

# Skyline

Insights into planning spaces around us

## Remembering 30 years of conservation since 1989

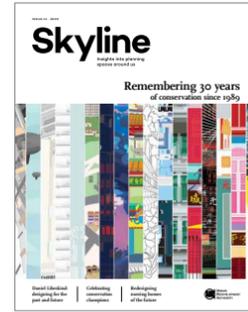


Daniel Libeskind:  
designing for the  
past and future

Celebrating  
conservation  
champions

Redesigning  
nursing homes  
of the future

# Skyline



Cover | A montage of artworks by students from the School of the Arts, Singapore (SOTA), inspired by conserved buildings. These are on display at the URA Centre ground floor. Find out what else students are doing to spark interest in heritage buildings on page 28. Image credit: SOTA.

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# Designing for the past and future

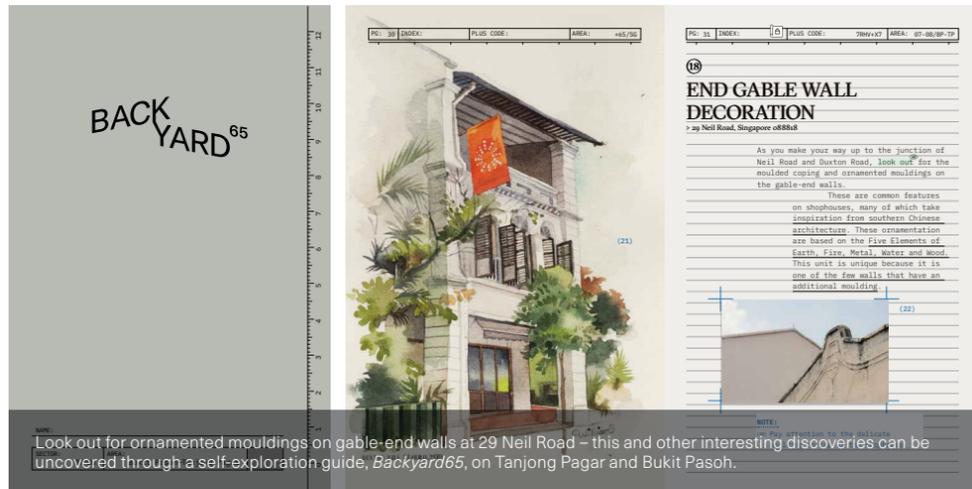
In this issue, we look at the retention and creation of places that connect us deeply to our past and our future. We also look at how the design of care facility spaces in neighbourhoods is evolving in contributing to our sense of place and home.

Known for designing memorials and cultural institutions, we speak to architect Daniel Libeskind to understand what it takes to design core places of culture and heritage. "You have to put your head and ears to the earth in order to listen, not only to the voices around you but to the inaudible voices. You have to use your eyes to see the invisible parts of the site...this is the kind of connection that you should search for when you work on a project," says Daniel in understanding the essence of a site.

A member of the Jury Panel for the International Architectural Design Competition for the Founders' Memorial, Daniel believes that it is memory as the foundation of architecture that "gives us a sense of connection between traditions of the past, the present and the future". The challenge is in taking

into account "the story that has developed from before we were born into something that will represent future generations," he adds. This need to connect to our past and yet cater to the present and future underlies the dedicated efforts of pioneers and champions who have contributed to the conservation journey in the last 30 years since 1989. We catch a glimpse into the struggles and triumphs of wrestling with the unknown and overcoming challenges to retain over 7,000 buildings today.

Beyond places of identity, ordinary spaces also contribute to our sense of place and home. We look at how the design of care facilities such as nursing homes are evolving to cater to changing needs. We talk to designers and experts of an ongoing study who are delving deeper into new design typologies for nursing homes that can enhance our sense of self, community and home.



Look out for ornamented mouldings on gable-end walls at 29 Neil Road – this and other interesting discoveries can be uncovered through a self-exploration guide, *Backyard65*, on Tanjong Pagar and Bukit Pasoh.

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# 3.8 km

The length of the runway at the Paya Lebar Airbase. A competition is now open, inviting designers and the community to envision its future together. A key landmark that reflects Singapore's aviation history, it served as the second international airport in Singapore from 1955 to 1981.

# 30

Since 1989, dedicated and proactive conservation efforts over 30 years have resulted in retaining more than 7,000 buildings. We celebrate the many champions and individuals who have been a valuable part of this journey.

**“I consider memory the foundation of architecture. It is memory that creates orientation and gives us a sense of connection between traditions of the past, the present and the future.”**

Renowned architect Daniel Libeskind on the importance of memory in designing spaces that connect the past, present and future. He is part of a seven-member Jury Panel for the International Architectural Design Competition for the Founders' Memorial.

**“We should continue to evolve the design of future nursing homes to have greater porosity and accessibility, to encourage greater interactions between the nursing home residents and the community.”**

Fung John Chye, Associate Professor, School of Design and Environment, National University of Singapore, envisioning the design of future nursing homes. He is leading an ongoing study, “Designing Future-Ready and Sustainable Nursing Homes for Person-Centric Care Models in Communities”.

# 1971

The year that the 1971 Concept Plan was finalised. The plan has significantly shaped Singapore's physical landscape today. It is on display at the Singapore City Gallery that captures Singapore's planning efforts and transformation over the years.

**“Right from the beginning in urban renewal, we have already designated areas for preservation. We have identified Chinatown, Little India and Kampong Gelam for conservation...”**

Conservation pioneer Alan Choe prepared conservation plans even amidst urgent urban renewal efforts in the 1960s and 1970s. He headed the urban renewal unit in 1964, a forerunner of URA formed in 1974.



## The invisible unicorn

Invisible unicorns and connecting to the heart – world renowned Polish-American architect Daniel Libeskind reveals the essence of designing for both the past and the future.

Writer **Serene Tng** | Photographer **Chee Boon Pin**

Daniel Libeskind believes that architecture is a humanistic discipline grounded in history and tradition, as told to writer Stanley Meisler of the Smithsonian Magazine.

An academic until age 43 and informed by a deep commitment to music, philosophy, literature and poetry, Daniel's many projects from the Jewish Museum in Berlin to the World Trade Centre site not only draw from the social and historical contexts of sites, they tell a story and evoke cultural memories that reach out to humanity.

The Jewish Museum in Berlin which opened in 2001 was Daniel's first major project and a series of influential museum commissions followed after that. In 2003, his firm, Studio Libeskind won another historic competition to create the master plan for the rebuilding of the World Trade Centre in New York. Over half of the 16-acre site was given to public space including the memorial which opened in 2014.

We caught up with Daniel on what it means to design a physical space for both the past and the future, the significance of memories as the foundation of architecture and listening to the inaudible voices of the ground.



Above | The Jewish Museum in Berlin designed by Daniel Libeskind is considered one of the most revolutionary structures built since the war in Germany or anywhere. Opened in 2001, its zinc exterior sliced in dozens of random geometric shapes are likened to an exploded Star of David. Through its design, Daniel sought to integrate the physical and spiritual meaning of the Holocaust into Berlin's consciousness. Image credit: Studio Libeskind.

The key to managing change is lodged in the human heart...the challenge is in taking into account the story that has developed from before we were born into something that will represent future generations.

**Why is memory important in the design of physical spaces?**

**Daniel:** I consider memory the foundation of architecture. It is memory that creates orientation and gives us a sense of connection between traditions of the past, the present and the future. Memory is key to all my work. When you deal with places of memory, you have to be able to transmit something beyond the past. You have to transmit the hopes of the future. You have to structure the spaces in such a way that it has the equivalent to the complexity of the human spirit and mind. Without memory, we would not know who we are or where we are going.

**Why is designing museums and memorials important to you?**

**Daniel:** I have had the good fortune of being able to work on many cultural institutions and memorials around the world dealing with different kinds of memories. In a way, these spaces are a core part of our lives. We might have spaces that cater to our domestic arrangements such as places to work in, places to go to. But in the end, to find who we are, why we are here and where we are going, you need a place of encounter, not just a space with a social realm, but a space that really forms our identities.

**What contributes to our sense of place?**

**Daniel:** Our sense of place is about being human. Animals have nests and burrows. Only human beings have something more than a habitat. They have a home. There is a difference between a habitat

and a home, just as there is a difference between biology and the human spirit. This is the profound aspect of being involved in architecture and creating a place. You are creating a home which goes beyond the physical necessities of life. It is not about how many square metres of space you have – it is about the quality of that space.

**How do you go about understanding the essence of a place?**

**Daniel:** You have to know what surrounds you by putting your head and ears on the earth in order to listen, not only to the voices around you but to the inaudible voices. You have to use your eyes to see the invisible parts of the site, not just what you can photograph with your camera. This is the kind of connection that you should search for when you work on a project.

**Are there other ways in which you “listen” to the ground?**

**Daniel:** I never go to the site with my camera. I sometimes do not even go with a sketch book or any motive. The Chinese have the concept of the unseen unicorn. The idea is that the unicorn is ever present, but most people only see the white horse. They do not see the unicorn that is hidden and in proximity.

So the site in the same way is like the invisible unicorn. It is there and is ever present, but is camouflaged by our expectations. You have to open up to the unexpected. If you do not expect the unexpected, you will miss it – It will just go by you! And that is the time that triggers the eureka moment.

**In our need to retain our heritage and cater for the future, how can we manage change?**

**Daniel:** The key to managing change is lodged in the human heart. We must stay connected to where we are – the sky, the earth, the uniqueness of the genius loci (protective spirit of a place) which is not exchangeable with anything else. The challenge is in taking into account the story that has developed from before we were born into something that will represent future generations. It is about how to shape developments in a way that is inspiring to a child that is just born, who is emerging into the world and still find the world open and free.

**For projects with significant public impact such as the new World Trade Centre where you were the master planner for the site, how did you see your role in managing competing views?**

**Daniel:** I am a great believer in democracy. Every one of my large projects had been in the centre of the public realm. It was engaged in often very tense and fractious public discourse. But without engagement, the project would mean nothing. A project like Ground Zero would never be done if one did not garner extremely competing views. There were very different views on what to do there. Almost every stakeholder had another view.

As the master planner of the site, I worked to bring people together, not just with an architect there but with a place. What does the place mean? What does the event mean? How do we give hope after such a catastrophic event? How can we develop the city to be full of optimism and beauty, while using memory as a fulcrum of the experience?

**At the centre of your master plan for the new World Trade Centre site is the retention of the concrete foundation walls that survived. This huge slurry wall has become a symbolic hero.**

**Daniel:** The wall was a key concept in my masterplan. It is an engineering marvel and

represents the strength of the human spirit in the face of tragedy. I thought people should experience the bedrock where the tragedy happened. This is also the foundation from where all the buildings rise up. Opening this foundation to the public view was challenging in every way. Because when you have a foundation, you usually put something on top of it. Exposing it has never been done before in history. It is only in ruins that you can see open foundations but this is a living foundation.

I was very moved when Pope Francis came to New York to give a key address in 2015 and he made this address in front of this wall to the world. He did not choose Times Square. He did not choose the Central Park. He did not choose the Saint Patrick's Cathedral. He chose this wall. This is because the walls have a voice. And it is that voice that also resonates in the invisible aspect of New York and the skies of New York in supporting the buildings surrounding the site.

It is very important to imbue the site with symbolic and democratic meanings and a sense of the future, a very beautiful future so that the world moves into the light and not into the darkness.

**In designing for the future, what is one thing architects and designers should do more of and one thing less of?**

**Daniel:** They should be more open to the wonders of the world. One should be astonished by science, beauty, art, technological advancements, history, which has the power to show us what the whole trajectory is and can be. What should be avoided is to diminish ambitions. To mediocritise and level everything into a sort of common denominator instead of opening it up to the highest expectations.

**What is most striking to you about Singapore's architecture?**

**Daniel:** What is significant is Lee Kuan Yew's original idea in how to transform this city state into a kind of a humanistic environment. Garden in a city and city



in a garden. What an ingenious and yet fundamental vision for humanity. You know, not to just live in a concrete jungle but create a place people feel good about and enjoy living in it. I think that is an aspect of Singapore that is really astonishing given that it is a small place but what a leading place in its ideas and visions.

**What do you find most satisfying about being an architect?**

**Daniel:** You are not really working just for yourself. It is not about you. It is about something that you are doing for someone whom you do not even know, who will be born many years later, who will come

into the street sort of independently. That is who you are designing for. You are not just designing for the people around you. Just the way Shakespeare did not really write his sonnets just for any known lover. He wrote it for the lover of the future.

*Daniel Libeskind is the Founder and Principal Architect of Studio Libeskind. He is also part of a seven-member Jury Panel for the International Architectural Design Competition for the Founders' Memorial, which will be located at Bay East in the Marina Bay area. The winning design will be announced in the first quarter of 2020. For more information about the Founders' Memorial, go to [www.foundersmemorial.sg](http://www.foundersmemorial.sg)*

Above | Three-foot thick and 70-foot-high, the concrete slurry wall built in the 1960s surrounded the World Trade Centre site. Surviving the 9/11 tragedy, it kept the waters of the Hudson River at bay. Today, it is part of the Ground Zero site as a tribute to it being an engineering marvel and is a testimony to the strength of the human spirit. Image credit: Studio Libeskind.

# Remembering 30 years

Singapore's conservation journey in the last 30 years since 1989 has been both a collective and a highly personal one. It is tied to our identity and soul.

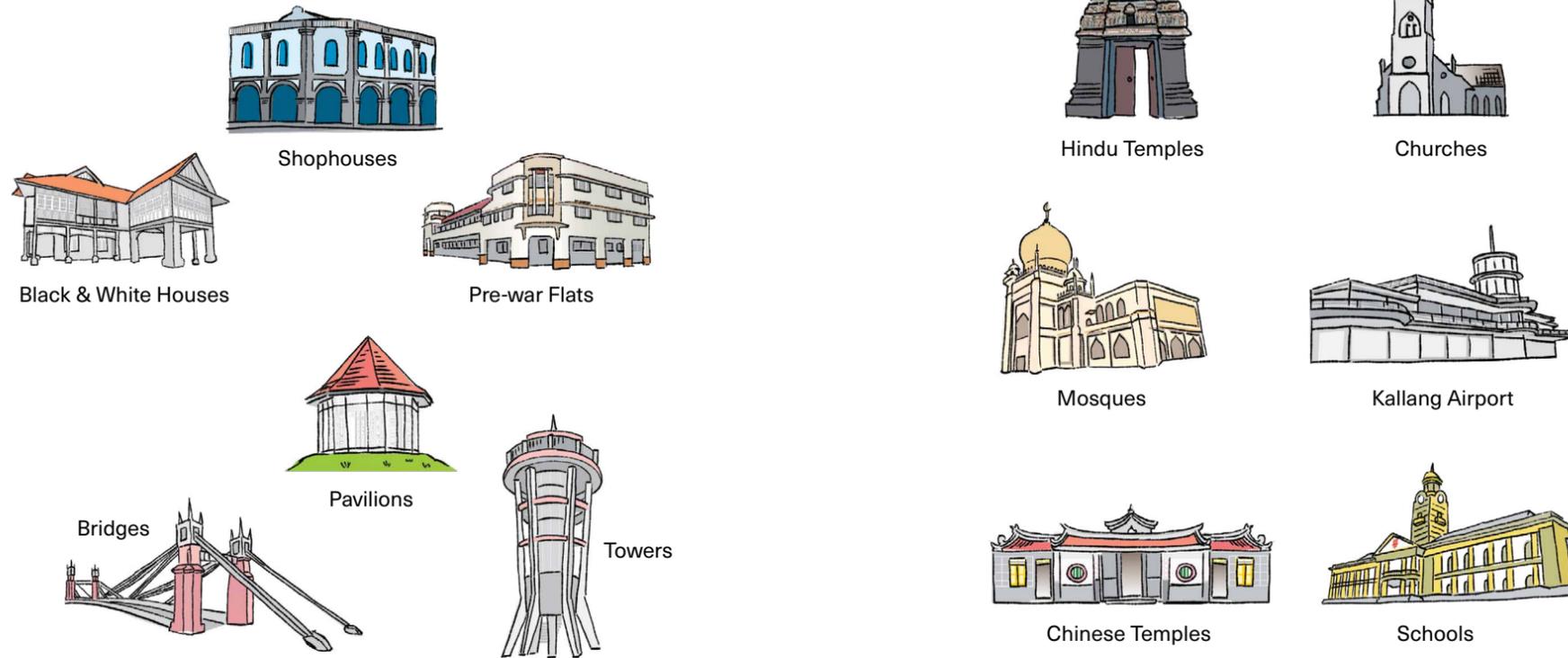
Reflecting on conservation efforts over the years, Desmond Lee, Second Minister for National Development shared in his speech at the annual 25th Architectural Heritage Award and the launch of "30 years of conservation" exhibition on 21 October 2019:

**"Our conservation journey started as early as the 1960s, when we began to safeguard older areas of our city. At this time, urban renewal was an urgent task, and many people did not quite see the value in keeping older buildings. I think you cannot look at it from today's lens, but put yourself in the shoes of Singapore back then in the 1960s, and the kinds of imperatives, pressures, that Singapore then was under.**

Thankfully, our pioneers saw the importance of protecting our built heritage. At the same time, they recognised that conservation had to be done pragmatically and with careful selection. Buildings needed to serve new purposes with new times, and continue to contribute to Singapore's progress and development. Putting this philosophy into practice, URA launched the conservation programme in the 1980s, with the first phase of large-scale conservation. Since then, we have continued to expand the footprint of our conserved landscape.

**Looking back on this journey, we celebrate not just 30 years of hard work, but also 30 years of partnerships, 30 years of trust."**

In remembering these 30 years, we present highlights from a special supplement featuring 30 individuals who contributed to shaping and sustaining Singapore's built heritage. The full supplement is available at [go.gov.sg/urapubIns](http://go.gov.sg/urapubIns).



6,130 Shophouses

600 Terrace houses

250 Bungalows/  
free standing houses

15 Structures/Infrastructures  
(bridges, towers,  
bandstands, railway/  
fire stations, etc)

40 Religious buildings  
(churches, mosques,  
temples)

30 Schools

1960s–1970s

## First stirrings

Even in the midst of urgent renewal efforts in the 1960s and early 1970s, there were already early stirrings on the importance of heritage conservation. Pioneers such as Alan Choe and Dr Liu Thai Ker worked behind the scenes to influence the path towards conservation.

1980s

## Laying the foundation

By the 1980s, the context had shifted where conservation could be considered on a larger scale. The defining Central Area Structure Plan created opportunities for entire areas to be conserved. 1989 was a turning point where 10 areas were gazetted for conservation covering 3,200 shophouses.

1990s

## Making it work

Throughout the 1990s, the focus was on clarifying and deepening conservation principles and standards that could hold up to global standards. The Architectural Heritage Award that remains today was introduced in 1995 to encourage quality restoration.

2000s

## New frontiers

The 2000s saw a shift in public expectations, with a growing interest in shaping a stronger sense of the collective past and identity together. The community also played a bigger role in contributing to important restoration work and the curation of historic buildings.

2010s

## Closer partnerships

From the 2010s, there is a closer collaboration and partnership in conservation efforts between the public, private and people sectors. Individuals and communities are increasingly taking ownership to define and shape identities and the built heritage and finding new ways to make the built heritage more accessible and relevant.

Above | Various types of buildings conserved over the years. The number of buildings conserved for each type is rounded off.

## First stirrings

Even in the midst of urban renewal efforts in the 1960s and 1970s, architect-planners Alan Choe and Dr Liu Thai Ker worked behind the scenes in influencing the path towards conservation.

The 1960s and early 1970s were focused on urgent urban renewal. Much of Singapore's problems came from the city centre. The housing shortage was acute then, with three quarters of the population crammed into the small downtown area, and many families squeezed into shared accommodation in decrepit shophouses. Even in the midst of the renewal efforts, there were already early stirrings on the importance of heritage conservation amongst planners, experts, architects and others.

Alan Choe was the first architect-planner in the Housing & Development Board (HDB) when he joined in 1962. He later headed the urban renewal unit in 1964, a forerunner of URA (formed in 1974), tasked to oversee urban renewal efforts particularly for the Central Area. Dr Liu Thai Ker was the Chief Executive Officer (CEO) for the Housing & Development Board (1975-1989) and later the CEO and Chief Planner of URA (1989-1992). An advocate for conservation, Thai Ker led the development of the first Conservation Master Plan for Singapore in 1989<sup>1</sup>.

While renewal efforts elsewhere which began in the United States from 1949 onwards was about tearing down older parts of the city, Alan recognised that Singapore's situation was unique.

Thus, even while addressing practical needs, a range of smaller rehabilitation and conservation efforts took place and more extensive conservation plans were prepared behind the scenes. "Right from the beginning in urban renewal, we have already designated areas for preservation. We have identified Chinatown, Little India and Kampong Gelam for conservation more from an urban design and planning point of view," says Alan.

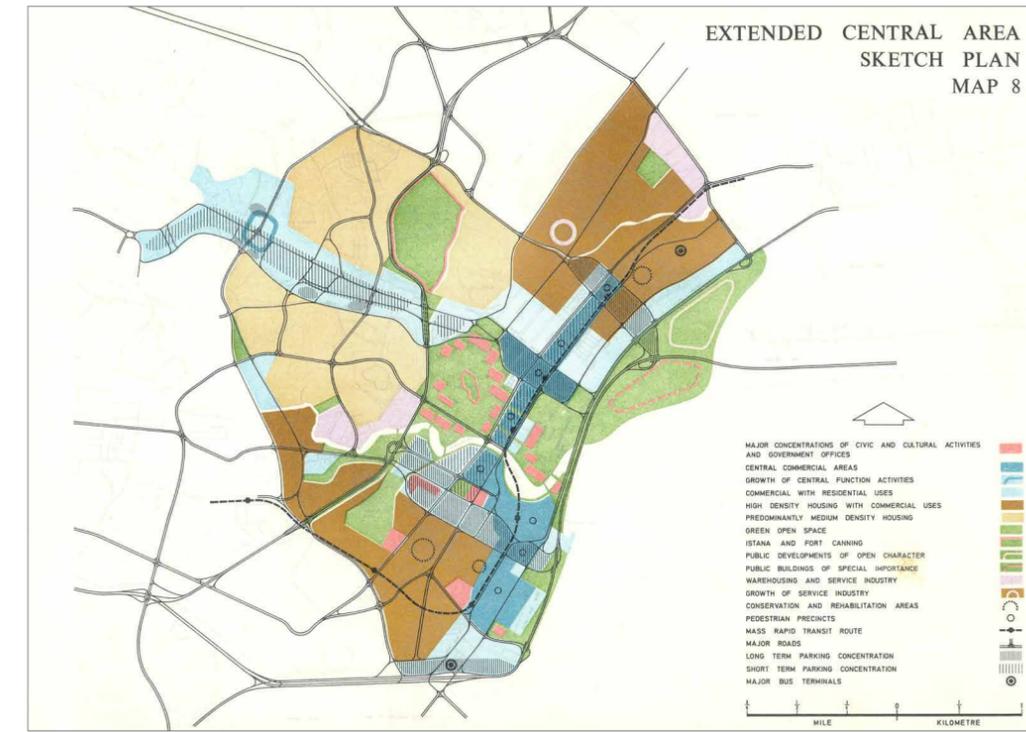
The support for conservation did not come easy. To Thai Ker, "at every step of the way, there were serious challenges, in the early days, when buildings were frequently destroyed or damaged." It took "a series of champions with passion, careful strategising and even some cunningness" to make things happen. To him, it was about putting in place strategies at the right time, where circumstances and interconnected events enhanced each other in leading to the support for a stronger focus on conservation.

In finalising the Conservation Master Plan, Thai Ker recalls: "We identified buildings which were 50 years old and more<sup>2</sup> and worked out the criteria to determine objectively whether they should be conserved or not. In many other cities, I was told, only buildings that were at least 50 years old could be considered for conservation. This is because if you decide to conserve a building too hastily, you do not have the historical perspective to assess its architectural merit correctly.

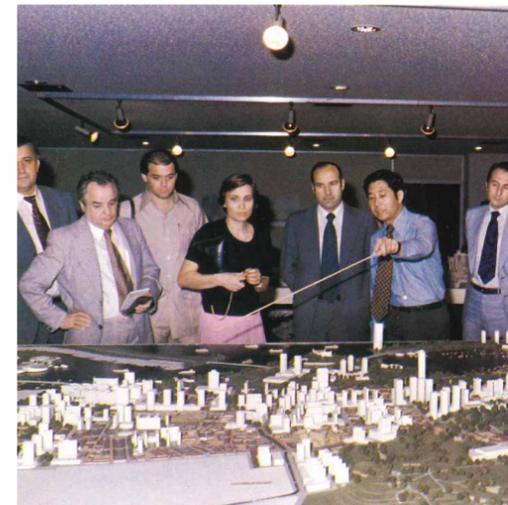
The six criteria of selection that were developed by my colleagues, to determine if a building should be conserved, were benchmarked against those of other well-known historical cities to ensure that they could measure up to international standards. Because of the six criteria, we were able to convince our government to conserve so much."



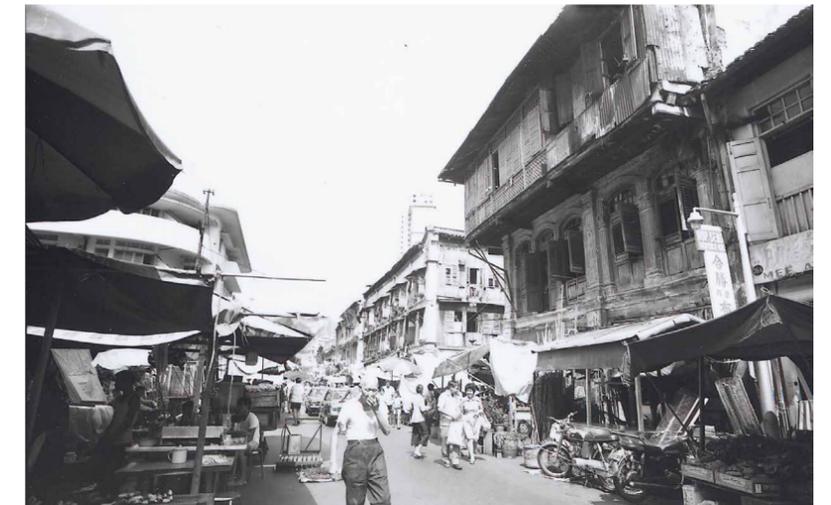
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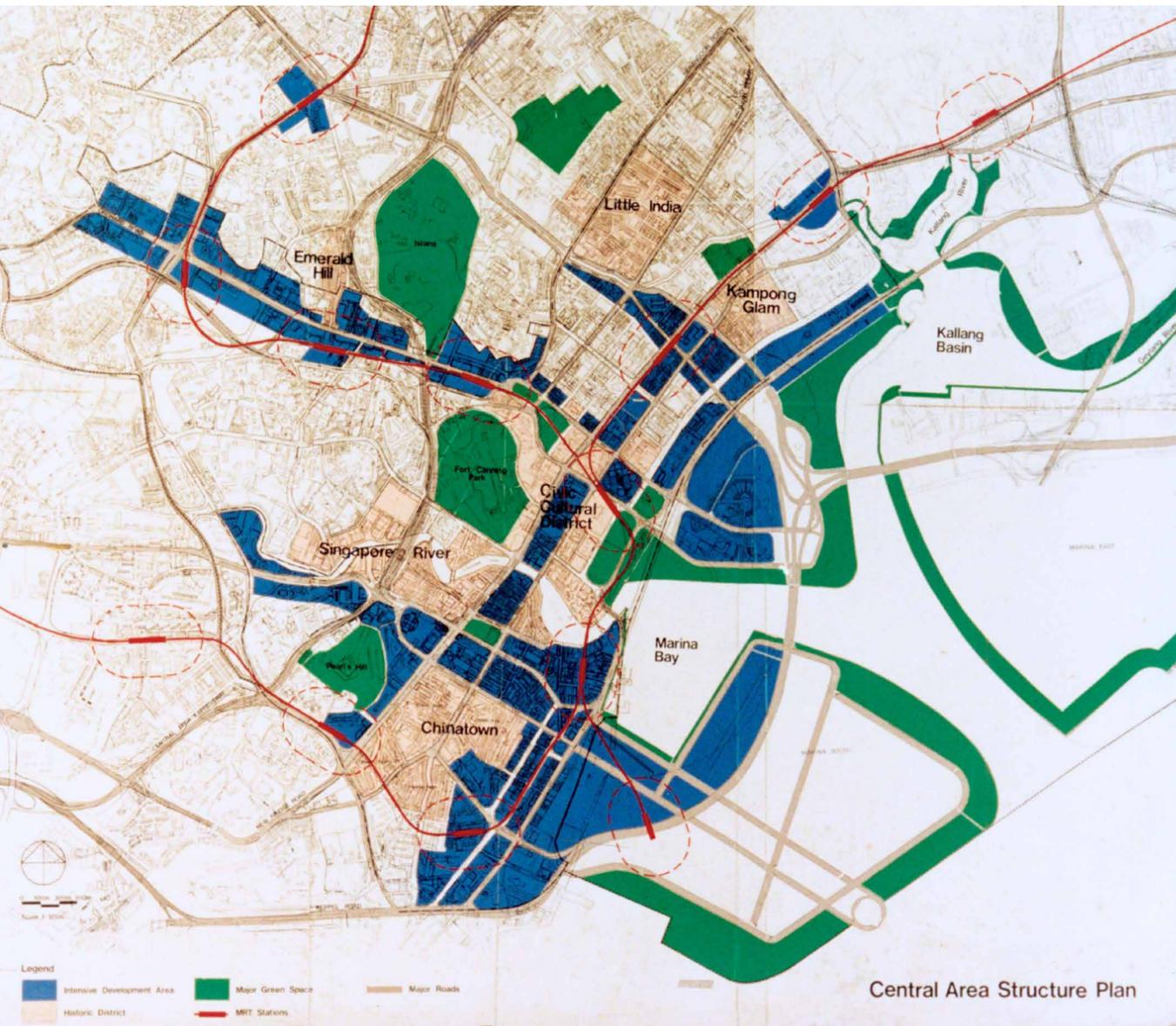
<sup>1</sup> The Conservation Master Plan was unveiled in 1986 and 10 areas were eventually gazetted for conservation in 1989 – Chinatown (Kreta Ayer, Tanjong Pagar, Bukit Pasoh, Telok Ayer) Kampong Gelam, Little India, Boat Quay, Clarke Quay, Cairnhill and Emerald Hill. This marked the start of more comprehensive conservation efforts carried out over 30 years.

<sup>2</sup> Buildings considered and identified for conservation today have to be at least 30 years old.

1. The Queen and the Duke of Edinburgh, Prince Philip, visited 9 Neil Road in 1989. Dr Liu Thai Ker (far left) is with the URA Chairman then, Professor Khoo Cheng Lim (on Dr Liu's right).  
2. A sketch plan by the United Nations team from their 1971 report, proposing the conservation of Kampong Gelam and parts of Chinatown.  
3. Alan Choe (in the middle with the pointer stick), hosting guests in 1978.  
4. Smith Street in Chinatown in 1974. The 1960s and early 1970s were focused on urgent urban renewal. Three quarters of the population was crammed into the downtown area.

# Laying the foundation

In making the case for conservation in the 1980s, conservation pioneers Koh-Lim Wen Gin, Khoo Teng Chye, Goh Hup Chor and Pamela Lee championed hard while French architect Didier Repellin inspired many on the importance of good restoration work.



Above | The Central Area Structure Plan by URA in 1985 created opportunities for entire areas of Chinatown, Little India and Kampong Gelam to be conserved.

By the 1980s, the context had shifted where conservation could be considered on a larger scale. The pressure for redevelopment had subsided. The focus also shifted to retaining unique and desirable characteristics of the urban environment.

Koh-Lim Wen Gin who joined URA in 1974 as a young architect and architect-planner Goh Hup Chor in 1982 were instrumental in leading the crucial conservation efforts while Khoo Teng Chye strengthened the case further as an engineer and corporate secretary in URA in the 1980s. And Pamela Lee as the Singapore Tourism Board head of product development then used the tourism agenda to “help save Singapore’s historic districts”.

Chief Architect for Historic Monuments and Inspector General of Historic Monuments in France, Didier Repellin awakened people to the charm of shophouses and the importance of good restoration in working on projects such as the Armenian shophouses, CHIJMES and Empress Place as a conservation consultant in the 1980s and 1990s.

## What were some of the early considerations in thinking about heritage and conservation?

**Wen Gin:** As a planner and architect, we looked at heritage from the point of view of how the city should evolve as a total environment. If you take a macro perspective on the city itself, the city needs the soul and the character and the history needs to be maintained. We also saw the early settlements where Stamford Raffles marked out in his town plan as really the start of Singapore. Why it is so important that we must conserve Chinatown, Little India, Kampong Gelam is because these are the areas designated as the ethnic areas.

## What were some of the factors that favoured the early conservation efforts?

**Teng Chye:** A key aspect that was crucial to the efforts was making conservation an integral part of

the urban planning process. This enabled us to take a more holistic and integrated approach in making conservation workable and viable within the larger fabric. From the land point of view, we planned for and carried out land reclamation for Marina Bay. This meant that the city could grow into Marina Bay and that allowed us to keep a large part of the historic areas.

## The Tourism Product Development Plan in 1986 included the conservation of entire historic districts. What was special about these areas?

**Pamelia:** It took Singaporeans five generations to build up a patina that is rich and unique. Seen from the eyes of an artist, our historic areas are full of life and character. Seen from the eyes of the urban planner, they are a rich assembly that cannot be engineered or forced. Seen from the eyes of tourists, they are better than any man-made attraction.

## You were drawn to the Armenian shophouses and chose to restore one of them.

**Didier:** Every one of the shophouse was different. The engravings were beautiful and spontaneous. There was so much personal and local expression behind them and I was very touched by their qualities.

## What is one lesson learnt that remains relevant for architects and planners today?

**Hup Chor:** Regardless of changing demands and tastes, we must remain convicted and committed to the professional values and beliefs that we are trained in as architects and planners. It is our role to present a strong case to decision makers for the things that we believe in and not wait for things to happen or directions to be given. We set the pace for the city.



1



2

## Making it work

In deepening conservation efforts in the 1990s, four professionals and experts, Dr Richard Helfer, Ler Seng Ann, Daniel Teo and Er Kian Hoo paved the way in conservation/restoration work and in improving the historic districts.

Throughout the 1990s, the focus was on clarifying and deepening conservation principles and standards that could hold up to global standards. Seminars and talks were organised to educate the industry and public on the value of conservation and restoration techniques. The Architectural Heritage Award that remains today was introduced in 1995 to encourage quality restoration.

Dr Richard Helfer oversaw the conservation, restoration and redevelopment of Raffles Hotel, from 1989 to 1991 that had set a new benchmark, as the then Founding Chairman and Chief Executive Officer of Raffles International Hotels & Resorts and Executive Director and Chairman of Raffles Hotel. "When you do proper conservation and restoration of a building, you have to have a clear vision of what you want it to be," he says. "Our goal was to create

something that Singaporeans and visitors could experience as an important relevant component of the history of Singapore and a national icon for Singaporeans to be proud of". This vision still survives some three decades on.

Ler Seng Ann, URA's Group Director for development services who has led various infrastructure and restoration works over the years, recalls overcoming many challenges in putting in place essential infrastructure to enable historic districts to meet modern needs.

For example, the Tanjong Pagar area in Chinatown was in need of major improvements. It did not have a proper sewerage system. To provide the necessary sewerage system, an entire new back lane had to be created in between the rows of shophouses.

"The buildings then were constructed back to back to each other so that made it more challenging," says Seng Ann. The back lane served many purposes in supporting essential electrical and water supplies, including doubling up as a fire escape route. Today, this little jagged back lane has evolved with a sub character of its own.

With a greater appreciation for conservation in the 1990s, many individuals have also come forward to volunteer their properties for conservation under URA's "Conservation initiated by Private Owner's Scheme" initiated in 1991. One of them was Daniel Teo, Chairman and Managing Director, Hong How Group and Director, Tong Eng Group. He volunteered 338E River Valley Road for conservation in 1992 and 36 and 38 Armenian Street in 2001, where the restoration of the shophouses along these streets later garnered the Architectural Heritage Award in 2010.

In building up expertise in good restoration work, Er Kian Hoo, Principal Partner of Towner Construction's passion for such work grew since his first project in 1995. He and his firm have carried out over 40 restoration projects in more than 20 years.

"Restoration projects are very different from any other construction work that we do. Every conserved building comes with very different challenges. We have to take the time to understand how the building was built and the kind of materials used," says Kian Hoo. He hopes builders, building owners, architects and other building professionals will take the time to appreciate and understand good restoration work and what it involves.



3



4

1. Some of the 32 out of 220 shophouses in Tanjong Pagar restored by URA, with 9 Neil Road (in the middle) completed as a "show house" to demonstrate the quality of restoration.

2. Creating the back lane between the shophouses in Tanjong Pagar to provide the essential sewerage system as part of the crucial improvements for historic districts to enable them to meet modern needs.

3. 36 and 38 Armenian Street were volunteered for conservation by real estate developer Daniel Teo as part of URA's conservation voluntary scheme.

4. The Warehouse Hotel is one of the many restoration projects by Towner Construction, which has carried out over 40 restoration works in more than 20 years. Image credit: Darren Soh.

## New frontiers

With the critical mass of historic buildings conserved by the early 2000s, the Chairman of the Conservation Advisory Panel (CAP), Dr James Khoo and CAP member Wo Mei Lan contributed to deeper conversations about identity and heritage and Peter Lee led the restoration and curation of the NUS Baba House.

The 2000s saw a shift in public expectations, with a growing interest in shaping a stronger sense of the collective past and identity together. The community also played a bigger role in contributing to important restoration work and the curation of historic buildings. An example is the NUS Baba House.

Dr James Khoo, a neurosurgeon, led the public engagements in 2002, contributing to the Identity Plan, a land use plan "plus", that presented ideas on how to retain the identities of 15 local areas as part of the Master Plan 2003. He was the Chairman of the Old World Charm Subject Group that was part of the Identity Plan, focusing on four areas – Balestier, Jalan Besar, Tanjong Katong and Joo Chiat.

He also later became the Chairman of URA's Conservation Advisory Panel (CAP) from 2002 to 2010, an independent platform that provided regular feedback on conservation proposals.

Architect Wo Mei Lan, co-founder of Liu & Wo Architects who has built up her passion for historic buildings and restoration work over the years, developed a deeper understanding and appreciation for Singapore's built heritage when she became a member of CAP from 2006 to 2012.

On the value of CAP, she shares: "It offers an avenue for various different perspectives to be considered in evaluating the merits of a building for conservation. Beyond just the retention of buildings, we also discussed how buildings can fit into the physical, cultural and social contexts and how it can be relevant for future generations."



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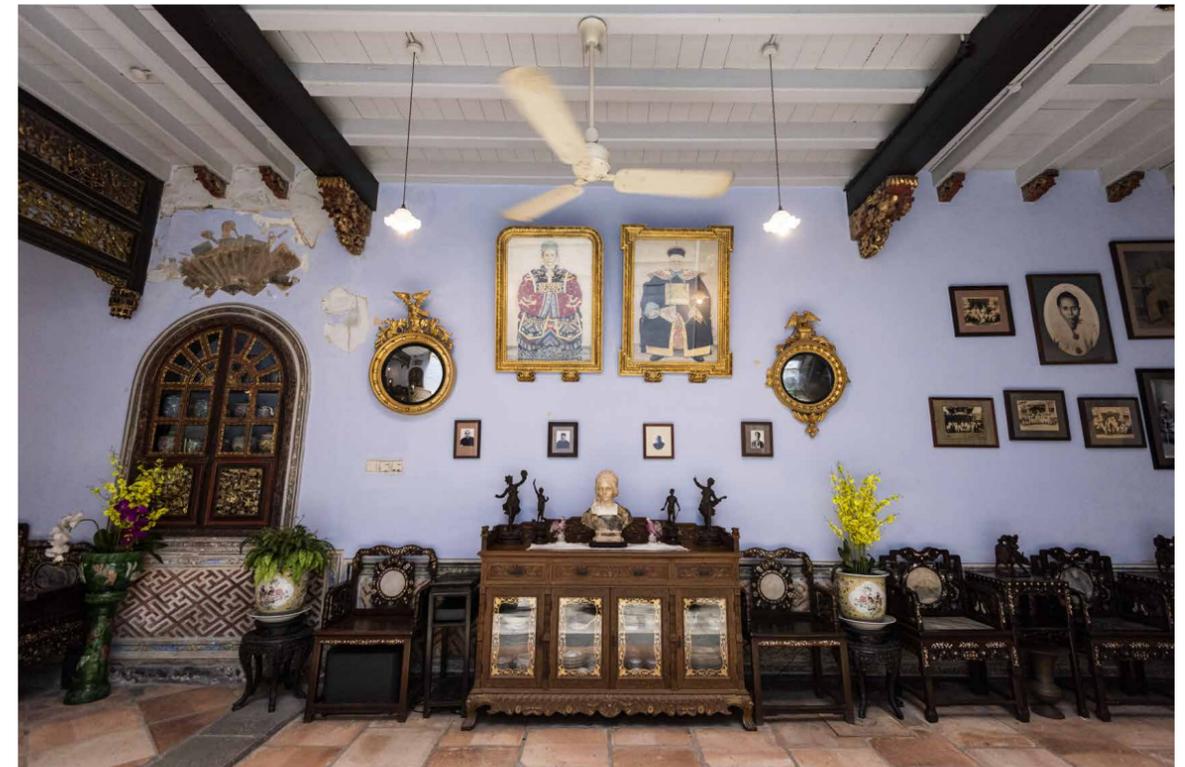
With a growing love and appreciation for conserved buildings, the community also contributed in more significant ways to Singapore's built heritage as in the case of the NUS (National University of Singapore) Baba House.

"A precious jewel", it is one of the last remaining intact Peranakan residential homes in Singapore that still has many original and unique architectural features of fine workmanship and quality in place. As its honorary curator, Peter Lee worked with the NUS Department of Architecture, NUS Museum, The Peranakan Association of Singapore and URA to restore and curate it as a living heritage museum.

Since it opened in 2008, the Baba House continues to fascinate in its form, curation and role in teaching and inspiring conversations about our past, present and future.



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1. The CAP Chairman, Dr James Khoo (at the bottom), at one of their meetings. The CAP has evaluated 34 proposals covering 1,000 buildings during its tenure from 2002 to 2018.

2. Architects Wo Mei Lan and Liu Kah Teck in their office at Duxton Hill. As early stakeholders in the Tanjong Pagar area, having bought their shophouse units in the initial phases of the shophouse tender for sale, they have grown to appreciate the importance of such historic areas. Image credit: Liu & Wo Architects.

3. Curator Peter Lee at the NUS Baba House at 157 Neil Road.

4. The ancestral hall in the NUS Baba House. Many pieces of furniture in the Baba House are original to the house.

# Closer partnerships

With closer partnerships between the public, private and people sectors from the 2010s, five individuals – Melody Zaccheus, Kwek Li Yong, Jayson Goh, Ashish Manchharam and Jonathan Poh, are actively shaping Singapore's built heritage in a variety of ways.



**Melody Zaccheus**  
Heritage correspondent  
The Straits Times

Straits Times heritage correspondent Melody Zaccheus believes telling good heritage stories helps connect people and their relationships to places.

Melody's foray into the heritage beat can be traced back to an article she wrote in 2012 on the National Heritage Board's efforts to document Singapore's eight remaining traditional bakeries known for producing conventionally prepared breads and buns. Learning first-hand about the struggles of these dying businesses, which once numbered up to 200 in the 1970s, inspired the then fresh journalism graduate to pursue more of such evocative stories.

Melody believes communities should be more involved in deciding what Singapore keeps for the future. "You cannot divorce a space from its community and we should not be alienating heritage from the very communities the structures are sited in," she says.



**Kwek Li Yong**  
Co-Founder  
My Community

The key for the past to stay relevant for the present and future is letting communities shape their identities and heritage, says Li Yong, co-founder of civic and heritage group, My Community.

What started as two students (Li Yong and Jasper Tan) going door-to-door in Queenstown to document residents' memories of the town in 2010 has since grown into a volunteer-led organisation that runs a museum, conducts heritage research and documentation as well as organises community events. A reason for the group's growth has been its highly accessible programmes, which centre on the sharing and exchange of personal memories.

While conserved buildings and sites provide an anchor for the community, Li Yong says intangibles such as stories keep them relevant to the present. "Any building, any site, any object is meaningless without the memories and experiences that wrap around these," says Li Yong.



**Jayson Goh**  
President  
160 Squadron Anti-Aircraft  
Alumni Association

A simple storyboard at Block 450 at Seletar East Camp has connected generations of those who served in the 160 Squadron, Singapore's longest-serving air defence unit. "Block 450 is the physical manifestation of the home spirit of every one of the servicemen and women who have gone through Squadron 160 and contributed to the air defence of this country for the last 50 years," says Jayson.

He initiated the storyboard on site, which was put up in 2015 when he came to know about the conservation of the block in 2014. This is part of URA's initiative to encourage stakeholders to produce heritage storyboards to share stories about important historic buildings.

"The storyboard reflects an era and the people who contributed to this place and to this country," says Jayson. "And the more the content of the storyboard reflects that, the more historical meaning and heritage a place will have for future generations."



**Ashish Manchharam**  
Founder and Managing Director  
8M Real Estate

Ashish Manchharam still remembers the strong sense of community shared amongst residents of Kampong Gelam where he spent his early childhood, and though his family moved out when he was just a boy, he is still deeply connected to the neighbourhood.

His growing up years in a historic district has influenced the way he manages 52 shophouses in Singapore. To him, shaping the use of shophouses is about ensuring the heritage and essence of historic districts remain.

"Real estate use and requirements change over time and you have to re-adapt. On the flipside here you have people who say let us keep it the same as it was before," he says. "We want to make sure we have a good mixture of the two."



**Jonathan Poh**  
Principal Architect/Director  
Provolk Architects

The proactive effort of architect Jonathan Poh and his Save Dakota Crescent group has helped to retain six blocks at Dakota Crescent, one of Singapore's oldest housing estates.

The estate is an example of early public housing designed by British town planners. The Singapore Improvement Trust built it in 1958 for public rental housing. His "Save Dakota" campaign initiated in 2014 and subsequent ground-up efforts contributed to the retention of six blocks, the estate's courtyard and the iconic dove playground in December 2017.

Reflecting on lessons gained, he shares: "It is important to put across proposals that are well thought through to present a coherent picture of the historic buildings and its larger context. It is also important to listen well to many different voices and views on ground."

1. Journalist Melody Zaccheus at the iconic playground at Dakota Crescent. Her media coverage of this neighbourhood inspired greater public discussion about its merits and why it should be retained. Image credit: Dax Lim.

2. My Community co-founder Kwek Li Yong (in red T-Shirt) with his team. Image credit: My Community.

3. Jayson Goh (far left) at the unveiling of the storyboard in 2015 at Block 450 at Seletar East Camp with Minister Chan Chun Sing beside him. Image credit: 160 Squadron.

4. Ashish Manchharam at his latest boutique integrated lifestyle destination, K&Sa House, along Keong Saik Road. Managing 52 shophouses, he seeks to inject new life into historic districts with creative uses while retaining their heritage.

5. Architect Jonathan Poh leading a tour together with Dakota Adventures as part of the efforts to raise awareness on the value of Dakota Crescent. Image credit: Save Dakota Crescent.

# The way forward

What are the challenges for conservation for the future? Key players and experts, Chan Sui Him, Dr Chua Ai Lin, Dr Yeo Kang Shua, Dr Nikhil Joshi and Tan Kar Lin reflect on key issues to focus on.

“In envisioning Singapore 50 years from now, we need to also ask ourselves if our current policies, programmes and efforts can continue to sustain our efforts of balancing the old and new for the future,” says Chan Sui Him. He is the first Chairman of URA’s Heritage and Identity Partnership formed in 2018 to support public-private-people collaboration in shaping and promoting Singapore’s built heritage and identity.

An architect for over 50 years, Sui Him was the Chief Executive Officer (1999-2004) and Chairman (2004-2015) of DP Architects.

“Heritage is about the future,” says Dr Chua Ai Lin, Executive Director of the Singapore Heritage Society (SHS). “It is about people, not just about buildings. It is not about something that is gone, but something that is here.” This belief that Singapore must have a “living presence of the past” was why a group of citizens led by architect William Lim founded the SHS in 1987.

As heritage becomes more mainstream, Ai Lin believes SHS must dig deeper into the issues it champions, going beyond nostalgia and memories. “I see our niche as looking at intellectual and policy issues,” adds the independent historian. “We are asking questions about best practices in heritage management, sustainability and how to move forward.”

To ensure historic buildings continue to last, we need to pay closer attention to the science of restoration, suggests Dr Yeo Kang Shua, Associate Professor, architectural history, theory and criticism, the Singapore University of Technology and Design. A project he has been working on for years is building a database of colour profiles and paints used in Singapore’s historic buildings. While it may seem like a trivial detail, he says paint colour offers an understanding of the preferences of society then and even what was available to the industry. “When you use inappropriate materials, the eventual loss is even more than if you leave it alone,” he says.

Tan Kar Lin, partner of Studio Lapis and Dr Nikhil Joshi, researcher and conservation consultant are actively promoting good restoration work and the use of traditional materials such as lime plaster for historic buildings.

To deepen the public and industry’s appreciation for conservation and restoration work, Kar Lin worked with URA to produce an eight-volume Conservation Technical Handbook as its editor from 2016 in collaboration with ICOMOS Singapore, which was set up in 2014 as the local chapter of the International Council of Monuments and Sites. “The handbook series is intended to introduce a range of available diagnostic and conservation methods and materials, presented through real local project examples that follows best conservation practices based on ICOMOS principles. Through this, we hope to also bring across the point that we do have local resources and skills to carry out quality conservation work,” says Kar Lin.



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On the value of lime plaster, Nikhil explains: “Although Singapore used to have craftspeople skilled in making lime suitable for the local climate, they vanished in the mid-20th century due to the popularity of modern construction. Historic buildings were built with porous materials such as clay bricks, sand, earth and timber. In particular, the mortars used to construct traditional brick and stone walls is composed of sand, water, and non-hydraulic lime, also known as slaked lime, high calcium lime or air lime. The mortar sets slowly by absorbing carbon dioxide and allow moisture trapped within walls to escape through the joints, allowing the walls to breathe.”



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1. Chan Sui Him, the Heritage and Identity Partnership Chairman (standing with blue shirt) with some of its members and URA management staff.  
2. The five past Presidents of the Singapore Heritage Society (SHS), clockwise from top left, Dahlia Shamsuddin, Dr Chua Ai Lin, Dr Kevin Tan, William Lim and Kwok Kian Woon. Image credit: SHS.

3. Dr Yeo Kang Shua (with white helmet) at the Yueh Hai Ching temple restoration. Image credit: Lim Shao Bin.  
4. Professors and students at Nikhil (far right) first course on lime plaster for the National University of Singapore in 2016. Image credit: Nikhil Joshi.  
5. Kar Lin (second from right) with other founding committee and advisors of the ICOMOS Singapore. Image credit: ICOMOS Singapore.

# What to read

Behind the written word are authors, photographers, architects and residents who have lived through the times and embraced the beauty and wonder of Singapore's built heritage. We look at a few publications that have made an impact.

Photographer **Chee Boon Pin**

## Architectural records

*Characters of Light*<sup>1</sup> (1957) was one of the first photo-books to capture the beauty of Singapore's built heritage in the 1950s on the cusp of great change. The book is significant in offering a fascinating glimpse of old Singapore. Its author, Majorie Doggett, who came to Singapore in 1947 and became a citizen in 1961, was also considered by architectural historian Dr Julian Davidson as "one of the finest photographers of her time working in Singapore". Through thoroughly researched texts, Majorie brought the buildings to life. "A building remains like a cold stone monument unless it is possible to visualise the sort of person who constructed it and lived in it," she said in her 1985 edition.

*Pastel Portraits* (1984) by Gretchen Liu and *Living Legacy* (1994) by Professor Robert Powell inspired



greater interest in Singapore's rich pre-war architecture with their well-illustrated records and served to support the hard-fought conservation battles during the crucial periods. *The Singapore Shophouse* (2010) deepened people's understanding of the shophouse. Its author, Dr Julian Davidson, has been passionately researching and documenting Singapore's architectural heritage for many years.

## Conservation guides

Three publication series produced by URA in the 1980s and 1990s served as important guides for professionals and owners of conservation buildings to appreciate the value of conservation and understand important considerations in restoring the buildings and shaping the streetscapes in the historic districts.

Initial manuals for Chinatown, Little India and Kampong Gelam (1988) were published as part of the Conservation Master Plan to solicit feedback from professionals. The manuals presented the planning and urban design considerations for the historic districts, architectural characteristics and restoration principles and conservation guidelines. An updated series with similar themes was published in 1995.

In raising the conservation and restoration standards in the 1990s, the book, *Objectives, Principles and Standards for Preservation and Conservation* (1993), was an important guide by URA and the Preservation Monuments Board. It detailed key principles such as the "3Rs – maximum retention, sensitive restoration, careful repair" which continue to be used today.



To keep pace with advancements in the practice, the Conservation Technical Handbook was published from 2016 in collaboration with ICOMOS Singapore.

In addition to the publications, smaller leaflets produced presented regular insights on conservation guidelines and considerations on specific building types and elements over the years. To help owners on restoring their buildings, smaller "Do It Right" guides have been produced, such as for Tiong Bahru.

## Personal stories

With a deeper appreciation for the built heritage and collective identities, recent books are presenting more intimate stories and the lives of residents and others within historic neighbourhoods. Examples are *On a little hill in Chinatown: Singapore's Ann Siang Hill* (2010) by legal historian and scholar Kevin Tan, *17A Keong Saik Road* (2018) by Charmaine Leong and *Leluhur Singapore's Kampong Gelam* (2019) by Hidayah Amin.

Charmaine who grew up in Keong Saik hopes that "people can remember Keong Saik as a place where our forebears had come to settle from China, worked hard to make a living, and left an imprint here." She adds: "It was not merely streets that provided entertainment to pleasure seekers, but a place where a community of people, despite their difficulties, persevered in working towards the hope of a better future."

Keong Saik can, and should, serve as an inspiration, or a reminder, of how far Singapore has come as a country made up mainly of immigrants who left their home countries to make a life for themselves."



<sup>1</sup> *Characters of Light* was first published in 1957 and republished in 1985. A recent publication, *Majorie Doggett's Singapore* (2019) offers another fresh view of old Singapore and Majorie's personal life.

# Artist's homecoming at Nassim Road

Floral patterns and jungle scape – UK artist Chloë Manasseh reimagines 28 Nassim Road, her grandfather's home built more than 100 years ago.

Writer **Serene Tng** | Photographer **Chee Boon Pin**

It is a special homecoming for the Singapore-based UK artist Chloë Manasseh, stepping back into her grandfather's world, in the house that he was born. Her grandfather, Leonard Manasseh, a renowned British architect, was born in 1916 at 28 Nassim Road in Singapore, now the official residence of the British High Commissioner.

Chloë was invited by the British High Commissioner to present a series of paintings inspired by Eden Hall at 28 Nassim Road in 2019. In "Fruitfulness of Forgetting", she wanted to recreate the sense of home by bringing the outside in. Her paintings are filled with floral patterns and birds, drawing from the intricate patterns in the house and Singapore's natural landscape.

## Homestead

"There is a human tendency to want to bring elements from the outside into one's home such as plants. This makes you feel more familiar in your homestead and more grounded," says the 28-year-old. In blending in the paintings into the home, she measured and custom fit each one specifically into the different spaces and corners for them to look like they have been a part of the home for a long time.

The original grounds around Eden Hall was home to variety of tropical birds, including kingfishers, long-tailed parakeets and black-napped oriel. It also had a stable and a tennis court. Remembering stories she hears from her family about the house and Singapore, she imagines Singapore then as a "jungle scape, with animals roaming freely."

28 Nassim Road is part of the White House Park/ Nassim Road conservation area. It was built more than 100 years ago in 1904 by Ezekiel Saleh Manasseh, Chloë's great grand uncle. He was a merchant from Baghdad who sold rice and opium. R.A.J. Bidwell of renowned local architectural firm Swan & Maclaren (now known as Swan & Maclaren Architects) designed the mansion and other prominent landmarks such as the Raffles Hotel and Goodwood Park Hotel. It was eventually sold to the British government in 1955 by Ezekiel's stepson, Vivian Bath.

Chloë's works has exhibited internationally. Working between painting, print, video and installation, her works sit between experience and imagination. On her love for painting, it was her grandfather who inspired her. She recalls: "I started painting at a very young age with my grandfather and in a way, he mentored me. I remember sitting on a stool and painting together with my grandfather on a hill top in the south of France."

Her grandfather was one of the leading British architects of the 1960s. He was also an accomplished painter in oils and watercolours where his artworks show his style in architecture in his delicate approach to buildings.



## Finding identity

In all of her works, she is fascinated with how people engage with their physical surroundings and its impact on one's identity and how imaginations contribute back to shaping spaces. In her search for her own identity, she is comforted that her grandfather's home remains intact after all these years. Chloë now calls Singapore her home and is studying her second Masters focusing on Art Therapy at the Lasalle College of the Arts.

*The "Fruitfulness of Forgetting" was presented by The British Council, in partnership with the British High Commission and ArtPorters.*

Above | Artist Chloë Manasseh and some of her artworks at 28 Nassim Road in 2019. The black and white photo (image credit: Chloë Manasseh) shows her with her grandfather, Leonard Manasseh, who was born at 28 Nassim Road in 1916.

# Telling stories

Youths brought new life to historic buildings by telling poignant stories in many different ways at URA's 2019 Architectural Heritage Season.

Writers **Jennifer Eveland** and **Serene Tng**

Behind every historic building are stories of people and connection across time. Whether it is through photography, artworks or films, youths are finding new ways to tell new and fresh stories about historic gems that make these landmarks even more precious.

In addition to the annual Architectural Heritage Award (AHA) conferred to two projects in 2019 – Temasek Shophouse at 28 Orchard Road and a residential shophouse at 105 Onan Road, the third edition of URA's annual Architectural Heritage Season in November and December 2019 presented more heritage events and activities including a wider range of youth projects.

A key feature is the Architectural Heritage Award film series that has been presenting diverse stories of conserved buildings and national monuments. In its fifth year, the project is a collaboration between URA and the Nanyang Technological University's Wee Kim Wee School of Communication and Information. We check out three out of the 15 films screened at The Projector on 24 Oct 2019.



Watch all the films here

## Other youth projects

Explore heritage gems in Tanjong Pagar and Bukit Pasoh with a special self-exploration guide, *Backyard65*, produced by the Singapore Institute of Technology. Access the guide here: [go.gov.sg/ura-consareas](http://go.gov.sg/ura-consareas)

Check out 18 whimsical and quirky illustrative artworks inspired by conserved buildings by students from the School of the Arts, Singapore. These are on display at the URA Centre ground floor facing Maxwell Road.

Rediscover Kampong Gelam with new lens through photographs by over 30 students, mentored by professional photographers in partnership with the National Youth Achievement Awards Young Photographers Network. The photographs were exhibited at the Malay Heritage Centre until 13 January 2020. A selection can be found in this issue's back page.



Above | "People's Biscuits" by student Kristen Ooi, inspired by the Khong Guan Building. This is one of the many artworks by students from the School of the Arts, Singapore (SOTA), on display at the URA Centre ground floor. Image credit: SOTA.

# Clifford Pier

*Celebrating food across time*

**What is special about this film**  
Produced by  
Gazetted for conservation  
Awarded the AHA

Rare footages of old Singapore  
Nichole Tan, G. Nanthinee Shree, Nur Afrina Zulkifli, Brenda Jansen  
in March 2007  
as part of the "Fullerton Heritage" development in 2011



"My father landed on this Clifford Pier in the 1930s. Back then, the car park in front of Clifford Pier...there are plenty of hawkers to provide food and beverages for people who are working along Collyer Quay and Telok Ayer Basin," says Bill Jee, a local tour guide.

Part of the experience of arriving and departing Singapore through Clifford Pier located in the heart of the city and working in the area for over 60 years is the street food available just around the corner.

This film remembers and celebrates the street food that has bonded people across time around this historic building.

Through vintage footage and swanky jazz, the film transports you back in time to the bustling street life around the pier. Built in 1933 by the Public Works Department, the boat services at Clifford Pier ended in 2006. This art-deco style building was then sold together with the former Customs Harbour Branch building to form part of "Fullerton Heritage", a waterfront development today that has hotel, commercial and recreational uses.

The contemporary Asian restaurant at Clifford Pier continues the celebration of street food with its own take on hawker dishes.

Above | Screen shot of Bill Jee, a local tour guide, who shares his father's experience of Clifford Pier in the 1930s, as taken from the student film on Clifford Pier, released as part of URA's 2019 Architectural Heritage Season.

## Ramakrishna Mission

*“You and I are the same”*

**What is special about this film** The heartwarming story of connection between two neighbours  
**Produced by** Hemant Mathy, Toh Yi Shien, Christel Lim, Sophia Kuek  
**Gazetted for conservation** in October 2006



“The Ramakrishna Mission has got a certain goal, to help as many people as it can, and to kindle the spiritual aspect of a human being. That means when they look at you, they do not look at you as Chinese or woman or anything. They look at you like you are another spirit...You and I are the same,” says B Uthayachandran, Yoga Instructor and Legal Advisor, Ramakrishna Mission.

This overarching philosophy and the belief that all religions lead to the same path is embodied in the main temple building that reflects all systems. The building combines architectural features that borrows from different religions and the Indian culture.

Located at 175 Bartley Road, the Ramakrishna Mission is a branch of the Ramakrishna Order of India, a worldwide spiritual and welfare organisation. The site consists of three buildings – the main temple building, together with a boys’ home and a cultural centre. Built in the 1950s and 1960s, the buildings feature a transition of architectural styles from Art Deco to Modern.

This spirit of openness to all cultures is shown in the film through a personal story of warm friendship fostered between the Mission and its neighbour, the Bartley Christian Church. Connected by an open canal, both have been lovingly supporting and helping each other over the years.

Above | Screen shot of the interview with B Uthayachandran, the Yoga Instructor and Legal Advisor of Ramakrishna Mission, as taken from the student film on the Mission, released as part of URA’s 2019 Architectural Heritage Season.

## Asian Civilisations Museum

*Touching the heart and soul*

**What is special about this film** The tender moments on what the building means on a personal level  
**Produced by** Eryka Fontenilla, Lim Ji Ah, Chia Kiat Ming, Zachary Tia  
**Gazetted for conservation** in February 1992  
**Awarded the AHA** 2003 and 2018



“The museum for me is a kind of book that I’m writing. It is a story of my life, the life of the people around me, the life of Singapore. And every day, it is like a different chapter, that is full of colour and full of experience,” says Kennie Ting, Director, Asian Civilisation Museum, reflecting on what the museum means to him.

In addition to Kennie, the film features architects Li Sau Kei and Nigel Greenhill of GreenhillLi who developed two new contemporary wings in 2015 and a Korean docent guide, bringing across emotional responses on the significance of this landmark building to them personally and for the larger community.

Above | Screen shot of architects Li Sau Kei and Nigel Greenhill of GreenhillLi sharing their personal connection to the Asian Civilisations Museum, as taken from the student film on the Museum, released as part of URA’s 2019 Architectural Heritage Season.

# Rethinking the design of nursing homes

From care facility to being a home and community space, designers and experts are exploring innovative design typologies for future nursing homes.

Writers **Jennifer Eveland** and **Serene Tng**

What contributes to our sense of belonging as we age in a nursing home environment? Within a nursing home, how can we continue to maintain our independence and connection to the community?

A first interdisciplinary study of its kind is bringing together academics, professionals, policy makers and healthcare providers to delve deeper into how the design of the physical environment can improve the well-being of not only nursing home residents but also that of caregivers, staff and the larger community.

“With the design of nursing homes evolving over the years, the study is important given our ageing population, and nursing homes are increasingly becoming an integral part of our urban and social fabric. Good design can bring all these elements together,” says Associate Professor Fung John Chye from the Centre for Ageing Research in the Environment (CARE) at the National University of Singapore (NUS)’s School of Design and Environment who is leading the study.

Led by NUS, in collaboration with URA, and other agencies and research partners, the study<sup>1</sup> began in 2017 and seeks to recommend design principles and typologies for future nursing homes that can better support person-centric care models and are well integrated with the surrounding communities. It is expected to be completed in the first half of 2020.

Beyond the research on understanding the relationships between the built environment and the well-being of older adults, as well as the care model, evidence-based research findings and principles were also translated into design concepts by two architectural firms – FARM Architects in partnership with STUCK Design, and Silver Thomas Hanley International.

<sup>1</sup> Other government, research and industry partners of the “Designing Future-Ready and Sustainable Nursing Homes for Person-Centric Care Models in Communities” study are the Agency for Integrated Care (AIC), Ministry of Health (MOH), MOH Holdings, Building and Construction Authority, Geriatric Education & Research Institute, National University Hospital, DUKE-NUS Centre for Ageing Research and Education, Ren Ci @ Ang Mo Kio, National University Health Systems and CoNex Systems. This research is supported by the Singapore Ministry of National Development (MND) and the National Research Foundation (NRF), Prime Minister’s Office under the Land and Liveability National Innovation Challenge (L2NIC) Research Programme Award No. L2NICTDF1-2017-5. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the interviewees, and do not reflect the views of MND and NRF, as well as URA, other agencies and research partners involved in the study.



The two firms were selected from six architectural firms<sup>2</sup> shortlisted through NUS’s Request for Proposal based on conceptual designs produced by the firms.

Key leads of the study and the design firms involved – Prof Fung, Natalie Pitt (Director, Silver Thomas Hanley), Tiah Nan Chyuan (Director, FARM Architects) and Yong Jieyu (Director, Stuck Design) – reflect on why innovation in the design of nursing homes matters.

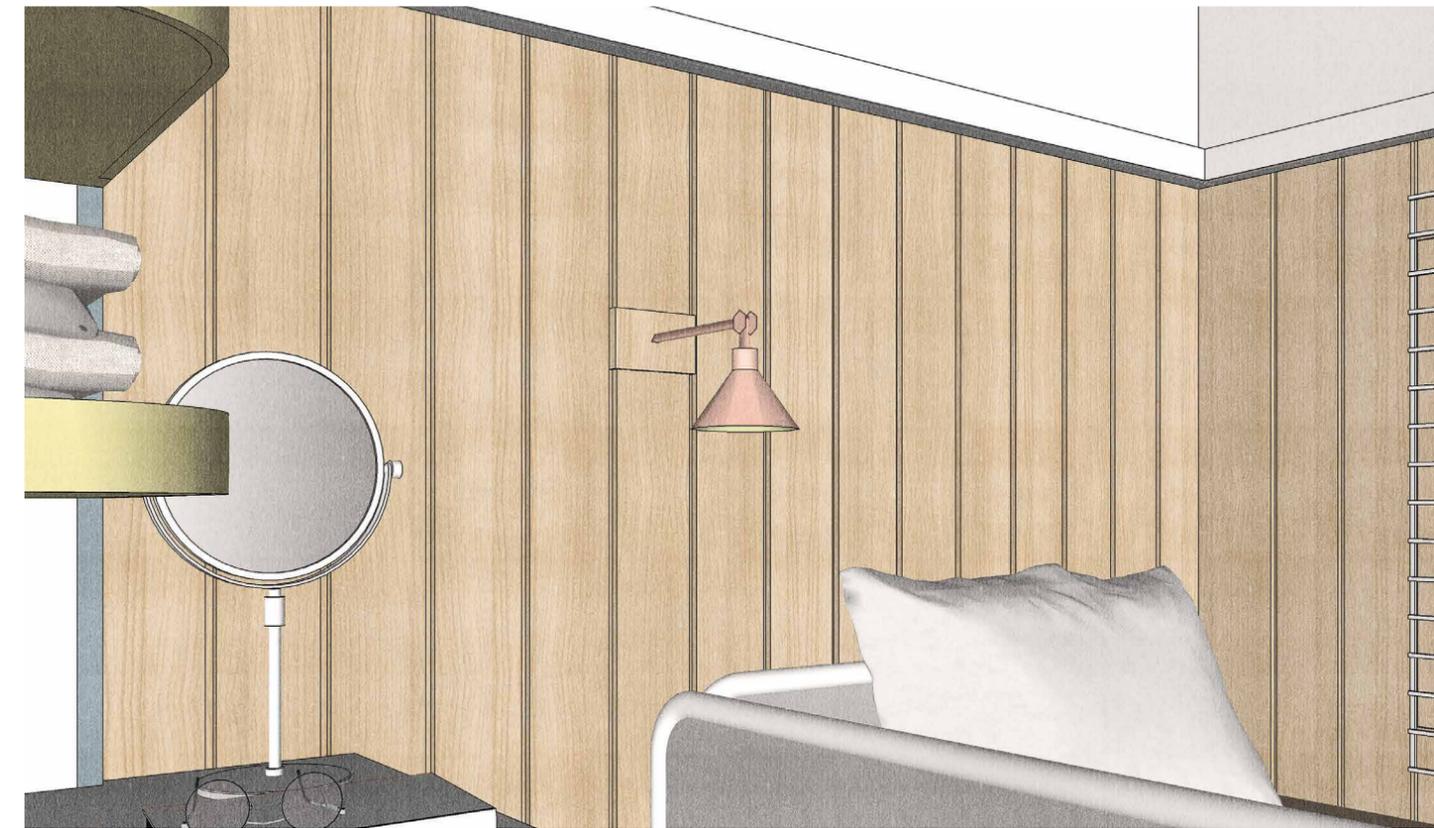
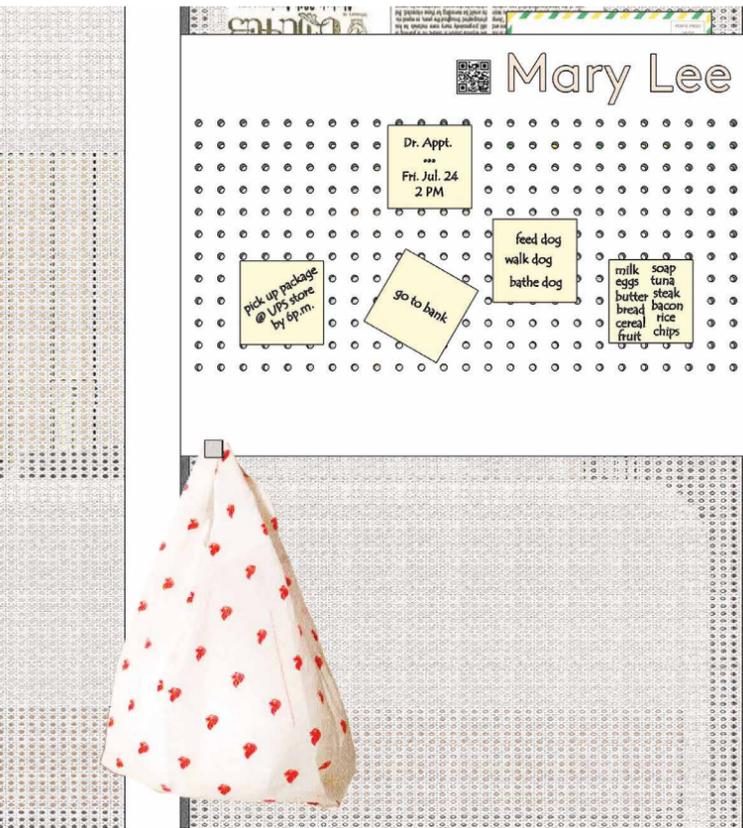
<sup>2</sup> The four other design firms are HKS Asia Pacific & AWP, DP Architects, Lekker Architects and Formwerkz Architects.

Above | An artist impression of the ‘Social Corridor’ by FARM as part of their conceptual design. Inspired by the common corridor in HDB flats, it is envisioned to run around the nursing home building, connecting the sky gardens and void decks of different levels. This gives residents more opportunities to walk around and interact with one another. Image credit: FARM.

## What is the significance of the study?

**John:** This is probably the first interdisciplinary design-led study of its kind for nursing homes in Singapore. In looking at design, we considered many different dimensions – how design needs to integrate with the care aspect, the social aspect and how the community plays a crucial role. We also looked at leveraging technology to support some of the activities and functions of the nursing homes.





**Jieyu:** In maintaining the sense of self, a key aspect is the ability for the resident to still feel at home. In our design explorations, we thought about people's perception of belonging and what it means to have a home. For example, the ability to host visitors contributes to the sense of belonging while in a nursing home, residents are typically assigned beds with minimal hosting spaces, which can feel like they are not in a place of their own. So we highlighted opportunities where we can blur the boundaries between a care facility and a home. Some of our design ideas were distilled from research by IKEA<sup>3</sup> into what makes people feel at home from a mental and emotional point of view.

**Tell us more about creating the home-like atmosphere.**

**John:** Unlike a hospital ward where one may stay for a few days and move on, those in nursing homes tend to stay there much longer. Therefore, for nursing homes, creating a home-like atmosphere and environment becomes more important, which

supports the person-centric care model. The newer nursing homes are increasingly designed based on person-centric care principles. One example is Ren Ci @ Ang Mo Kio. Its living space was designed to emulate a HDB flat as opposed to a dormitory type of design. This is one manifestation of person-centric care in design. There are many other aspects, for example, allowing personalisation for each resident, to enable them to make their bed space and immediate areas more personal to them.

**Nan Chyuan:** We asked how much private space do you need to feel at home? Then within that private space, what can be added? We identified 15 important elements that include the space around resident's bed, a threshold with a sliding door, a letterbox, table with drawers and a lamp that residents can turn on and off when they want. There is also a hosting table for entertaining. The furniture has concealed wheels and can be moved but are covered for a greater sense of permanence.

A big part of the design is the ability to customise the space around their beds to retain individuality as much as possible.

**Natalie:** There are also the climatic aspects of design that need to be considered. In Singapore, aged-care buildings are typically naturally-ventilated, so a cross-flow of air improves comfort levels. Besides addressing heat and rain, access to daylight and views are also important design considerations.

**Why is it important for nursing homes to integrate with their immediate neighbourhoods and how can their designs encourage community involvement?**

**John:** If a nursing home is developed in isolation from its neighbourhood, the community is unlikely to interact with it. From an urban design perspective, the challenge is how to integrate the nursing home with the surrounding community so that we reduce the potential social stigmatisation of the nursing home.

For the two design concepts selected, the architects and designers explored how to make some amenities in the nursing homes accessible to the community. For example, if the nursing home has a daycare centre for the elderly that only operates during weekdays, then in the weekend, some of the spaces, such as the multi-purpose hall can be made available to the community to hold events and other activities.

Newer nursing home developments have adopted more open and fenceless design concepts. We should continue to evolve the design of future nursing homes to have greater porosity and accessibility, to encourage greater interactions between the nursing home residents and the community.

**Natalie:** Heritage is an important aspect to Singapore's diverse history and cultures, so we engendered the kampong spirit, which is about highlighting communities and how they work together. We looked at how people inform the

<sup>3</sup> IKEA's annual Life at Home study is a comprehensive global survey into the factors that make people from various cultures feel a sense of home.

Above | From a face plate, to a mobile unit, a drawer with lock and an individual lamp – FARM believes that being able to personalise one's own private space in a nursing home can enhance the individual's sense of belonging. Image credit: FARM.

programming of the building. We integrated co-share spaces, from pop-up spaces to an amphitheatre, as part of the urban space for concerts or celebrations at key times of the year, plus a playground and gardens available to all. It is about integrating the nursing home environment within communities.

**Nan Chyuan:** We had an idea for a caregivers' club – a space for neighbourhood caregivers. In Singapore, there are currently two gig-economy organisations providing in-home caregiver services, CaregiverAsia and Homage. Their caregivers travel island-wide. We can adapt from the Deliveroo model to link up caregivers located within the community with those who need it. This creates the idea of a community taking care of its own. This model could reduce booking fees, travel time for caregivers and booking times. Another idea is for an app that allows family and resident information to be tracked so different caregivers can read up and know how to engage individual residents about their personal interests.

#### Looking into the future, who are nursing homes for and how do you see its role and design evolving?

**John:** Who the nursing homes are for in the future is a key question our research tries to answer. Nursing homes, even the current ones, will have to support three major age groups. The Pioneer Generation who are the predominant current users of nursing homes, the young-old i.e. the Merdeka Generation who may in five to ten years' time consider using a nursing home, and the future old or the Millennial Generation who may need to use the nursing home in 30 years' time.

The new nursing homes that are developed now have to have sufficient flexibility and adaptability to respond to the changing needs as it will be difficult to retrofit and modify the infrastructure later on. The nursing home designs must have a certain degree of flexibility. For instance, one of the ideas now is to design for flexibility in bed configurations to cater to changing demands in the future.

In the future, nursing homes will continue to play an important role but this role will have to evolve and transform. I hope that in 20 to 30 years' time, each community can have some kind of nursing or care hub within the HDB neighbourhood to look after the elderly in its midst. This can offer more options and less people will need to rely on the traditional nursing homes. We can continue to have the institutions but transform them into homes for elderly requiring higher level of care and then at the same time develop community-based care. We already have homecare services but some individuals may find it costlier and may prefer accessing services in the community care hub instead.

Nursing homes in the future could also evolve to becoming not just an institution for long-term care but can have community activities and commercial functions that the community can access and use. Nursing home residents will benefit because of the potential for incidental encounters and social interactions.

**Natalie:** Technology integration is a big thing, from residents' access to technology to how the building can accommodate new technology or at least be future-proofed for it. The future of nursing homes should consider what families and carers need as well. For example, there can be kitchen facilities and barbecue pits to allow a family to cook and share a meal together.

**Nan Chyuan:** While we strive for an eventual "age in place" solution in the near future, there will still be a need for nursing homes. From our research, it is important to encourage positive engagement with the residents in their immediate living environment. Changing little habits can encourage active participation and eventual ownership. There is strong correlation between having a sense of ownership and one's mental well-being.



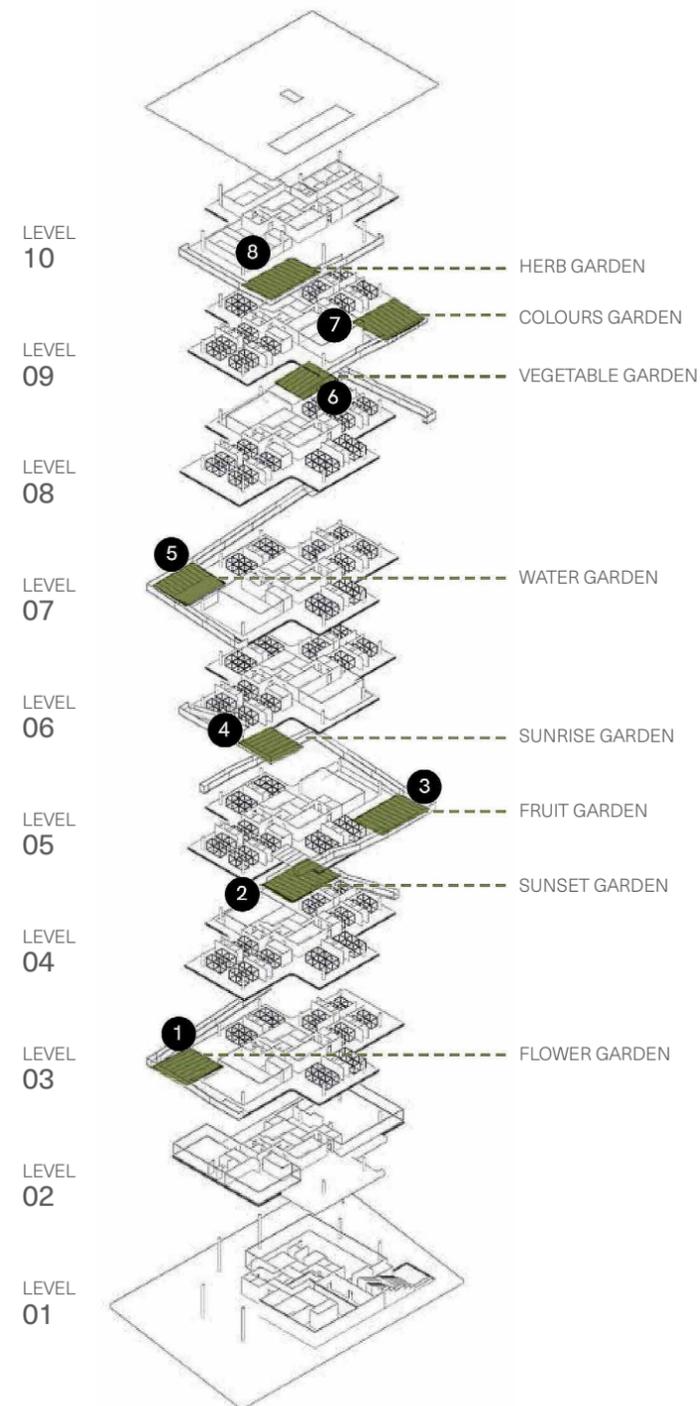
Above | In its conceptual design, Silver Thomas Hanley International (STHI) proposed for greenery to be integrated as part of the design for various floors and spaces to promote the residents' sense of well-being. Image credit: STHI.

In Singapore, our climate does not change much throughout the year, so our sense of time may be highly repetitive and flat. So we thought about the flowering cycles of plants or even harvesting of fruits and vegetables. We set different gardens on each floor, so that when each blooms or is ready to harvest, residents are encouraged to go see it or actively take care of the plants.

We also recognised that some elderly come with skills and could become go-to people for residents who need repairs or other help. There was a proposal to introduce internal currency that can be spent within the community to buy fruits or other items. The idea is to create a city in a city, and it is really how each of these ideas are trying to answer the bigger questions of the project.

*This study and other efforts are part of an ongoing learning journey in shaping the evolving design of nursing homes and the larger physical environment. It is a journey that is both personal and collective. It is about understanding what each of us need to age well and how well-designed places and spaces can help build up stronger communities able to support one other.*

*The conceptual designs from the study were presented at URA's exhibition, "Designing our Age-Friendly City", together with other design solutions that contribute to the age-friendly neighbourhood, from 17 October 2019 to 4 January 2020. The exhibition is the eighth instalment of URA's Urban Lab series that presents ideas and urban solutions for a liveable and sustainable Singapore.*



# What if...

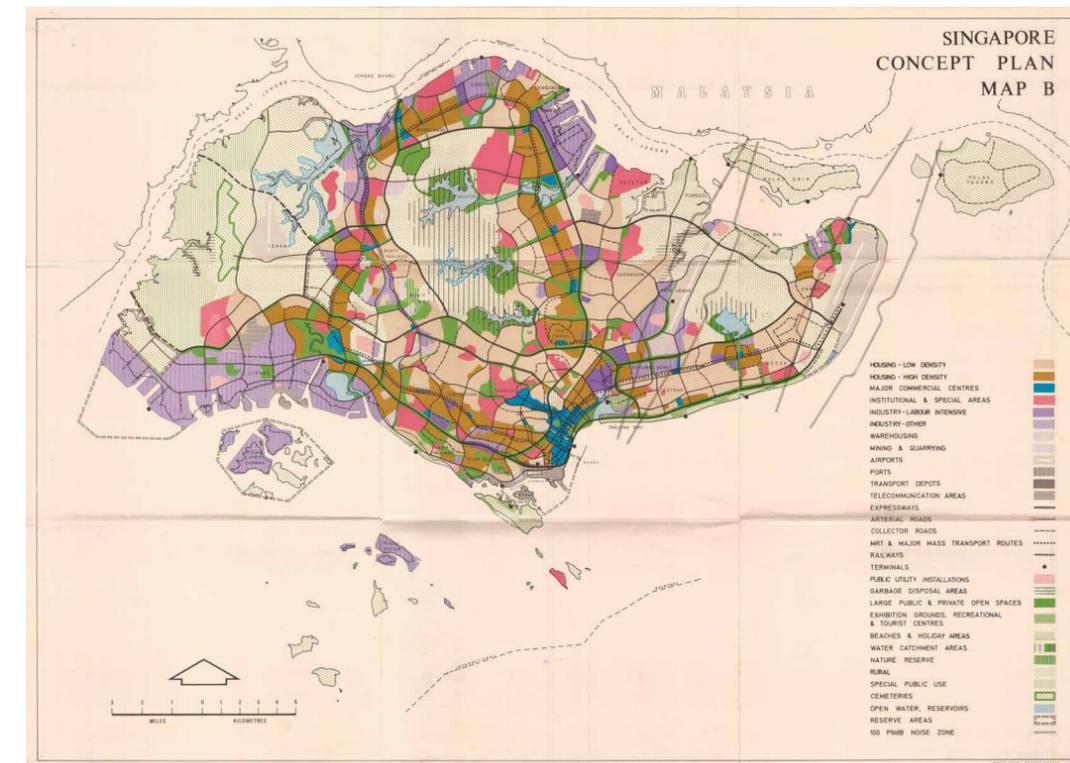
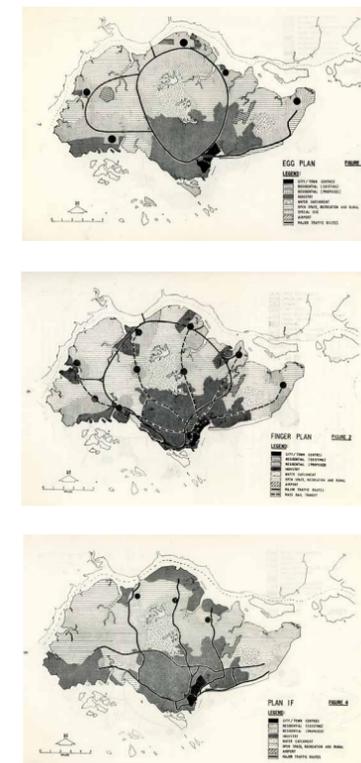
Singapore has no train networks? The international airport is not located at Changi? And everyone lives only in the north or south?

Behind the defining 1971 Concept Plan that has influenced the way we live, work and play today was the effort of close to 100 experts, professionals and government officers who thoroughly debated and explored a diverse range of ideas and plans between 1967 and 1969, with the help of the United Nations, to draw up the Concept Plan then.

This exercise about 50 years ago reflects the need for long-term planning and the value of partnerships over the years in exploring every possibility and idea in shaping and transforming Singapore's landscape.

The planning journey is captured in the Singapore City Gallery; the only gallery that features Singapore's planning efforts. Launched in January 1999, the gallery attracts more than 150,000 visitors in the recent years.

The 1971 Concept Plan is presented in "Mapping Singapore", a permanent addition to the gallery that traces Singapore's physical evolution over 100 years through maps, plans and models. As a long-term land-use plan that charts Singapore's physical development over 40 to 50 years, it is reviewed regularly to keep pace with changing needs.



Above | FARM envisioned the creation of different types of gardens on various floors based on the harvesting and flowering cycles throughout the year as a way of encouraging residents to stay active and engaged. Image credit: FARM.

Above | Ideas plans (three sketches on the left) explored "what ifs" in imagining the city prior to finalising the 1971 Concept Plan. From expressways to location of the airport at Changi, the plan has significantly shaped Singapore's cityscape today. Sources: The ideas plans were presented in the Planning Department Annual Report 1968 & 1969 while the Concept Plan 1971 was presented in the United Nations Urban Renewal & Development Project (part three) Report, 1971. All diagrams are not to scale and are for illustrative purposes only.

The 1971 Concept Plan guided the infrastructure that would facilitate economic growth and address the housing and basic social needs of the population. Key infrastructure planned and implemented included developing a new international airport at Changi, building up new towns around the Central Catchment and along the East-West corridor, developing the port, an expressway system and a mass rapid transit system.

On the significance of the plan, E.E. Peacock, the Senior Partner of Crooks, Mitchell, Peacock and Stewart, the United Nations consultant, commented in 1971: "It is human and it will always need careful updating, refining and management in order to keep it alive. But I do believe quite sincerely that it can be, if adopted and nurtured, the equal of any other administrative system of metropolitan planning in the world today."

**Explore the gallery**

Revamped in March 2019, the Singapore City Gallery has 11 thematic areas with 40 dynamic exhibits, featuring interactive and immersive exhibits that help visitors better grasp the nation's planning challenges and the innovative solutions found to tackle them. It also features the many hands that have helped shaped the city into what it is today.

- Watch an immersive show and discover hidden infrastructural networks and urban systems that make the city work
- Explore neighbourhoods and streetscapes focused on active mobility
- Tell us what makes up your ideal neighbourhood and see what others say
- Try your hand at redesigning Marina Bay's skyline and view original models of Marina Bay by renowned architects I.M. Pei and Kenzo Tange
- Learn the art and science of creating memorable and distinctive buildings
- Come up close to one of the largest architectural models of Singapore's Central Area



## Visiting the Singapore City Gallery

The Gallery offers free guided visits for the public to learn more about how we shape our city into a highly liveable, people-friendly and delightful home. Led by the URA volunteers, these community tours are held at 11.00am and 12.30pm on Tuesdays and Thursdays, and on the first and third Saturday of each month. Admission to the Gallery is free of charge. Web: [ura.gov.sg/gallery](http://ura.gov.sg/gallery)

**Address**  
 Singapore City Gallery  
 45 Maxwell Road  
 The URA Centre  
 Singapore 069118

**Opening hours**  
 Mondays to Saturdays: 9.00am to 5.00pm,  
 closed on Sundays and public holidays



# Runway for your imagination

Transform the Paya Lebar Airbase and its surroundings into a sustainable and liveable town in future – now you can play a part in a new ideas competition.



The Paya Lebar Airbase reflects Singapore's civil and military aviation history, being Singapore's second international airport from 1955 to 1981 and having served as the headquarters for the Singapore Airlines from 1972 to the 1980s.

Described as the finest airport in Asia operationally then, it reflected Singapore's post-war rapid development and modernisation efforts. Key features that have remained today are its 3.8 km runway and its former airport buildings including the terminal building, control tower and hangars. Currently used as a military airbase, the airbase will be relocated from the 2030s onwards.

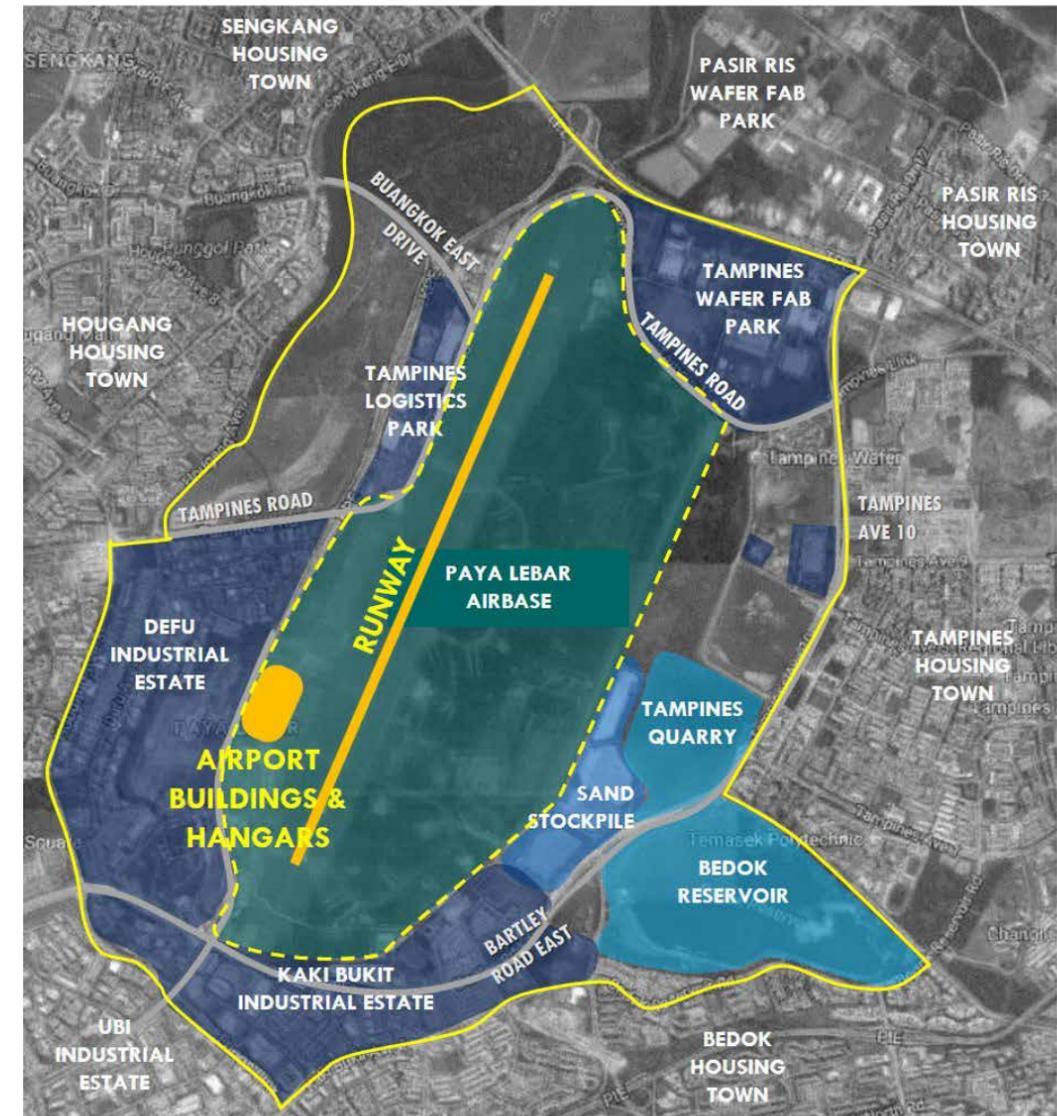
This opens up new possibilities in transforming the airbase and the surrounding industrial area progressively into a liveable and sustainable new town for the future, building upon its unique identity as a former airport and airbase.

## Ideas competition

A new ideas competition, "Runway for your Imagination", by URA in partnership with the Singapore Institute of Architects and the Singapore Institute of Planners, invites professionals, tertiary students and the community to envision the future of the area together. The competition is seeking submissions for one of the following three aspects:

- Conceptual Master Plan to transform the airbase and the surrounding industrial area into a highly liveable and sustainable town;
- ideas to rejuvenate the former airport building cluster; or
- ideas to transform part of the runway as community spaces.

Proposals should also consider ideas on how to retain and celebrate the area's rich aviation heritage, and how people want to live, work and play in future neighbourhoods.



## Draft Master Plan 2019: initial ideas

Prior to the ideas competition, the public had a chance to contribute their initial views and ideas for the future of the Paya Lebar Airbase area during the Draft Master Plan 2019 Review in March 2019.

A Quick Urban Analysis Kit (QUA-Kit) was developed by the Chair of Information Architecture at the Swiss Federal Institute of Technology (ETH Zurich) to enable the public to design any given urban area by adding and moving objects from a given palette. URA worked with the Institute to customise the web-based tool further to enable the public to easily design and add features over the runway area such

as housing, play fields, planting areas etc. The tool was available at the physical exhibition and online. The tool was also used by 120 pre-tertiary students at URA's annual Challenge for the Urban and Built Environment workshop in November 2019 in generating future possibilities and ideas for Paya Lebar Airbase as the study site.

*The "Runway for your Imagination" ideas competition is open from 31 Jan to 27 March 2020 to all members of the public including professionals (open category) and tertiary students (tertiary category). For more information about the competition, go to [www.go.gov.sg/runwayforyourimagination](http://www.go.gov.sg/runwayforyourimagination)*

# At a glance

We check out the latest events and happenings shaping the landscapes and neighbourhoods around us.

## Five stones

Inspired by childhood memories of playing five stones growing up, artist Twardzik-Ching Chor Leng has created a playful installation of large inflatables that were on display in different parts of Singapore. "I grew up playing five stones and remember it as a game that brought people together," shares Chor Leng.

Entitled "Five Stones", the installations that are up to six metres high, sought to ignite personal and collective memories around a simple child's play in the earlier days of Singapore. "I wanted to create a large-scale work that brought across the communal spirit of openness, inviting interactions with the artwork and amongst people," adds Chor Leng.

Commissioned by the National Art Council (NAC)'s Public Art Trust in commemoration of the Singapore Bicentennial, the installations have been roving in different parts of Singapore. Starting from November 2019 in Punggol, the installations moved to 10 other locations such as Jurong, Kampong Gelam and Marina Bay and culminated in the Civic District in January 2020 as part of the Singapore Art Week. On the response to the installations, Chor Ling is heartened. "The best moments for me is to see the interest and excitement the artwork has created. Grandparents are explaining the game to their grandchildren. And people are having fun playing with the huge stones," she says.

Twardzik-Ching Chor Leng has been practising Installation Art for more than 10 years. She believes that art can exist anywhere. Many of her public installations seek to actively engage spaces and people. NAC initiated the Public Art Trust in 2014 to bring art into everyday urban spaces through the regular commissioning of meaningful public art in public places.



## Tanjong Pagar pop-up installations

If you happen to be around the Tanjong Pagar, Duxton and Bukit Pasoh areas, check out five pop-up installations in various public spaces. These were first presented at the Tanjong Pagar Day Out on 23 November 2019. Created together with tertiary students who took part in the 2017 Nanyang Polytechnic MAD Conference and participants from the "My Ideas For Public Spaces: Pop-Ups" Competition in 2017, they demonstrate how simple pop-ups can transform spaces around us. This is part of URA's ongoing efforts to work with the community to enliven public spaces across the island.



Interested to start a project in a public space? Find out more about the Lively Places Programme



## Reimagining state-owned properties

Ever thought of transforming state-owned buildings into vibrant places for the community? We are inviting business owners, architects, developers and designers to submit proposals on new and creative interim uses for selected state properties and land under the "RSVP: Reinventing Spaces into Vibrant Places" programme, which was jointly launched by URA and the Singapore Land Authority in May 2019. RSVP aims to enliven the public realm by turning vacant spaces into delightful, loveable places that people can enjoy. Following the tender launch of the first property at 45 Sultan Gate, the second tender at 30 Maxwell Road is now open.



**When**  
Submit by 25 February 2020

**Web**  
[go.gov.sg/rsvp-programme](http://go.gov.sg/rsvp-programme)

## Master Plan 2019 gazetted

The Master Plan 2019 was gazetted on 27 November 2019. It is a statutory land use plan that guides the physical development of Singapore over the next 10 to 15 years. The gazette concludes the review of the Draft Master Plan 2019, which was exhibited at The URA Centre from March to June 2019. Over 25,000 people visited the exhibition and 110,000 visited the plans online. Feedback from stakeholders have contributed to refining the plans for key areas. The Master Plan 2019 is available online.

**Web** [www.ura.gov.sg/MP19](http://www.ura.gov.sg/MP19)



## Rejuvenate Bukit Timah Fire Station

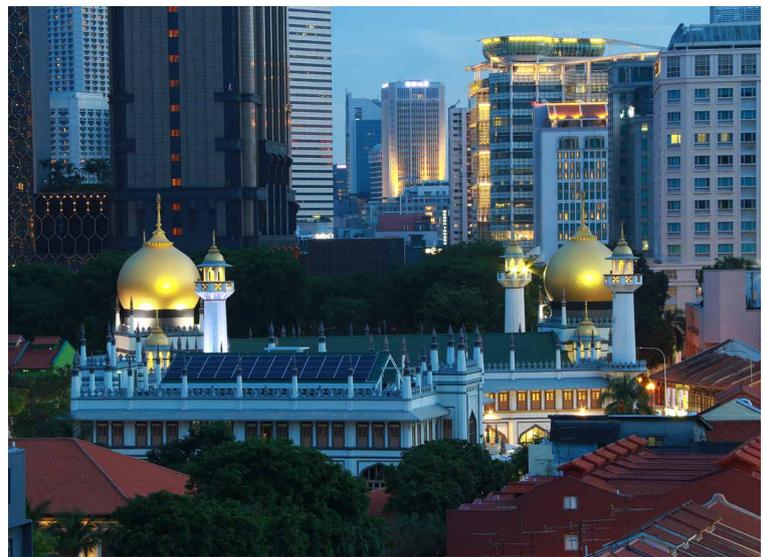
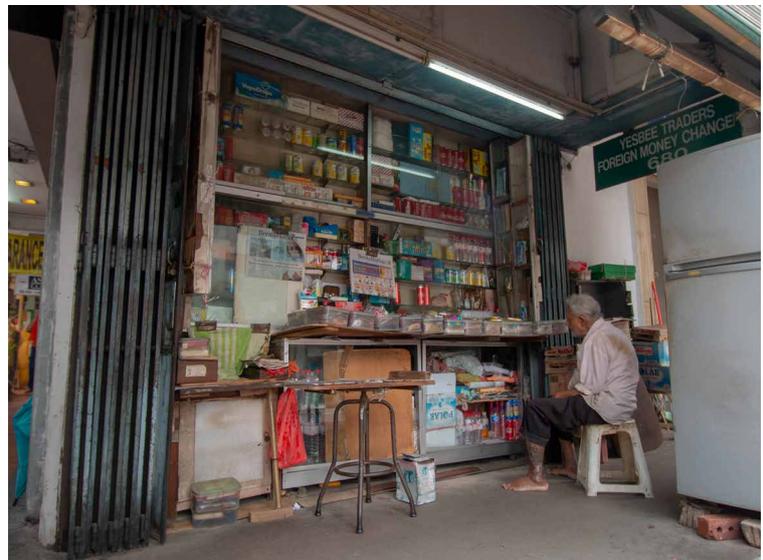
Give the historic Bukit Timah Fire Station a new lease of life. A sustainability-focused competition inviting expressions of interests was launched on 4 December 2019 for the conserved building and its lush green site. Located at the crossroads of the Bukit Batok Nature Reserve, Bukit Batok Nature Park and two recreational corridors – the Rail Corridor and the Coast-to-Coast trail, the competition seeks to attract proposals that can transform the site into a gateway community node for visitors of all ages and abilities to enjoy nature, heritage and adventure. This competition is part of the global C40 Cities Climate Leadership Group's "Reinventing Cities" competition, organised in collaboration with URA, Singapore Land Authority, National Parks Board and Building Construction Authority. The inclusion of Bukit Timah Fire Station will see Singapore as the first and only city in Asia to be taking part.

**When** Submit by 3 April 2020  
**Web** [www.c40reinventingcities.org](http://www.c40reinventingcities.org)

Above | The "Five Stones" installations in different parts of Singapore has encouraged greater interactions and bonding amongst people. The installation in the image at the bottom was on display at the Kebun Bahru Bird Singing Club in 2019. Image credits: National Arts Council.

Above | Tanjong Pagar pop-up installations: the sketch of the "Maze" by Indra Pramana from the "My Ideas For Public Space: Pop-Ups" Competition and the actual installation at Tras Link Park.

A selection of photographs capturing Kampong Gelam and its surroundings by students. Mentored by professional photographers, the students spent six months in 2019 exploring and documenting the many different facets of the historic area through their lens as part of a heritage photography initiative by URA in partnership with the National Youth Achievement Awards Young Photographers' Network. Find out what else students are doing to inspire new interest in heritage buildings and areas on page 28.



Above | Clockwise from the top left, photographs taken by students, Derek Chong, Tan Wei Lun, Sim Heng Ee and Lee Zhi Jie, show the many different facets of the historic Kampong Gelam.