*

**Mark Gillingham**  
*(Landscape Architect of the New Student Precinct)*



*These images show the progression of the conceptual designs for the New Student Precinct. The bottom one was delivered in early 2018 and before The Living Pavilion. The top one was created after The Living Pavilion (November 2019). In the most recent conceptual design, the undulation of Bouverie Creek is more pronounced and interconnected with the other landscape features. Please note, the design is still in progress and the concept will continue to shift and evolve in the near future.*

*Images by Lyons + Koning Eizenberg Architecture with NMBW Architecture Studio, Architects EAT, Greenaway Architects and Aspect Studio with GLAS, New Student Precinct Project, The University of Melbourne*



# Masters Thesis Project: Shifting Ecological Awareness to Foster Deeper Connections to Nature Through ArtScience Experiences

by Christina Renowden

Research Advisors: Tanja Beer and Luis Mata

Through our largely sedentary, urbanised lifestyle, many people consider nature as 'out there' and we often see ourselves as separate from and dominant over nature. It is likely that the absence of time spent immersed in nature on a regular basis is contributing to the disengagement between humans and nature, particularly in urban environments. Most worryingly, this has led to a decline in ecological awareness and an absence of interest or concern for conservation of the living systems in which we are so intricately bound.

While knowledge transfer is a critical factor for understanding the ecological crisis, an information-driven mode on its own has yet to demonstrate a paradigm shift in our connection and relationship to nature. Integrating the arts into the discourse of science communication and nature connection may allow us to speak more readily to our humanity and can increase the public's understanding of biodiversity through provoking a mindful and emotional response. ArtScience practice is a transdisciplinary practice

combining scientific knowledge explored through art as a way of inspiring open-mindedness, deeper understandings and creativity. Through ArtScience experiences, my Master's research study sought to provide opportunities for participants to build their ecological awareness and have a more mindful connection to nature present in The Living Pavilion.

My research topic specifically looked at observational and experiential data collected during the three workshops, the feedback and ecological insights shared by 20 research participants as well as six in-depth interviews with selected participants. This research revealed three key themes emerging from the participants' experience: biodiversity discovery, a state of flow and attunement with nature. In the following pages, you will discover a short snapshot of the experiences crafted to foster ecological awareness as well as the themes that emerged from this data. Each participant was given a pseudonym to protect their identity.

- 3 ArtScience Experiences
- 20 research participants
- 6 in-depth interviews

*"Arts can provide a platform for expression and reflection on critical issues which traditional education and outreach methods typically cannot"*

## ArtScience workshops

The ArtScience approach used in this research united a holistic, integrated and experiential learning that is also referred to as the "heart, head and hand" model. This is a lifelong learning strategy as it unites the head (cognitive learning through critical reflection); heart (affective/emotional learning through relational knowing); and hand (practical/psychomotor learning through deep engagement). Incorporating the heart, head and hand approach to ArtScience experiences allows a more open and diverse approach, rather than just focusing on the cognitive. As a consequence, this accesses the whole person and their physical, mental and psychological development.

Each workshop, of approximately 2-hours invited participants to explore the importance, and their awareness of biodiversity in urban environments. The workshops included three components:

1. Oral presentation on the subject matter – speaking to head
2. Ecologically related activity – speaking to hand
3. Artistic inquiry – speaking to heart and providing a link between head, hand and heart.



Top and bottom  
Participants during  
an ArtScience workshop.  
Photo by Luis Mata

## Frog Ensemble

This workshop centred on an auditory exploration of frogs.

**Subject matter:** I applied my amphibian ecology knowledge to show six participants how to identify frog species accurately by listening to their unique male advertisement (breeding) calls. We also discussed interesting aspects of frog species' life history, reproductive strategies and the global amphibian decline.

**Ecological Activity:** Participants were led through the frog soundscape within The Living Pavilion.

**Artistic inquiry:** Participants were given a range of artistic mediums to reflect on what they had learned and their experience of listening to the frog calls. While most participants used collage, some preferred to write a poem or create a zine.



*Top and bottom*  
One of the participant  
artistic pieces.

*Participants during a Frog  
Ensemble workshop.*  
Photos by Christina Renowden

## Biodiversity Snapshot

This workshop had a visual focus and centred on insect pollinators.

**Subject matter:** Six participants were taught how to identify ten insect-pollinators local to The Living Pavilion site and greater Melbourne. While the identification skills were basic, they gave participants enough information and skill level to differentiate between the key species that could have been potentially encountered during the workshop.

**Ecological Activity:** Participants sought out insects within designated 'pollinator observatories' recording plant-insect interactions (Vogel et al. 2018). They followed citizen science protocols based on survey methodologies developed as part of the Clean Air Urban Landscape Hub 'Beneficial Insects' app (Mata et al. 2018).

**Artistic inquiry:** Participants used a macro clip-on lens on their smartphones to take photos of insects and flowers. Participants then printed their photos producing small polaroid print outs of their images.

*Top and bottom*  
Participants during  
a Biodiversity Snapshot workshop.  
Photo by Luis Mata

## Ephemeral in Nature

This workshop had a Kulin Nation Indigenous plants focus

**Subject matter:** Building upon the ten insect-pollinators used in the Biodiversity Snapshot workshop, I used my plant knowledge to teach eight participants about the inter-relationships between insect pollinators and indigenous plants.

**Ecological Activity:** Armed with a plant ID booklet I created for this workshop, participants enjoyed a guided walk around The Living Pavilion and used their booklet to identify Indigenous plants. During the walk, we discussed how plants provide food and habitat resources for insects and other fauna. Participants were encouraged to interact with the plants.

**Artistic inquiry:** Participants created individual nature-inspired collages using natural materials such as flowers, leaves and seed pods that I had previously collected for this activity. This ephemeral art represented an aesthetic reflection of their time during the workshop and within The Living Pavilion.

## Some results from participants artistic inquiries



Participants creative pieces from a Frog Ensemble workshop (Top) and an Ephemeral in Nature Workshop (Bottom). Photos by Christina Renowden



Top and bottom Participants during an Ephemeral in Nature workshop. Photo by Luis Mata

## Research Outcomes

The arts can affect people's connection to nature and provoke emotions that traditional communication modes cannot. The participatory art experiences were able to ignite a deep emotional engagement with the subject matter, building empathy and understanding around biodiversity thus stimulating a new ecological awareness for participants. My research process revealed three key aspects emerging from participants' experience: 1) discovery and learning about biodiversity; 2) being in 'flow' an optimal experience which is intrinsically motivating and enjoyable, and; 3) attunement where participants 'tune in' with the natural environment through mindful connections and increased awareness.

The cognitive aspects of the experience for participants was most evident following the oral presentation (head); while the ecological activity engaged the hand. Combined, this led to a 'thrill' of discovery for participants. Discovery also

indicated an increased awareness and attunement with nature, particularly when participants reflected on their new discoveries through the art-based activity which engaged with the heart. This helped facilitate an increased awareness and connection with the 'hidden' nature that surrounds us in urban environments. The theme of 'flow' was evident in the artistic inquiry where engaging the hand and heart participants felt they "lost track of time", were "totally immersed" and "got lost" in the activity (see full page spread with quotes).

The study showed the potential and effectiveness of participatory art-based approaches to science communication by integrating three spheres of learning: head (cognitive), heart (affective) and hand (practical). Considering this, ArtScience programmes are an effective tool to provide deep emotional learning about ecology and biodiversity, and as a result help to build ecological awareness and nature connection.

**85%** of participants stated that they learnt or discovered something new

Several participants experienced flow during the creative activities in the workshops

Participants reported they felt more "in tune" and aware of the local environment

*"So that moment of creativity... as well as the connection between the dirt and also the meaning of the drawing itself... that kind of creativity that made me feel connected to my surroundings and my alertness and awareness"*

*Workshop participant*

*Clockwise from top  
Skipper Butterfly.  
Photo by Luis Mata*

*Participants at a Biodiversity  
Snapshot workshop.  
Photo by Luis Mata*

*Participant at a Frog Ensemble  
workshop. Photo by Christina  
Renowden*



*"I learnt something new, I learnt a new species that was obviously around me all the time that I hadn't paid attention to, so I felt a sense of a thrill of seeing a new animal, and a thrill of having learnt something new".*



*"When I started putting things down on the paper it was more like it just flowed, and you stopped thinking about it had to be a perfect masterpiece, it was just an expression of whatever you wanted it to be. It was the process that made it".*



*"My mind was more attuned to the messiness of nature and became more open-minded".*

*"I got lost in it, I got lost in trying to take the best picture of a bee and being really close to that bee and trying not to disturb the bee. And, that was when I felt most connected. I was in the moment and being very present".*

# Summary of Key Insights

This research report has demonstrated some of the ways in which we have tracked The Living Pavilion's contribution to place. Mapping the success of the project has entailed taking a holistic and comprehensive approach to placemaking that provided social, cultural and ecological attributes to inform the future potential and ongoing evolution of the University.

## Creating place activation

- Design and programming choices which foregrounded Indigenous themes (both ecological and cultural) were the most popular spaces and events (e.g. Kulin Nation plants, Bouverie creek mural).

- Generating family event opportunities (in the afternoons and weekends) aided in creating a more relaxed and convivial atmosphere and contributed to a sense of community within the Campus. It effectively dissolved barriers of the University as a place for staff and students and welcomed the wider community.

*"[The Living Pavilion] was so, so vital – informative, subversive, grounding, unsettling. Evokes simultaneous joy and hope at the re-illumination of embodied knowledge, and melancholy that this is unusual/unfamiliar. Reading the stories and descriptions I felt I wanted to know and act on every word!"*

Guest book entry

## Developing Biodiversity Benefit

- Native and introduced insects were observed interacting with both indigenous and introduced plants.

- Indigenous species opened up new niches or opportunities for indigenous pollinators. In fact, as much as 27% of all the insect species recorded were found exclusively living on the Kulin Nation plants.

## Enhancing Place Attachment

- The Living Pavilion received an overall rating of 4.7 out of 5 'hearts'.

- Evidence of care was demonstrated through decreased rubbish on the site, as well as numerous people returning to the space to attend multiple events.

- 69% of survey participants stated that they met new people and 88% felt more relaxed and de-stressed while visiting.

- 77% of survey participants said that they experienced an increased oneness with nature (e.g. through the native plants, eel design and soundscapes).

## Celebrating Indigenous Place

- Comparing the results from previous research on students' perceptions of the site, we observed a 40% increase in people's understanding of the site as an 'Aboriginal place'.

- Most celebrated Indigenous features were the cultural stories of the plants shared through the signage and workshops.

- Participants expressed a desire and willingness to learn more about Indigenous perspectives.

## Generating Pedagogical Landscapes

- The Living Pavilion provided multiple avenues for teaching and learning across a diversity of age ranges, disciplines and walks of life through the plant signage, workshops, talks and performances.

- Over 100 students participated in the co-creation process of The Living Pavilion, including 7 Living Pavilion Ambassadors who were contracted as co-researchers/researchers-in-training.

- The experience provided opportunities for students and staff and the wider community to learn about Indigenous culture and ecological knowledge, opening up new approaches and skills across multiple disciplines.

## Informing Future Potential

- The Living Pavilion assisted in testing the potential of the site by gathering community responses and tracking biodiversity benefit.

- There was a clear desire amongst visitors to make The Living Pavilion a permanent feature of the University's landscape.

- The Landscape Architect Mark Gillingham (GlasUrban) has incorporated some of the features of The Living Pavilion into his permanent design for the New Student Precinct (e.g. signage, soundscapes and seating).

# Reflections

## Embracing Transdisciplinary Practice

by Dominique Hes, Cristina Hernandez-Santin, and Tanja Beer

*How did transdisciplinary research enrich the project and transform The Living Pavilion team?*

Transdisciplinary research is a holistic research approach where participants across multiple (and often seemingly disparate) fields work together to create new conceptual, theoretical, methodological, and translational perspectives that moves beyond independent fields of research to address a common problem. At the crux of 'trans'-disciplinary research is the notion of transforming the researcher by connecting to, learning from and being changed by other disciplines, resulting in a much richer, diverse and successful outcome. The benefits of transdisciplinary collaboration have been well documented and supports investigators in learning and developing new skills to inform and enrich their own research and practice. Nevertheless, transdisciplinary research is more complex and time-intensive and often requires additional commitment from the team members, as well as an openness to discuss and navigate conflicts. As described above, The Living Pavilion's research team included 10 researchers from multiple backgrounds and disciplines as

well as 7 student researchers across the University of Melbourne and RMIT University.

The Living Pavilion's transdisciplinary research approach aimed not only to create a more robust, resilient, adaptive and agile outcome for the project, but also contributed to the learning and knowledge sharing of its investigators. As highlighted above, the study was conducted through an 'umbrella research approach' with semi-independent projects examining the social and ecological benefits of the place activation as well as the Indigenous and ecological knowledge transfer achieved. The 'umbrella approach' allowed the team to maintain a level of independence while also providing ample opportunities to connect with other research foci and contribute to broader placemaking discussions. Many of the investigators stated that they were drawn to the project for its 'uniqueness' or 'potential' and stayed committed because they were responsible for bringing their specific expertise to the greater impact of the project.

**46%** of the team reported that the transdisciplinary process led to significantly improved research outcomes

**41%** of the team felt enriched by the Indigenous learnings for both research and personal growth

**11%** reported that the project helped them grow personally or shifted perspectives on collaborative practice

*"Made me once again excited about working as part of a team".*  
**Researcher**

Over the course of the project, the team met multiple times to discuss, agree and define our methodology, research questions and roles. A key part of the research was also the capacity for the team to reflect on their own experience of transdisciplinary practice and shed light on the key discoveries encountered in embracing the transdisciplinary nature of the project. All researchers spoke about the impact of the Indigenous-led process as one that was particularly valuable to the project, including how their own practice as researchers had grown and evolved by being introduced to Indigenous perspectives. Many of the researchers commented how the First Nations focus of The Living Pavilion opened up new and uncharted territories for them, allowing them to reconsider how their wider research relates to and affirms Indigenous place and perspectives beyond traditional scientific discourse. In particular, researchers were prompted to consider how their wider research acknowledges and benefits First Peoples.

Another benefit of the transdisciplinary research was how it was able to bring different fields together. For instance, biodiversity surveys are not normally pursued when exploring place attachment, however, the transdisciplinary approach demonstrated one that was advocating for and 'measuring' the human and non-human attributes of place. For example, the ecology team shared how the project highlighted the value of popup environments, placemaking, engagement and social connection in their scientific research, while others spoke about how an ecological focus opened up their perspectives of urban environments, including different ways of knowing, observing and being with place. There was an expressed desire to "bring art into ecological research". As one of our Living Pavilion Ambassadors stated: "[I learnt] that science works so well with arts – the two are a perfect storm for communicating really important information to a wide audience".

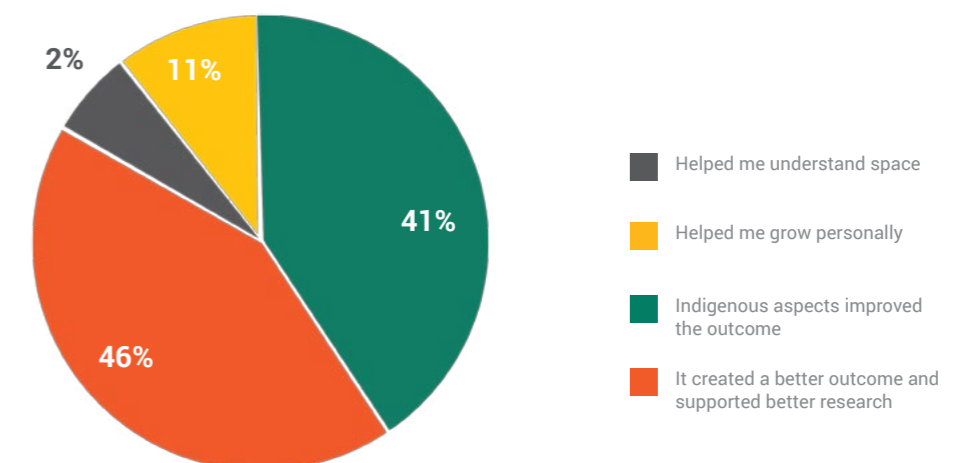
*"[The project] made me aware of the need to reflect more carefully on my own place within the university as a non-Indigenous researcher and the kinds of knowledge I create, and who benefits from this".*

**Researcher**

*"[The] talk about Bouverie creek made me deeply appreciate the synergistic relationship between Indigenous culture and biodiversity".*

**Researcher**

HOW THE RESEARCH TEAM FIND TRANSDISCIPLINARY RESEARCH VALUABLE



The percentages in this image are based on the total number of statements made by the 17 people involved in the research.

The responses also demonstrated that the researchers grew with the project and expanded their own perspectives and sense of value. For example, many commented how the project built their confidence in being able to connect with people from different disciplines. As one researcher highlighted, “At the beginning I felt I wasn’t sure if I belonged, because of my social science background, but also as someone who so recently moved here. But as the project unfolded, I realised that I did have an interest in the topics and could easily fit in”. A key strength of the project was that while people came from different backgrounds and interests, the researchers were held together by common values.

As indicated by the results of the report, merging theoretical and methodological insights from different disciplines can lead to surprising and exciting outcomes. The overwhelming response from the team was the desire to work in a more transdisciplinary way in the future, including its importance in progressing their individual fields. The transdisciplinary nature of the project allowed researchers to step outside of their specific fields to see the “bigger picture”. As one Living Pavilion Ambassador noted, The Living Pavilion was an opportunity “to realise just how interconnected everything is...especially at a time where knowledge tends to be very specialised and somewhat exclusive”.

*“[The project] has changed my whole career trajectory”.*

*Researcher*

*“I didn’t know how to listen before The Living Pavilion. I feel I know how to listen and to understand what I hear better”.*

*Researcher*

## Reflections

### *Event Spaces as Testing Grounds for Regenerative Placemaking*

by Tanja Beer

Temporary event spaces can act as testing grounds to prototype ideas for permanent designs, allowing opportunities for stakeholders to identify suitable interventions that best support social-ecological relationships while also aiding in the ongoing ecological evolution of the site. As evidenced by this report, event spaces can also play a powerful role in demonstrating ways in which First Nations sovereignty can be forefronted through strategic and meaningful activations that can be implemented into longer term designs and programming (e.g. soundscapes, signage, painting, spaces for Welcome to Country performances). The very act of making and performing places together in real time and

space provides opportunities for collective memories. These collective memories can act as powerful agents of change, permeating psycho-social spheres and influencing the lives of those connected to them.

Temporary initiatives are not encumbered by the same issues of permanent projects, and thus, tend to be more playful and experimental as a result. By embracing the temporality of shaping the physical and social attributes of public spaces, designers have the opportunity to experiment, explore and reimagine environments in fresh ways. These experiments can also be useful in considering a site’s long-term potential, including generating community responses to more controversial ideas and aesthetics.

*“As a non-Indigenous observer it felt that this is an important step in de-colonising the space and reinforcing the depth of Indigenous history on the site”.*

*Mark Gillingham  
(Landscape Architect of the New Student Precinct)*

*“The temporary nature of the space gives me agency to use it, before it was too formal, too rigid for me to feel I could sit here”.*

*The Living Pavilion ambassador*

*“The Living Pavilion fostered a real sense of community and teamwork”.*

*The Living Pavilion ambassador*



The Living Pavilion offered a glimpse into how thriving ecological, social and cultural gathering places might be made possible. The project demonstrated how an uninspiring thoroughfare may be reimagined as a place of celebration, inspiration, storytelling and performance, leading to the flourishing of social relationships and knowledge exchange amongst participants. By engaging in multiple site narratives, The Living Pavilion's design and programming demonstrated how activating 'stories of place' can be a powerful tool in fostering and deepening place attachment, even if only over a short period of time.

Through developing creative and meaningful connections, partnerships, and networks, temporary event spaces have the potential to shift narratives and perceptions of place – a process that can rapidly forefront Indigenous sovereignty, catalyse engagement, cultivate empathy, precipitate action and generate hope. Thus, projects like The Living Pavilion can act as acupuncture points or testing grounds for the potential of a place to regeneratively manifest itself.

*"I felt like I was part of something that made an impact on the University of Melbourne".*

*The Living Pavilion ambassador*

*"I think the tactile and multi-disciplinary aspect of the work will ensure it remains in the minds of people long after they visited the space, and hopefully inform the way many see place".*

*The Living Pavilion team member*



*Bouverie Creek artwork by Dixon Patten, Bayila Creative.  
Photo by Sarah Fisher*

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Standing on Bouverie Creek artwork  
by Dixon Patten, Bayila Creative.  
Photo by Tanja Beer

# Project Credits

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Project Website: [students.unimelb.edu.au/student-precinct](https://students.unimelb.edu.au/student-precinct)

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