



MPAVILION

EDUCATION
GUIDE

2017 BY REM KOOLHAAS AND DAVID GIANOTTEN OF OMA

MPavilion is an annual initiative of the Naomi Milgrom Foundation that, since 2014, has brought leading architects from Australia and around the world to Melbourne to design a temporary pavilion for the Queen Victoria Gardens. Each MPavilion hosts a diverse program of free talks, performances, workshops and educational activities and is open daily during its season.

The ambition of MPavilion is to make architecture accessible as a field of design that is of central importance to the way we each experience the world. The architects invited to design each MPavilion are chosen because they are outstanding in their field and unique in their approach to architectural design. This selection criteria has resulted in each new MPavilion being very different from the last in form, materials and building technologies used. At the close of the season each MPavilion is relocated to a new home. You can visit previous MPavilions at locations across Victoria. You can visit the 2017 MPavilion by OMA at Monash University's Clayton campus, in Melbourne.

How to use this resource

This resource introduces the MPavilion initiative and focuses upon the 2017 edition by Dutch architects Rem Koolhaas and David Gianotten for the firm OMA. It is aimed at students in levels/years 3-10 and its content is aligned with Victorian and Australian curriculum descriptors. It is intended as a source of insight for educators to draw upon for use either in the classroom, or to help structure an excursion to MPavilion. Each MPavilion has its own dedicated resource and it is recommended that students visit more than one MPavilion to appreciate the contrasts between the designs of different years.



About the Architects:

Rem Koolhaas & David Gianotten for OMA

Office for Metropolitan Architecture (OMA) is an internationally renowned architecture firm with offices in the Netherlands, Australia, Hong Kong and the USA. OMA is led by nine partner architects, including MPavilion 2017 architects Rem Koolhaas and David Gianotten.

Rem Koolhaas co-founded OMA in 1975, after graduating from the Architectural Association in London. In 1978 he published *Delirious New York: A Retroactive Manifesto for Manhattan*; and in 1995, his book *S,M,L,XL* summarised the work of OMA in 'a novel about architecture'. Koolhaas also leads AMO, the research arm of OMA, which investigates areas beyond architecture, including media, politics, renewable energy and fashion. Koolhaas is a professor at Harvard University, where he leads a program investigating changing urban conditions around the world.

David Gianotten is managing partner–architect of OMA. He oversees the management, business strategy and growth of the company worldwide. As partner-in-charge he has supervised the design and construction of several major OMA projects, including the Taipei Performing Arts Centre; the KataOMA resort in Bali; and, more recently, the New Museum for Western Australia. Gianotten is one of two directors at the recently opened OMA branch office in Sydney, Australia.

Portrait of Rem Koolhaas & David Gianotten
Image by Fred Ernst

What is architecture?

Put simply, architecture is the art and practice of designing buildings. A person who practices architecture is called an architect, and to become qualified they must have studied architecture at university. The field of architecture is diverse, including very practical buildings, like hospitals, and also highly creative and expressive ones, like art galleries. And very often, the best architectural buildings combine both practicality and creativity together.

What is a pavilion?

Generally, pavilions are defined by their use as venues for enjoyment or pleasure-related activities such as art exhibitions, music concerts, or as shelters at sporting events. Ordinarily, people don't live or work permanently in a pavilion, and this is reflected in their designs - you are unlikely to ever find amenities such as a kitchen or bedroom in a pavilion. Because pavilions do not need to be functional for day-to-day work or habitation (living), they offer architects unique opportunities to take creative risks and to test experimental designs.

You might already have encountered some examples of pavilions in day-to-day life. For instance, a bandstand in a park, a gazebo in a garden, or a grandstand at a football oval are all different types of modern pavilion. The word 'pavilion' is thought to have developed from two words, the Latin word *papilo*, meaning tent, and the French word *papillon*, meaning butterfly. This is because very early examples of pavilions were large tents with extended fabric sections that were reminiscent of the spread wings of a butterfly. Some of the earliest known pavilions built from permanent materials were Chinese and date back millennia - to 1046-256 BCE!

Exploration opportunity: Investigate these historical and contemporary examples of pavilion design from around the world. What characteristics do they share with the OMA MPavilion?

- Prada Transfomer pavilion, by OMA
- Town Enclosure pavilion, by Carney Logan Burke Architects
- Taoran Pavilion
- Royal Pavilion at Schloss Sanssouci

Key design: 2015 AL_A MPavilion

The 2017 MPavilion by OMA is a contemporary interpretation of an ancient type of architecture - the Roman amphitheatre. The word amphitheatre is derived from the ancient Greek *amphi* meaning 'on both sides' and *theatron* meaning 'the seeing place'. Ancient amphitheatres were open air, publicly accessible venues that hosted theatrical performances, gladiatorial games, and even public executions. Amphitheatres are characterised by stepped seating that encloses a central open space, and can be intimate spaces, seating a few hundred people, or massive structures able to accommodate thousands. The largest examples are structurally similar to present-day stadiums, such as the MCG in Melbourne.

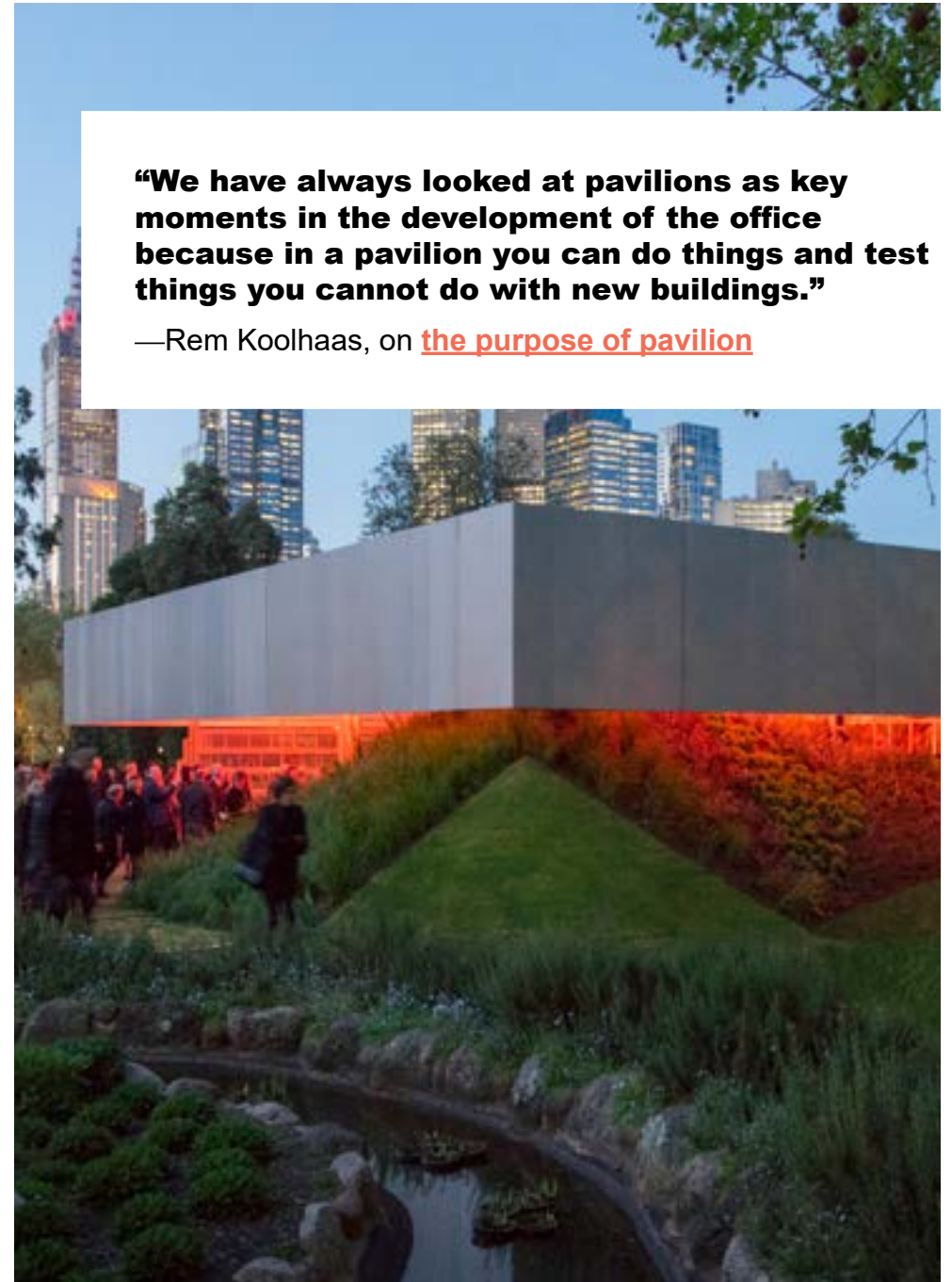
“(The MPavilion is) embedded in the landscape on purpose so that people see it come up from nature. (The) main structure is the great (...) roof (...) which (is the) signalling element of the project. (It) captures the sun and light and therefore really signals that this is where you need to be, without being able to see the amphitheatre underneath.”

—David Gianotten, [introduction to the 2017 MPavilion design](#)

The 2017 MPavilion is walled on two sides by a sloping mound of earth planted with native Australian shrubs and grasses. These inclined, landscaped walls make structure appear embedded within the landscape. These kind of walls, which is thicker at the base than the top, are known in architectural terminology as batters. The choice to cover the batters with plantlife is a reference to natural amphitheatres - parts of the landscape where a naturally occurring rock formation or steep incline creates tiered seating around a central open space. The architects wanted their pavilion to appear to have been excavated (meaning dug-out) from the parkland, so that instead of sitting 'on' the ground the MPavilion is 'within' the landscape.

“We have always looked at pavilions as key moments in the development of the office because in a pavilion you can do things and test things you cannot do with new buildings.”

—Rem Koolhaas, on [the purpose of pavilion](#)



The botanical batters camouflage the internal structure and activities of the MPavilion, but the architects didn't want their building to be totally invisible. To off-set this disguising effect, Gianotten and Koolhaas added a prominent square roof with reflective metal sides that wrap around the entire perimeter. The architects designed the reflective surfaces of the roof to catch the sunlight and act as a beacon, to indicate from a distance that there was a place for people to engage. The wrap-around roof also achieves another of their goals, which was for the pavilion to be a 'wrapper' for the activities within. This idea appealed to Naomi Milgrom, commissioner of MPavilion, because it is aligned with the overarching strategy of the MPavilion initiative.

“Rem (Koolhaas’) articulation of architecture as a wrapper for activity is totally in-line with what we’re doing at MPavilion. It’s a wrapper for all of the performances and everything that goes on inside... This is part of the way we like to work — our performances, our talks, our music, our engagement...”

—Naomi Milgrom AC, [discussing the 2017 MPavilion by OMA](#)

“The MPavilion is a place for debate. (It’s an) amphitheatre that can be transformed in different configurations by a kind of rotating part (that) creates different pockets, where different activities can play a role (...) with the city as its backdrop..”

—David Gianotten, [on the 2017 MPavilion design](#)

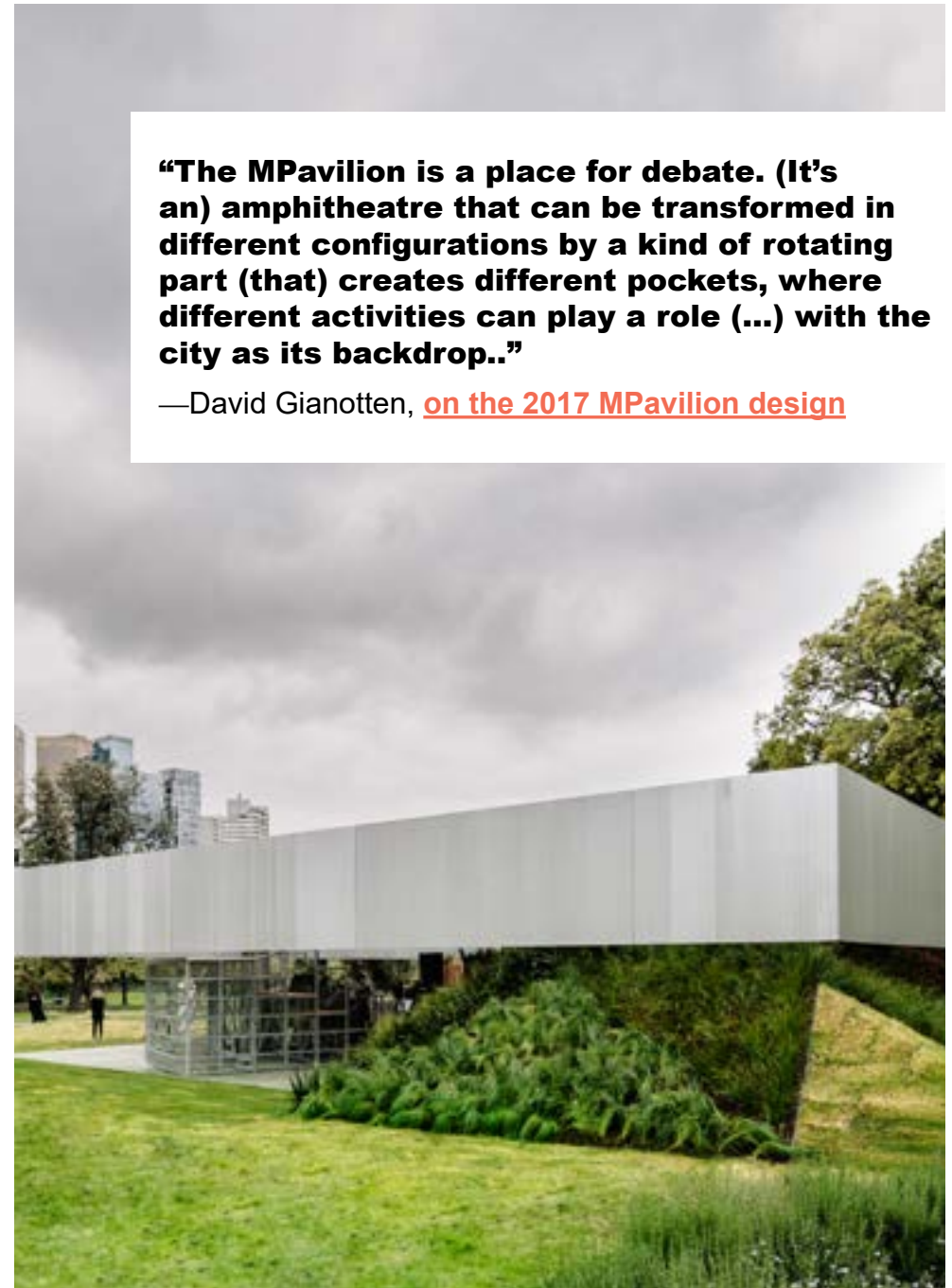


Image by Timothy Burgess

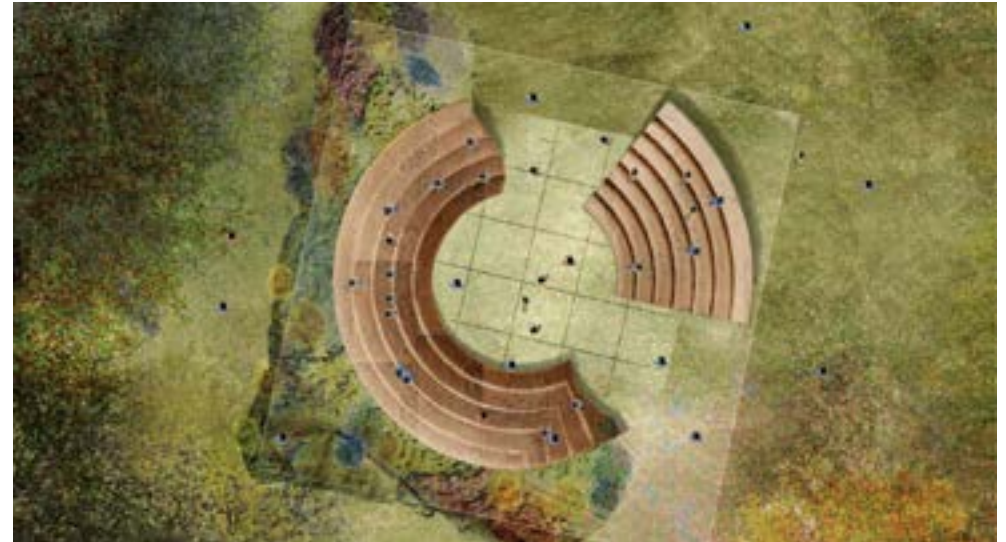
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Gianotten and Koolhaas wanted the OMA MPavilion to be adaptable for diverse activities including debate, socialising, dance, exercise and performance. In response to this challenge they designed a pavilion that can be physically reconfigured with ease.

Opposite the expansive semi-circular bank of amphitheatre-style seating is a tribune - a type of raised platform traditionally used for public addresses and speeches. The OMA tribune is unusual because it can rotate 360° on a central upright axis, which allows the activities it hosts to be directed to audiences inside or outside the pavilion. In this way, the 2017 MPavilion simulates not only the form of the ancient amphitheatres, but also their core objective (meaning goal) - to provide a publicly accessible, inclusive and open gathering space for diverse audiences.

Fascinating facts:

- *Theatron* is the word from which the contemporary English language word **theatre** has evolved. The meaning 'seeing place' makes sense when you think about the theatre as a place one visits to view performances.
- Native plants were chosen by the architects as a way to anchor the pavilion in Melbourne. Gianotten and Koolhaas intended the Indigenous flora to remind people of the multiple layers of history - Indigenous and colonial - of the site where the MPavilion is located.
- The Romans built over two-hundred amphitheatres throughout their empire and many survive to this day, including the Colosseum in Rome, Italy, which was completed in 80 AD and is the largest ever constructed.



The OMA 2017 MPavilion design process

OMA began their design process by thinking about how the MPavilion would be used and by whom. They wanted their design to enrich the context (meaning place - Melbourne) where it would be located.

Gianotten and Koolhaas then decided on an appropriate architectural inspiration, the Roman amphitheatre, that could be adapted to achieve their dual ambitions - to create a pavilion to accommodate a diverse program, and to introduce a new kind of architecture to Melbourne.

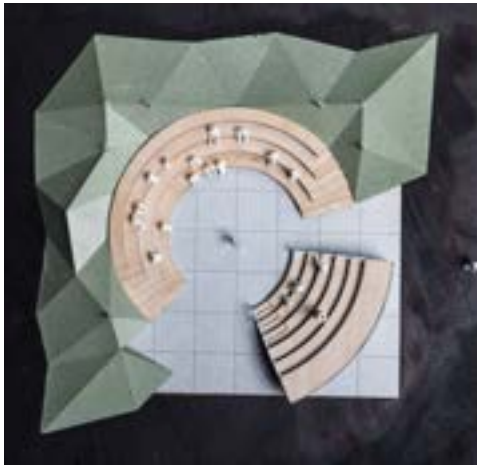
The architects then trialed different ways to translate the ancient form of an amphitheatre into a contemporary pavilion. To do this they produced a series of computer generated renders that show very different design interpretations.



The Colloseum in Rome (Image by [Alessandroferri](#), CC BY-SA 4.0)

Models

Once the best option was chosen, Gianotten and Koolhaas created a scale model. The model comes apart in sections, like a three-dimensional puzzle, so that different elements can be examined in detail.

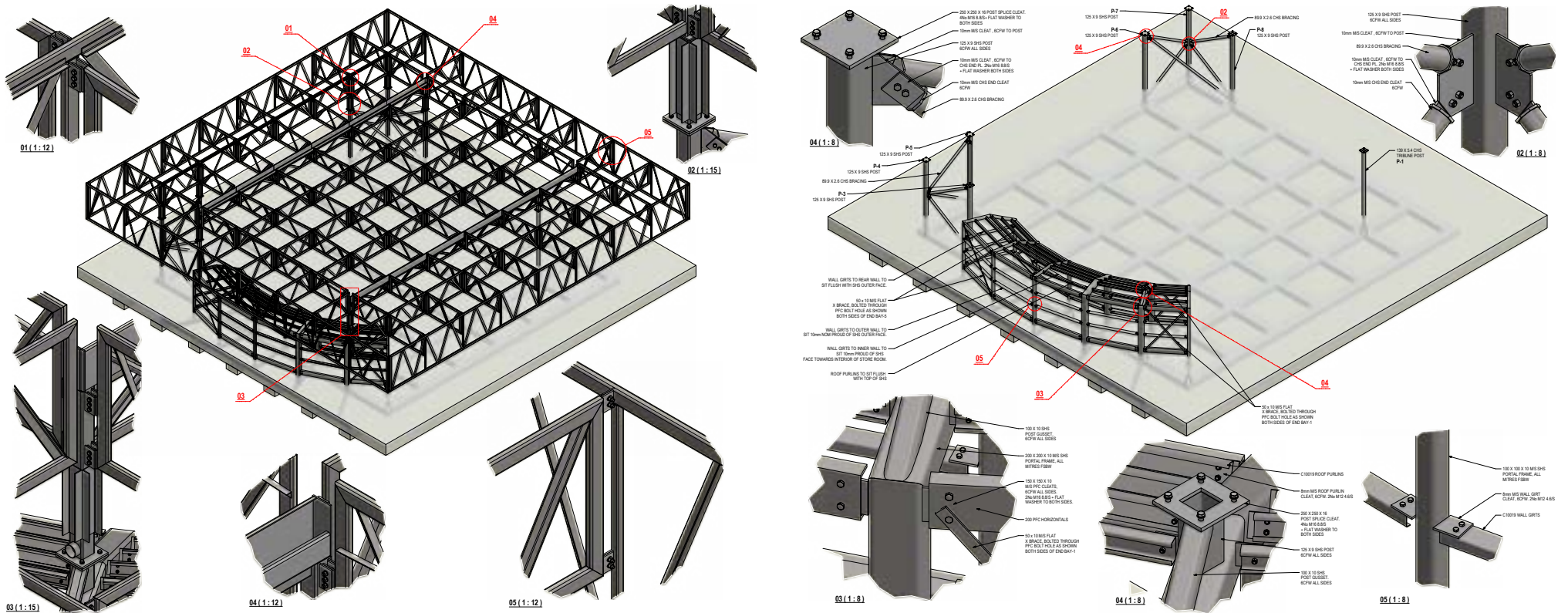


“..one thing I really like about doing pavilions (is) you don’t quite know what will happen in them ... but at the same time you know that people will meet there, that you have to promote the interaction between people, and that you have to make something that is noticeable enough and effective enough to inject something (into) a city that wasn’t there (before)...”

—Rem Koolhaas, on [the purpose of pavilion](#)

Engineering

Next, the design was delivered to a team of engineers who specified which materials and construction techniques could be used to transform the model into a full-scale, habitable building.



Construction

Lastly, the pavilion was installed in the Queen Victoria Gardens where it remained for five months.



Relocation

At the close of each season the current MPavilion is donated to a Victorian organisation, this is to make space for the next MPavilion. Interested organisations apply to 'adopt' each MPavilion and the most appropriate site is chosen. Recipients of MPavilions include the Melbourne Zoo, the University of Melbourne and the Hellenic Museum. This strategy means that each previous MPavilion remains available to visit, and Melbourne has also gained an accessible collection of diverse architecture by leading architects.

The 2017 MPavilion can be visited in Monash University, Clayton campus. This location was chosen because Monash University educates a large cohort of architectural students. This is important because OMA is one of the world's most prominent and influential architectural firms. Having the MPavilion on-campus means that students and future architects are able to visit the pavilion for inspiration and first-hand learning about design and construction.

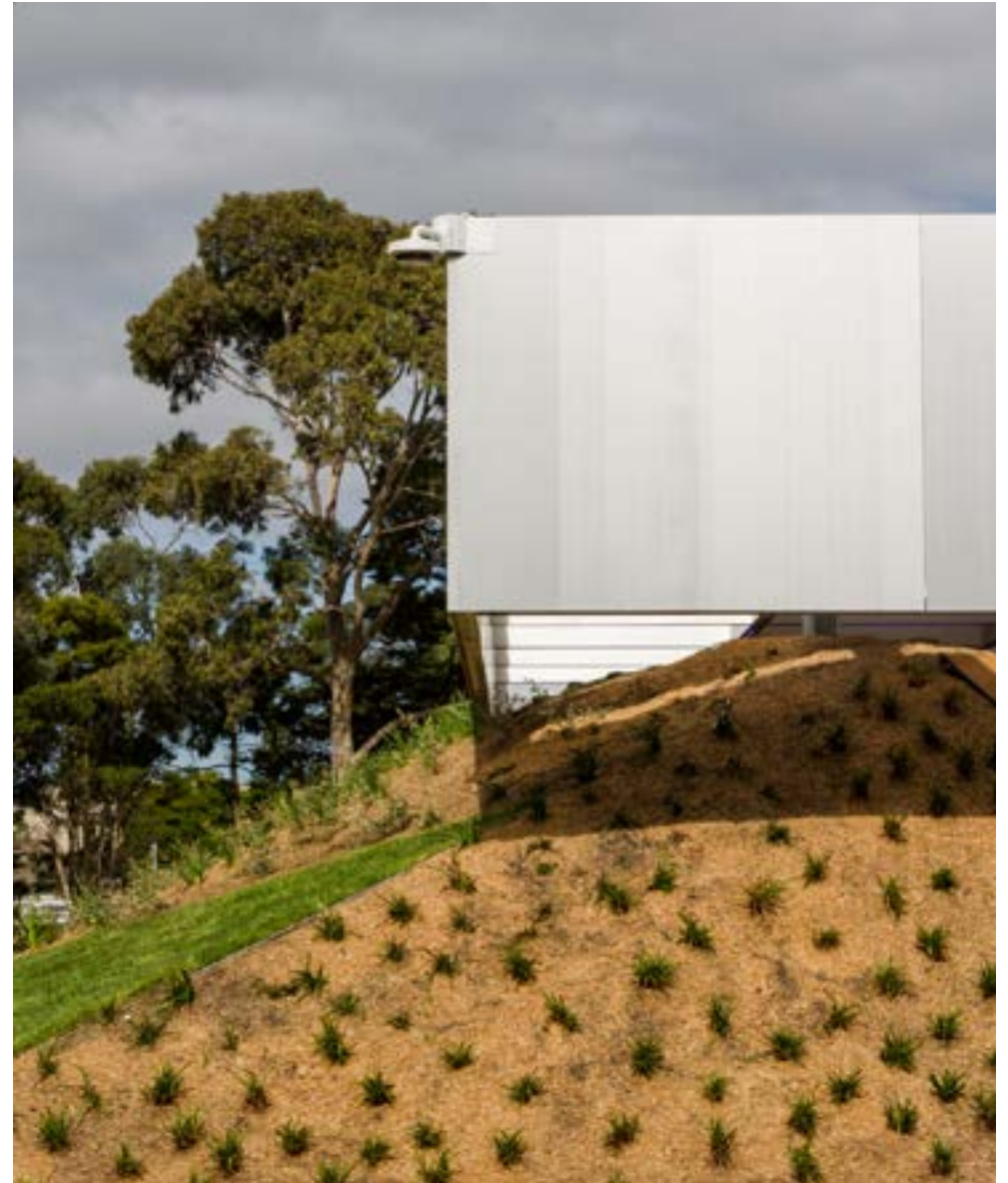


Image by Alan Weedon

Inquiry questions:

1. Have you ever been in a building with moving parts before? Why do you think the architects created a building with a rotating stage?

2. The design of this MPavilion is inspired by an ancient type of building. What kinds of buildings do you know of that have a similar structure?

3. The OMA architects wanted the roof of the 2017 MPavilion to act like a beacon, to be seen from afar. What are some other ways that other buildings you have seen that are highly visible from a distance? Why would visibility be important?

Activity:

The 2017 MPavilion by OMA is inspired by the architecture of ancient Roman amphitheatres. The architects wanted to create a pavilion that would be open and publicly accessible, and so looked to examples of historical buildings that had the same aims that they could adapt.

Your task is to choose an example of historical architecture (try to find something at least one thousand years old) to translate into a contemporary pavilion. Think about what the ancient buildings were intended for and choose one that aligns with the intentions you have for your pavilion. For example, ancient temples from many cultures were designed as retreats to facilitate prayer, contemplation and ritual. If you wanted to create a pavilion that would allow people a space to contemplate in peace, a temple would be a good historical example to select.

Collect images of your chosen genre of architecture and look for what they all share. Try to emulate those key features or qualities in your pavilion, but as a contemporary design and using sustainable building materials. Consider how your choice of materials can reduce impact on the environment. Trial your design by sketching different options and choose the most successful and create a full colour image using hand drawing or digital methods. Once back at school you could also try to create an architectural model, like David Gianotten and Rem Koolhaas did for the 2017 MPavilion.

Excursion tool kit:

- Greylead pencils
- Coloured pencils
- Paper or visual diary
- Hats, sunscreen and water bottles

Inquiry questions:

1. David Gianotten and Rem Koolhaas value innovation, and their primary aim was to introduce something new to the city of Melbourne. What features of the 2017 MPavilion are unlike any other building in Melbourne?

2. The 2017 MPavilion was designed as a 'wrapper' for diverse activities and audiences. What are five features of the pavilion that emphasise accessibility or communicate a welcoming impression?

3. The site of the 2017 MPavilion is something that the architects thought about deeply. It was first erected in the centre of Melbourne, opposite the National Gallery of Victoria, a large public institution. Now, the pavilion is located in the centre of Monash University's Clayton campus. How do you think relocation changed the way people experience the 2017 MPavilion? Is the site important, or is your experience (feelings, thoughts, opinions) of the building the same wherever it is?

Activity:

Analyse the design language of the OMA MPavilion. What does the pavilion communicate to you - does it tell a story? Now that it is a permanent fixture of Monash University, what future do you think the pavilion has as a venue and meeting place? Who will use it? What will happen there? Make bullet point notes on your key ideas.

Your task:

Write a short (100-200 word) non-fiction review of the pavilion, as if you are trying to communicate the experience to a reader who has not visited it. Include your opinion of the design and your analysis of the pavilion's 'story'. Emphasise the role of creativity in Gianotten and Koolhaas' design solutions.

Or:

Write a short (100-200 word) imaginative narrative that involves either a group of characters or an individual protagonist taking over the OMA MPavilion and directing its activities according to their own unique plan. This could be a science fiction, dramatic, romantic or comedic story. Let your imagination go wild - but be sure to connect your story to the real design features of the pavilion.

Excursion tool kit:

- Pens and pencils
- Loose leaf paper, digital device or visual diary
- Hats, sunscreen and water bottles

Primary school

Australian curriculum links:

Design and Technologies / Processes and Production Skills + Knowledge & Understanding: ([ACTDEP017](#); [ACTDEP019](#))

Evaluating, revising and selecting design ideas, based on criteria for success and including consideration of ethics, social values and sustainability

Considering the impact designed products, services or environments have in relation to sustainability and also on local, regional and global communities, including Aboriginal and Torres Strait Islander communities and countries in the Asia region

Victorian curriculum links:

Design Technologies / Technologies and Society:
([VCDSTS023](#); [VCDSTS033](#))

Recognise and investigate the role of people in design and technologies occupations and explore factors, including sustainability, that impact on the design of solutions to meet community needs for future use.

Extension materials

- [Rem Koolhaas & David Gianotten Discuss the Design of the 2017 MPavilion](#)
- [Footage showing the 2017 MPavilion's rotating tribune in action](#)
- [Naomi Milgrom, Rem Koolhaas & David Gianotten discuss the MPavilion 2017 design by OMA](#)
- [The 2017 MPavilion as showcased on the OMA website](#)

Secondary school

Australian curriculum links:

Independently develop criteria for success to evaluate design ideas, processes and solutions and their sustainability: ([ACTDEP038](#))

Evaluating designed solutions and processes and transferring new knowledge and skills to future design projects

Victorian curriculum links:

Design and Technologies / Creating Designed Solutions / Evaluating:
([VCDSCD044](#); [VCDSCD055](#))

Considering how creativity, innovation and enterprise contribute to how products, services and environments evolve

Planning your visit

The 2017 MPavilion is located on the grounds of Monash University, Clayton campus, located at Wellington Road, Clayton. For venue information please visit their [website](#).

The MPavilion changes each year, and up until 2020 the location in the Queen Victoria Gardens has remained the same. However, to account for Covid-19 restrictions an innovative new model has been developed for 2020 that will see all the previous MPavilions used as venues for artistic commissions and events. This is instead of a new MPavilion being built. The next MPavilion in the series will be commissioned for 2021.

You can plan your visit to coincide with education-centred events for students and teachers by visiting mpavilion.org

The full-to-bursting program of free events for the general public can also be accessed at mpavilion.org/program

Next steps

All but one of the previous MPavilions have been relocated to new locations within Melbourne and are available for viewing, most at no cost.

- 2019** MPavilion by Australian architect Glenn Murcutt is soon to be relocated to **The University of Melbourne, University Square, Carlton** in early 2021.
- 2018** MPavilion by Spanish architect Carme Pinós is soon to be relocated, watch this space.
- 2016** MPavilion by Indian architect Bijoy Jain for Studio Mumbai can be visited at the **Melbourne Zoo** (Ticketed admission).
- 2015** MPavilion by British architect Amanda Levete for AL_A can be visited at **Docklands Park**.
- 2014** MPavilion by Australian architect Sean Godsell can be visited at the **Hellenic Museum**.

Acknowledgements

This resource was written and compiled by Andrew Atchison for MPavilion, December 2020.

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