

30 years of conservation in Singapore since 1989

30 personal reflections and stories



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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 heritage, our identity and our soul.

In remembering the 30 years and thinking about the future, we take a brief glimpse into the personal reflections and experiences of some of the individuals who wrestled with the unknown, walked the ground and opened up our worlds to new possibilities at poignant milestones.

We also step into the shoes of those whose lives and identities are intimately intertwined with our built heritage and what this means for them.

While we cannot comprehensively cover countless more individuals, stories and conservation milestones over 30 years, we hope this brief special supplement will serve as an inspiration for continued collective and personal contributions in shaping Singapore's conservation efforts.

All interviews have been edited and condensed for clarity.

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Top and bottom: the media briefing announcing the Conservation Master Plan in 1986 and 41 Emerald Hill, one of the winners of the 1994 Good Effort Award.

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“The history of a city is recorded not only in books, but also in its buildings. While the written word captures the evolution of events and beliefs, buildings embody lifestyles and aesthetic tastes, technology and crafts. Therefore old buildings are more than just bricks and mortar. Old townhouses and shops, temples and churches, schools and institutions, are more than utilitarian objects.

They also are a record of our ancestors’ aspirations and achievements. In Singapore, many of the old buildings embody the visual confluence of our multi-varied ethnic roots. While the majority need some face-lift, they never cease to delight our eyes and enhance the sense of time and place unique to our own city.

We must realise that photographs and words are no substitute for life-size forms and spaces. For one cannot walk into or around the buildings in these photographs. Meanwhile ageing artisans and their crafts vanish with the passage of time. Buildings demolished are history records gone. While some must make way for progress, some, we hope, will remain to link us with our past.”

S. Rajaratnam
Deputy Prime Minister (1980–1985)

First stirrings

1960s - 1970s

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.

There was no readily available space to build new offices in the city to support job creation. Valuable land that could be used for commercial development was instead taken up by run-down shophouses that were essentially housing slums¹.

The renewal efforts were focused on slum clearance, housing development and a comprehensive redevelopment of the Central Area of Singapore. The primary goal then was to transform the city into a modern centre for business, finance and tourism².

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, the first General Manager of the urban renewal unit in the Housing & Development Board (HDB) and Dr Liu Thai Ker, Chief Executive Officer of HDB and later URA recall working behind the scenes in influencing the path towards conservation.



Smith Street in 1974. Erik Lorange noted in his 1962 report that the conditions of majority of residential buildings in the Central Area were "poor to a frightening degree."

¹Pang, Alvin. (2016). Urban Redevelopment: From Urban Squalor to Global City, Centre for Liveable Cities.

²Singapore Institute of Architects. (2013). RUMAH 50: Review of urbanism, modern architecture & housing: 50 years of SIA 1963-2013, the story of the Singapore architectural profession. Singapore: SIA Press.

1963: Initial emphasis

The United Nations (UN) experts, Otto Koenigsberger, Charles Abrams and Susumu Kobe, identified conservation to be an “indispensable element” of urban renewal in their 1963 report.



Plan above:
A later United Nations (UN) team proposed for parts of Chinatown and “Arab Town” to be conserved as shown in their plan. © The UN Urban Renewal & Development Project Report, 1971.

Plan on left:
Erik Lorange proposed for urban renewal in the Central Area to be carried out on a precinct basis in his 1962 report, starting with N1 (part of Kampong Gelam) and S1 (part of Chinatown) areas. © Lorange Report, 1962.

Getting ready

Even in the midst of urgent urban renewal efforts in the 1960s, Alan Choe, the first General Manager of the Urban Renewal Unit had draft conservation plans in the drawer.

Alan Choe was the first architect-planner in the Housing & Development Board (HDB) when he joined in 1962. HDB was on a race against time to build 10,000 flats each year in the first five years. 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. He started as a one-man operation which later grew to 15 people when the unit became a department.

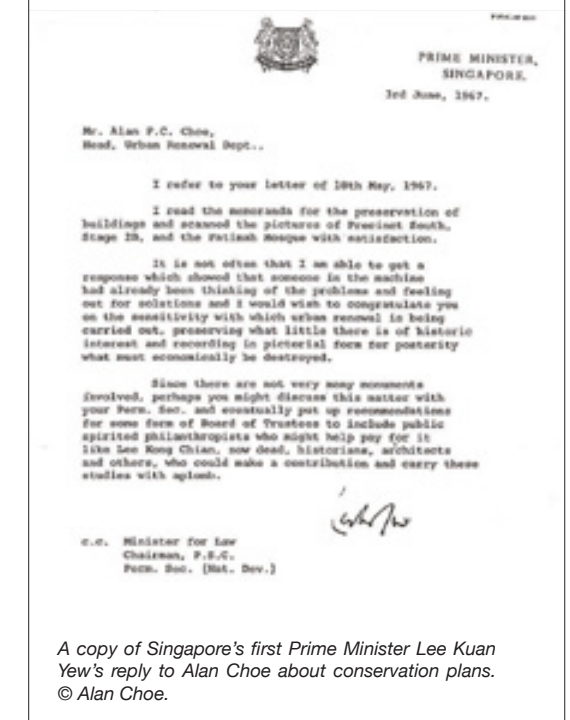
He worked with United Nations experts who were engaged to offer critical planning and other expertise in support of renewal efforts. Erik Lorange, a Norwegian town planner was tasked to assess if Singapore was ready for urban renewal in 1962. He did suggest that Singapore was ready and recommended that the Central Area be systematically redeveloped.

Erik also proposed to form another team of experts that was later engaged. Otto Koenigsberger, an urban planner, Charles Abrams, a legal and land expert and Susumu Kobe, an economist and traffic engineer (commonly referred to as the “KAK team”) came up with specific action programmes in 1963 to drive renewal efforts for the city centre.

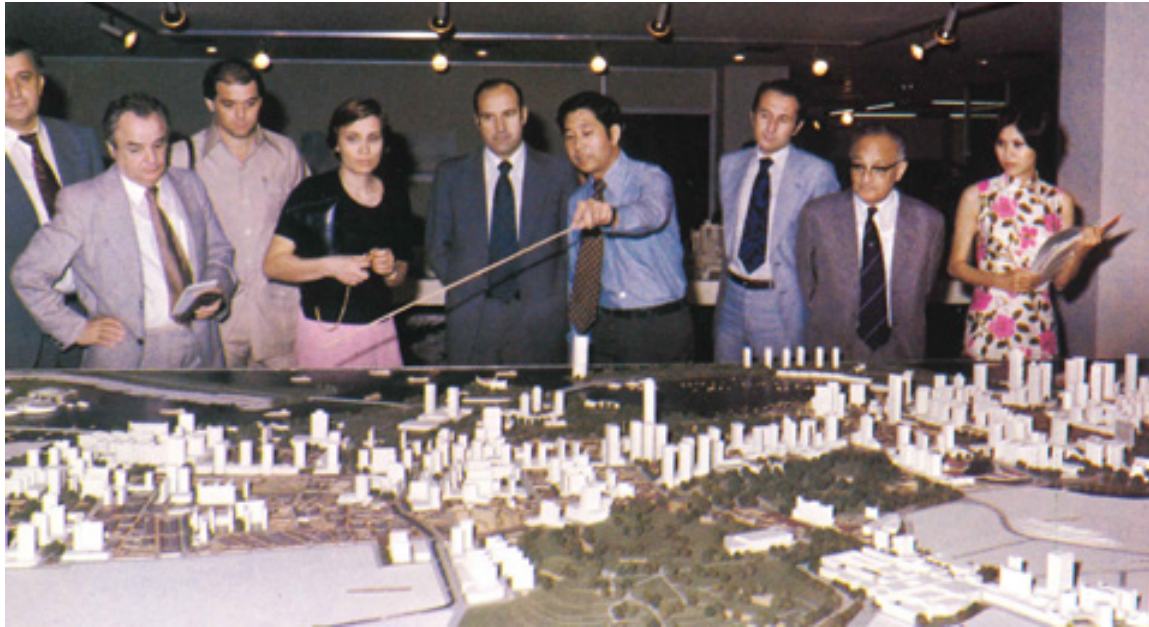
While renewal efforts elsewhere which began in the United States from 1949 onwards was about tearing down older parts of the city, Alan recognised that Singapore’s situation was unique. Thus, even while addressing practical needs, a range of smaller rehabilitation and conservation efforts took place and more extensive conservation plans were prepared behind the scenes.

1967: Early efforts

Even amidst urgent renewal efforts, planners had already begun identifying areas and buildings for conservation. A letter by Singapore’s first Prime Minister Lee Kuan Yew to the then General Manager of URA, Alan Choe, expressed his appreciation for such efforts.



A copy of Singapore’s first Prime Minister Lee Kuan Yew’s reply to Alan Choe about conservation plans. © Alan Choe.



Alan Choe (in the middle with the pointer stick) hosting foreign guests in 1978.

Can you describe how the city was like in the 1960s, especially the housing situation? How did the Rent Control Act³ add to the problem?

Alan: The problem of the bad housing shortage in the 1960s was aggravated by the fact that immediately after the Second World War; there was a great shortage of housing. A lot of the people went out to Malaysia, Johor and elsewhere to escape the occupation of the Japanese. So, after the war, they came back. But when they came back, there was a great shortage of housing.

So the British government decided to impose the Rent Control Act. It was the right move at that time but it served a different purpose. Rent control was to prevent people from increasing the rent. The owners of housing cannot increase the rent; so with that, there is no urge for them to do any improvement. That aggravated the degradation of the housing; all the housing became slums overnight.

How did the focus move from public housing to urban renewal in the Central Area?

Alan: Soon after the government achieved the public housing target, the team realised that you cannot improve total public housing without clearing the Central Area slums. It was directed that we should form an urban renewal unit in HDB.

So I started as a one-man show in HDB. Through the UNDP (United Nations Development Programme), the government appointed Erik Lorange, a very nice chap. He came in, his objective was to try and tell the government whether Singapore was ready for

³The Rent Control Act was introduced in 1947 to restrict a landlord's right to increase the rent or to remove the tenant from a rent controlled property. This was to protect tenants from unscrupulous landlords during the housing shortage of the post-war years.

urban renewal or not. He came down, one-to-one, I was almost learning everything from him. Through him, I was able to walk every street in the Central Area.

What were your thoughts about urban renewal and preservation then?

Alan: I was very fortunate that in the course of doing a study on urban renewal, I went to many cities to see urban renewal. I have seen the state of urban renewal where they literally tear down all the old parts of the city.

And I realised for Singapore, we have all the more reasons to preserve because we have so little. You can only preserve core areas where you think it fits in with the plan and where you think it has a role to play. If you preserve everything, then there is no urban renewal.

What were some of the areas identified for conservation then and why?

Alan: 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.

When we talked about the conservation of an area, we had immediately thought in terms of our rich cultural heritage which can also add to the tourist attraction that Singapore has to offer. It will give visitors a chance and also young Singaporeans a taste of what Singapore was like in the early days.

You spent a lot of time walking around the city centre with Erik Lorange. What stood out to you in those walks?

Alan: Through our daily walks, not only did I get to know every nook and corner, I was awakened to the beauty and charm in some old buildings and sites.

To the initial opponents to conservation, what were your thoughts then?

Alan: The counter argument I offer is that it is because the very reason we have so few that we have to be even more concerned and conscious about preserving what little we have. Because if we just let go, we have nothing to conserve.

What is one thing you are proud of?

Alan: One of my greatest pride was that, once the then Prime Minister Lee Kuan Yew asked whether we have plans for the preservation of old buildings, the next day, I sent him my documentation, my plans for the conservation of Chinatown, Little India and also the Serangoon area. I remember the next day; he wrote me a nice letter, which I kept till today.

Responses to this interview have been taken from three sources with permission from Alan Choe⁴.

⁴The three sources are:

1. Extract from Low Eng Khim's *Oral history interview* with Alan Choe, 20 May 1987, Accession No. 001891, courtesy of National Archives of Singapore.
2. URA, Architectural Heritage Singapore (Singapore: URA, 2015), Pg 4.
3. Choe, Alan. "Interview by CLC", Centre for Liveable Cities, Ministry of National Development, 26 September 2014, transcript, accession number CLC/023/2014/005.

1966: SPUR voices

One of the notable groups that advocated for conservation was the Singapore Planning and Urban Research Group (SPUR) led by architects William Lim, Tay Kheng Soon, Chew Weng Kong, Koh Seow Chuan and Chan Sau Yan. SPUR was de-registered as a society in 1975.



As part of SPUR, William Lim had envisioned a high-density and liveable city in a 1966 essay. © SPUR 1965-67.

1973: Monuments identified

Following the setup of the Preservation Monuments Board in 1971, the first eight national monuments were identified: Thong Chai Medical Institution, Armenian Church, St Andrew's Cathedral, Telok Ayer Market, Thian Hock Keng Temple, Sri Mariamman Temple, Hajiah Fatimah Mosque and the Cathedral of the Good Shepherd.

1977: Rehabilitation projects

Before the conservation of historic districts, smaller rehabilitation projects were carried out (by URA and other agencies like the Singapore Tourism Promotion Board) in the 1970s and 1980s at Murray Street, Cuppage Terrace, Tudor Court and Emerald Hill.



Singapore's first eight national monuments.

You need champions

Reflecting on early influences, memorable moments and turning points for conservation, “nothing happens by chance”, says Dr Liu Thai Ker, who was the CEO of the Housing & Development Board and later URA.

Architect-Planner 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). Considered the “Architect of Modern Singapore”, Thai Ker made a significant impact on Singapore’s urban landscape where he oversaw the completion of over half a million homes and a major revision of the Concept Plan in 1991.

An advocate for conservation, Thai Ker worked behind the scenes in influencing the path towards conservation and contributed to the development of the first Conservation Master Plan for Singapore in 1989.

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 also 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 your younger days, what were your thoughts about historical buildings?

Thai Ker: I was very much influenced by the time I spent in Australia and the United States, studying and working there between the age of 17 to 31. I was overwhelmed by the modern and historical buildings in their cities and was thus interested to understand their attitudes towards historical buildings and how they might dignify a city.

Even though historical buildings in Singapore are mostly less than 150 years old, every city’s historical buildings are unique. While Penang, Malacca, Xiamen and other cities have their own shophouses, they are slightly different from one another. Singapore shophouses are characterised by rich colour, so we must preserve them.

Even though you had to build HDB flats rapidly in the early years, your heart was also focused on conservation. What was one moment that you recall where you quietly pushed for it behind the scenes?

Thai Ker: I remember buying time to save Little India from demolition. When the instruction came to build HDB flats in the Little India area, I was concerned that too many historical buildings would be affected. We carried out a thorough survey of the area, of what should be conserved and what should not. Unlike other projects, I told my staff to take all the time they needed.

After the survey was done, we had to show some progress. So, we identified a street block for redevelopment. The existing buildings there were the least worthwhile to preserve. And that is the site of Rowell Court today.

After we decided on the site to build the HDB flats, we went for buildings of 24 floors which would require a relatively long time to build. By the time Rowell Court was built, the tide had turned. The people and government of Singapore had grown to appreciate our historical buildings. The mood for preserving them became prevalent, and few buildings were demolished after that.

Why did you call 9 Neil Road a “Monument of all Monuments”?

Thai Ker: Until the mid or late 1970s, shophouses were considered slums. Their facades had blackened, being overgrown with algae. But one day, a few engineers from one of the French construction companies that we worked with to build prefabricated HDB flats came to me and lamented about the loss of historical buildings. They wanted me to help them select a shophouse for them to spend a few thousand dollars to repaint its façade to show how beautiful it could really be.

So we picked 9 Neil Road as a showcase. After it was repainted, the people and government officials of Singapore suddenly realised that our own shophouses were actually architectural gems. I made it a point to walk into that shophouse. Inside, it was a world of darkness (as it was not restored yet). But outside, the facade had been transformed to become so beautiful. That simple act awakened us to the beauty of shophouses.

You saw the late 1970s as a turning point for conservation.

Thai Ker: I remember around 1979, we had the first financial crisis since Singapore’s independence in 1965. The Economic Development Board convened a meeting to discuss how to move forward from the crisis. One of the recommendations made at this meeting was to develop tourism. And part of that effort was to protect historical buildings.

“Even though the historical buildings in Singapore are mostly less than 150 years old, but every city’s historical buildings are unique... Singapore’s shophouses are characterised by rich colour, so we must preserve them.”



The façade of 9 Neil Road before and after restoration in the 1980s.



A top view showing parts of Chinatown in the 1970s.

Then at a separate meeting soon after, chaired by Dr Tony Tan, the then Minister for Trade and Industry, I was asked to brief on areas to be earmarked for conservation. At the end of the meeting, the Minister asked me how I felt about protecting historical buildings after having been used to tearing them down. I told him that I had been waiting for the last 10 years for just that very moment and was delighted as I believed that that meeting was to become an important turning point for conservation.

The 1989 Conservation Master Plan was a defining moment for conservation.

Thai Ker: In developing the Conservation Master Plan, we identified buildings which were 50 years old and more 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 thus able to convince our government to conserve so much. My colleagues and I in URA cared a lot about historical buildings. So, when we identified them for conservation, we wanted to make sure that they were conserved as real antiques by adhering to the 10 principles of restoration that we developed after extensive study of conservation practices in other cities.

The fact that we have been able to conserve so many buildings today was also thanks to an army of ladies in URA then, headed by architect Koh-Lim Wen Gin, who were all passionate and dedicated to conservation.

What is one lesson to take away from the early efforts?

Thai Ker: When rent control was gradually lifted from 1988, building owners responded positively. Our then Minister Mr Dhanabalan seized the opportunity to come up with a brilliant idea, which was for the Singapore government to help support building owners who had serious plans to conserve their buildings by prioritising the resettlement of their tenants to HDB flats.

I remember the first owner to respond to this could not afford to restore his shophouse. So, he sold his property to another owner who could. It was sold for about S\$120,000 then and the new owner spent around S\$350,000 to restore it. A few months later, this new owner resold the newly restored shophouse for S\$1.3 million, which generated a lot of interest for other owners to also restore their old buildings.

For the success of this push for conservation, there had to have been a series of champions and clever strategies. You had to have champions pushing for a master plan for conservation as well as strategies to complement and support it. The lifting of rent control was used for building owners to have the incentive to restore their buildings. However, the rent control could not have been lifted had there not been enough HDB flats available for resettlement. After conservation, the value of these properties went up, creating a stronger desire for conservation and so on.

This thus illustrates the key lesson for conservation that nothing “happens by chance”. Everything is interconnected and you have to have champions with passion, conviction and strategies to make things happen.



The Queen and the Duke of Edinburgh, Prince Philip, visited 9 Neil Road in 1989. She was “delighted to find that, in the midst of the relentless rise of new buildings in Singapore, its past was being so carefully nurtured.” Dr Liu Thai Ker is on the far left, with Chairman of URA then, Professor Khoo Cheng Lim on his right.

Laying the foundation

1980s

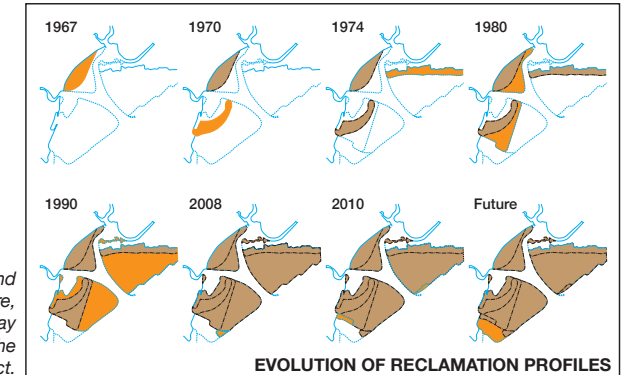
By the 1980s, the context had shifted where conservation could be considered on a larger scale.

The Central Area had evolved from a traditional, mixed-used urban core to a predominantly commercial hub with modern developments.

The pressure for redevelopment had subsided. Basic urban problems were well addressed. Historic districts in the city centre could be kept intact with large scale reclamation in Marina Bay providing sufficient land to support the future expansion of the Central Business District. Tourism became more important for economic growth with the need to enhance tourist facilities in historic districts.

The focus also shifted to enhancing quality and retaining unique and desirable characteristics of the urban environment. People travelled more and had a stronger awareness and demand for the city to retain its heritage and identity.

In making the case for conservation, young architect Koh-Lim Wen Gin and Khoo Teng Chye, both engineer and corporate secretary in URA then and Pamela Lee, the Singapore Tourism Board head of product development then, recall championing hard and managing the many moving parts. French architect Didier Repellin also remembers his early restoration works in Singapore, which made a deep impact.



An overview in 1975 showing the first phase of land reclamation, known as Marina South and Marina Centre, to support the construction of the East Coast Parkway (ECP). Later land reclamation phases focused on the extension of the Central Business District.



1985: Central Area Structure Plan

With a stronger focus on the quality of the physical built form in the Central Area and balancing intensification (around areas served by the upcoming MRT system) with green spaces and low-rise historic districts, URA's Central Area Structure Plan created opportunities for the entire areas of Chinatown, Little India and Kampong Gelam to be conserved.

1989: Conservation Master Plan

After a three-year effort to put together the Conservation Master Plan, it was unveiled in 1986. 10 areas were eventually gazetted for conservation in 1989 covering 3,200 shophouses - 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 conservations efforts carried out over 30 years. The URA also became the national conservation authority.



The Conservation Master Plan was part of the Central Area Structure Plan shown here that identifies entire historic districts and major green spaces together with areas for more intensive development.

Making the case

From sketching ideas on paper, to doing extensive archival research, crunching numbers and persuading people – it took seven years to make the case for conservation.

Koh-Lim Wen Gin joined URA in 1974 as a young architect drawn to the ambitious effort to transform the city centre. She was instrumental in leading the crucial conservation efforts on a large scale. Her first assignment given to her by Alan Choe was to draw the reclamation profile of Marina Bay. The opportunity to conserve the historic districts in the city centre came when plans to build the Mass Rapid Transit (MRT) system was announced in May 1982. She had just come back from maternity leave in September 1982 and was appointed to head a small urban design team.

The announcement to proceed with the building of the MRT network offered the chance for the team to initiate a comprehensive review of the Central Area which led to the development of the Central Area Structure Plan in 1985, a defining plan that provided a framework for sustainable development in the city centre. It also clearly identified the need to conserve the low-rise historic districts as a whole while balancing this with denser and more high-rise developments around the MRT stations.

It took seven years to make the case for conservation a reality on a more comprehensive scale.



Koh-Lim Wen Gin (standing in the middle) in discussion with staff on the plans for the Central Area with the decision to proceed with the building of the MRT network in 1982.

You lived in a shophouse for a short while and had some early encounters of the historic districts then.

Wen Gin: I remember as a kid, I would follow my mother to Chinatown’s wet market to buy fresh produce and to Arab Street to buy textile. I remember walking past Sago Street lined with death houses with great fear. My impression then of these places was that they were fascinating but were messy and smelly at times. I also lived in a shophouse along Orchard Road and had joined my younger sister in a school at Mount Sophia. I remember walking to the school through the Istana.

What were your thoughts then when reviewing the Central Area?

Wen Gin: When we looked at the city centre, we asked ourselves, can you imagine if we tear down all these old historic areas where it has its charm and historical roots and give you a sense of identity and history. And you just build high-rise glass boxes, imagine they are all wiped out today and in place they are all glass boxes, Singapore will be a city without soul, without history and without feeling. The younger generation will have to go to a library to turn the pages and know what it was like then.

At that time, we also visited other cities and it made us think that cities may begin to look alike if everything was high-rise and modern.

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. And also when you do a city plan, there should be a layering effect. You do not just build in every square foot high-rise blocks where there is no sense of space, vista, urban window or certain vantage points where you can comprehend the beauty of the city.

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. Prior to the early 1980s, there were attempts to conserve these heritage areas but it was done on a piecemeal basis such as at Murray Street or Cuppage Terrace.

Tell us more about the Central Area Structure Plan.

Wen Gin: In the plan, with the MRT network determined, we recommended suitable corridors along the MRT routes and around stations which could have high-rise and high-density developments. This allowed us to be able to conserve or retain significant districts such as the Civic District, Singapore River, Chinatown, Little India, Kampong Gelam and hill parks such as Fort Canning Hill and Pearl’s Hill.

They are what we call the lungs of the city. They are low-rise. They naturally serve as lungs of the city. In a way, this is where Singapore started its first developments. And we felt that they should be conserved on an area basis. The plan also envisaged the extension of the downtown core, expanding the Central Business District into the reclaimed land at Marina Bay.

How did you address the initial scepticism in the early years?

Wen Gin: Everybody looked at us and say, all these crummy looking buildings about to collapse, why are you advocating we should conserve them? We had to present our argument and champion very hard. What we did was we restored one of the shophouses at Neil Road over three months as a demonstration project to show what it was and how it can become. And why it is very liveable. If you design and build thoughtfully, buildings can be very liveable and adaptable for whatever use you are going to put in it. So we demonstrated how and why. We worked with the media to write feature articles almost every week to impress upon everyone why you should not be demolishing, why you should restore, how you restore and so on.

We staged various exhibitions, in 1986, the first major one on the Conservation Master Plan (to conserve 10 historic districts) to get public buy-in and also exhibited conservation guidelines in 1988 including publishing a set of conservation manuals for each of the historic districts to raise awareness and understanding on how we can maintain and enhance our historic buildings. When the 10 historic districts were gazetted for conservation in 1989, our photographer walked every street to capture each shophouse and these contributed to developing a set of façade guidelines.

For the conserved areas beyond the historic districts, what was one major challenge in balancing the old and new?

Wen Gin: We knew that it would be very difficult to obtain approval to conserve these areas in the secondary settlements outside of the city centre as they are located immediately adjacent to new high-rise developments. The loss of potential became an issue. If we push for full conservation, we may end up losing the whole lot.

We worked long hours, brainstormed and studied the details and came up with a creative solution of an integrated old and new approach.

This approach requires only the front main building to be conserved while the rear service block together with the service yard can be demolished and redeveloped higher such that it does not compromise the scale of the main building that is to be conserved and as seen from the main street. By doing so, we were able to retain the charming streetscape and the owners were able to achieve the allowable floor area.

You have stayed in URA for 34 years. What has kept you going?

Wen Gin: You have to first believe in what you can do and what you are doing. If you have the belief, the confidence and you have the passion, even you get a knock on your head, you probably just cry for one night. The next morning, you get up and say, hey, I am going to move again.

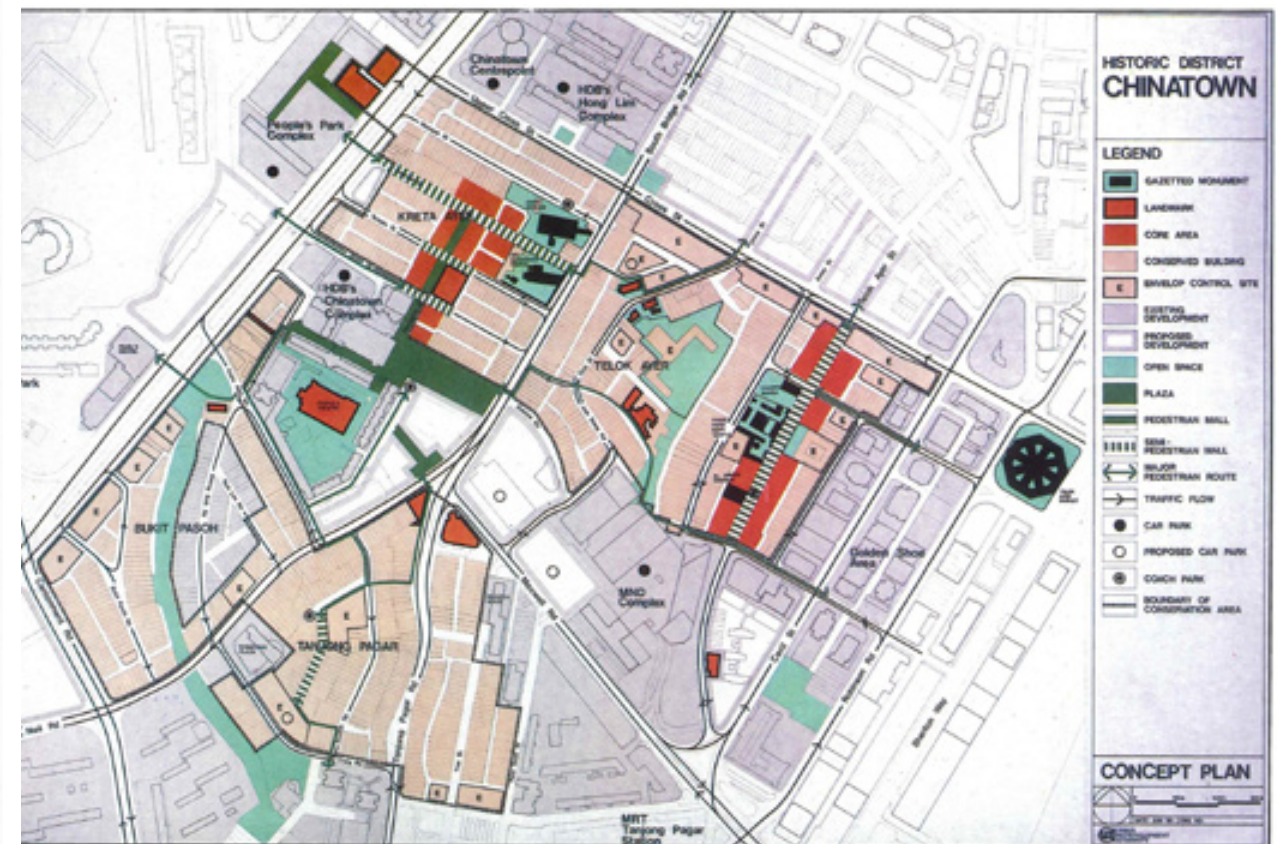
You need perseverance. If you do not have perseverance, it will be very easy to say, forget it, I change job. Also, you must be able to stay

long enough in the job to do all these things and to see the results. Because when you are able to see the results of the effort you put in, you get that sense of satisfaction. I was fortunate that throughout my 34-year career, my team members were all very passionate. Together, we worked hard and long hours to achieve our goals to transform Singapore into a global city of excellence.

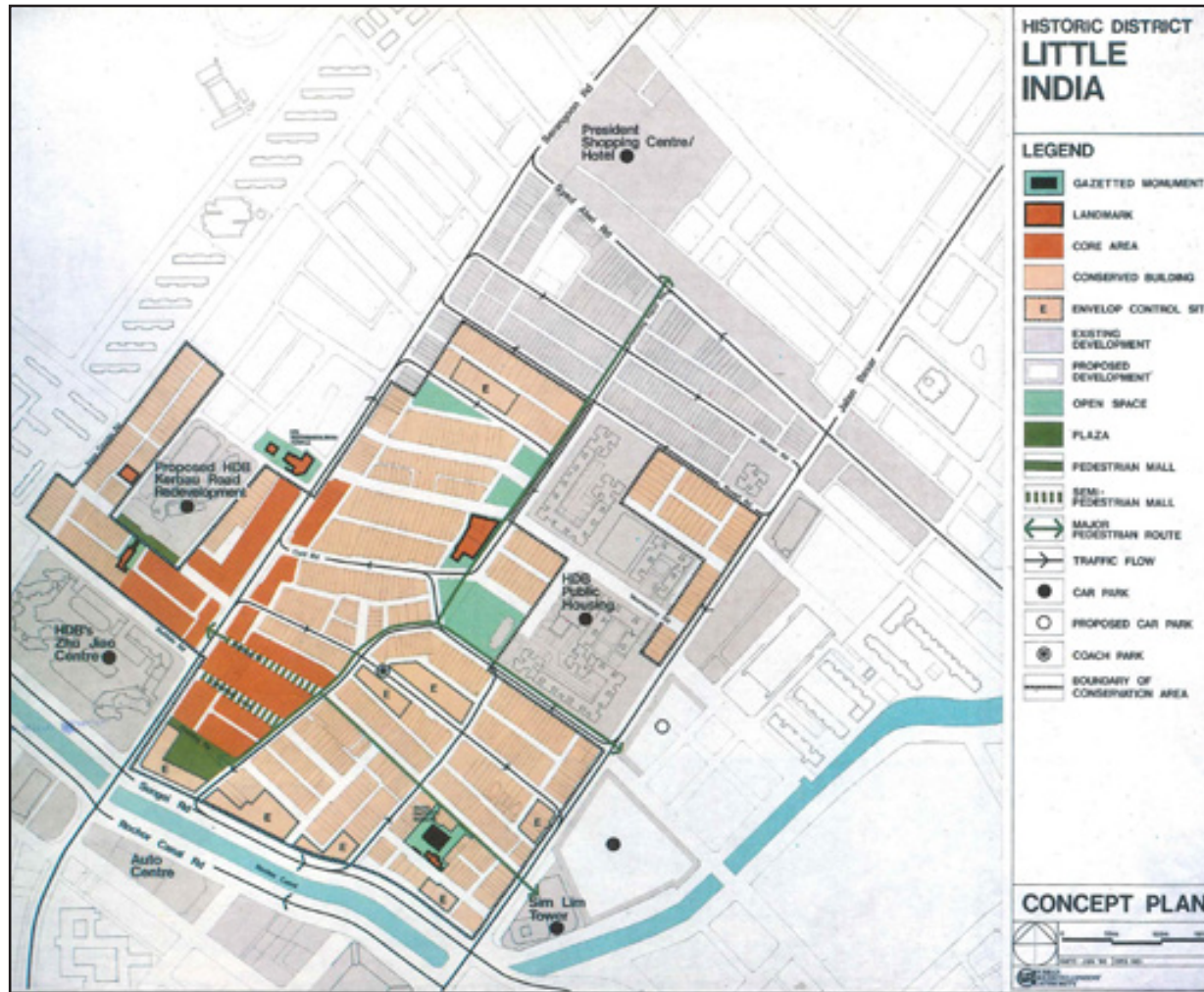
“Everybody looked at us and say, all these crummy looking buildings about to collapse, why are you advocating we should conserve them? We had to present our argument and champion very hard.”

THOUGHTS REFLECTED DURING THE PROJECT TOUR IN AMERICA FROM 28 SEP 85 TO 3 NOV 85

WASHINGTON DC axes, vistas, monuments plazas, formal parks, 100'-0" - 130'-0" height control	MARINA SOUTH? NEW CITY.
INNER HARBOUR, BALTIMORE size of water body 400'x800' promenade 36'-0" wide simple paving open space bollard, steps, jetty floating pontoon pipes & canvas/vingh for shelter at jetty	MARINA BAY?
ALEXANDRIA	CLARKE QUAY? important to retain some warehouses/shophouses as per original interior
HARPER'S FERRY	FORT CANNING PARK?
CHICAGO Architecture Frank Lloyd Wright Religious buildings in the air	temple, churches, mosque?
SAVANNAH squares (open space) } trust lots } wards house lots }	MARINA SOUTH/MARINA EAST residential town HDB?
DENVER 16th streetmall free shutter services university campus	ORCHARD ROAD? North Bridge Road South Bridge Road Victoria Street Beach Road
SAN FRANCISCO	
SEATTLE Pike Place Market Pioneer Square	
NEW ORLEANS french quarter Jaxxon Brewery	CHINATOWN/LITTLE INDIA?



Personal notes by Koh-Lim Wen Gin from a study trip in 1985 to American cities and the Concept Plan for Chinatown produced as part of the conservation manual series for Chinatown, Little India and Kampong Gelam in July 1988.



The concept plans for Little India and Kampong Gelam as part of the manual series published in 1988.



Chinatown in 1974 showing that a large part of it can be kept because of the land reclamation of Marina Bay as shown in the background at the top.

Moving parts

In translating the vision of the conservation strategy into reality, there were many moving parts that had to be managed.

Behind the outcomes of beautiful rows of shophouses and distinctive streetscapes today, there were many intricate details that had to be wrestled with.

From setting up a national conservation authority, to addressing how Singapore could afford to conserve, making conservation economically viable and poring over details such as whether to put up barricades at Boat Quay, there were many moving parts that had to be managed. It was about striking the right balance in managing trade-offs and finding creative ways to have both the old and the new.

Khoo Teng Chye played a crucial role in the 1980s and 1990s in seeing to some of the details, in coordinating the implementation of various conservation plans and in strengthening the case for conservation. He was an engineer when he first joined URA in 1976 and became the Chief Executive Officer and Chief Planner of URA from 1992 to 1996.

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 which was not necessarily the norm. Conservation was viewed as a critical part of the city's fabric. 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, a major argument for why we could afford conservation on a larger scale was because 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.

It was also important to establish a national authority for conservation. It helped that URA was both the planning and the conservation authority which facilitated the integration of conservation plans within the larger areas and implementation from plans to reality to be carried out more seamlessly.

URA was not just a passive regulator and planner but also had a development arm then where they could proactively implement demonstration projects which was important in the early years to show how the conservation of properties could work.

In making conservation viable, what were some of the moving parts that had to be managed?

Teng Chye: At one level, we had to go out to survey thousands of buildings, do the necessary documentation and develop the guidelines. On another level, we had to ensure that the conservation guidelines had to be workable and acceptable to various agencies. For example, there were fire safety concerns for the conserved buildings that had to be addressed. Legislation had to be in place to make URA the conservation authority and to support conservation efforts.

We also had to think about how to incentivise the private sector for conserved properties to be attractive to them economically. This included doing a lot of calculations and number crunching to show how investments to restore the conserved buildings could yield good rate of returns and value for property owners. This encouraged property owners to restore shophouses on their own and some of the successful ones can be seen along Telok Ayer and Amoy Streets for example.

Efforts were also made to take care of the districts as a whole by putting in place essential infrastructure such as the sewerage system and electricity, improving the streetscape, and seeing to details like the street furniture.

You had an interesting experience about putting up barricades at Boat Quay.

Teng Chye: It was a question of whether we should put up barricades along the steps flanking Boat Quay by the Singapore River. The steps are a part of our heritage where coolies used to step off in moving the goods from the boats to the warehouses. Many of the tenants in the Boat Quay area wanted to retain the steps as they are without barriers. People can actually walk along the river and go down the steps to get closer to the water.

But there was another group that felt that not having the barricades was not safe. It became an issue that was debated about. In the end, we compromised by creating a simple capstan with chains along the river. This is one of the many examples of various dilemmas and challenges that we managed. It was about how we could find ways to accommodate the differing views while keeping to fundamental principles.

Looking ahead, how do you see the focus of conservation evolving?

Teng Chye: Conservation should not be viewed in isolation. We should think about it as an approach to urban renewal. What is it that makes a city a city? What is it that defines the urban fabric of a city? It is not just about the buildings, it is also about the roads, infrastructure and the bridges.

A city has to constantly renew and revitalise itself. But in the process of renewing, you do want to keep parts of the old so that there is a sense of continuity. To me, moving forward, it is not just about conserving this building or that building but the approach should look at areas and places as part of the overall urban renewal strategy.

1987: Showing potential

The restoration of 32 shophouses along Tanjong Pagar, Neil and Duxton Roads in Chinatown was the first larger scale restoration work initiated for historic districts to demonstrate how old buildings could be restored well and be commercially viable.

1988: Rent control lifted

The rent control was gradually lifted in phases for areas intended for conservation, removing the impediment that held back owners of shophouses from investing in their properties. It was introduced after World War II to protect the city's poor in keeping rents low. While this created lesser incentives for landlords to maintain the old buildings, it helped to prevent them from being demolished.



Top and bottom: some of the 32 out of 220 shophouses in Tanjong Pagar being restored by URA in May 1987 with 9 Neil Road (in the middle) completed as a "show house" to demonstrate the quality of restoration and another 38 shophouses were launched for sale by tender (Phase 2A) in August 1987.

The tourism angle

The tourism agenda helped support the conservation of Singapore's historic districts but the real agenda was for Singaporeans and generations to come.

Writers Justin Zhuang and Serene Tng

Pamelia Lee came to Singapore in 1966 when she married a Singaporean. A fourth generation American Chinese born in Hawaii, she already valued tourism at a young age.

Her first experience of old Singapore during a short visit in 1963 left a deep impression, which influenced her 15 years later when she joined the Singapore Tourism Promotion Board then (STPB was set up in 1964 and is today's Singapore Tourism Board) in 1978.

She spent her early years from 1978 to 1984 marketing Singapore overseas as a destination and oversaw Singapore's advertising campaigns.

She saw the mid-1980s as a major turning point for both tourism and conservation. Leading up to this, the economy was slowing down. New hotels were built from the 1970s but there were no new tourist attractions added.

Singapore's charm had diminished as "rows and rows of shophouses..were lost", she shared in her presentation to British Parliamentarians in 1987.

In response to the crisis and recognising the need to invest in tourism as a key economic driver, the government announced the Tourism Product Development Plan in 1986, backed by a one billion dollar budget for tourism development.

This resulted in the revitalisation of Singapore's tourism products that included Sentosa, the Southern Islands, Botanic Gardens, Fort Canning Park, Jurong Bird Park, Night Safari and the conservation of buildings and entire historic districts.

This significant shift riding on tourism gave Pamelia a chance to "help save Singapore's historic districts, a move that...would go beyond the decade, deep into the future."

Tourism was a useful vehicle for our national conservation effort, but conservation was and is really for the benefit of Singaporeans, says Pamelia, "to make our home, Singapore, unique, identifiable and befitting to our Asian lifestyle and tropical environment".

1986: Tourism Master Plan

The Singapore Tourism Promotion Board shared the first tourism master plan with a commitment of S\$1 billion to support the efforts. Conservation and revitalisation of selected historic areas were some of the key aspects of the plan.



Telok Ayer Street in 1979.



Top and bottom: Temple Street and a top view of Kampong Gelam in 1985.

You had a love for tourism at a young age and saw Singapore's tourism potential.

Pamelia: Coming from Hawaii and having travelled around the world for a whole school year at the age of twenty, tourism seemed a very natural choice. I loved being a tourist and I loved imagining tourism concepts. Singapore's full tourism potential was an unknown factor at the time.

But it was obvious to me that although Singapore is so small in terms of physical size, yet it is so blessed. It is blessed because it sits strategically on the Southeast Asian sea route with Europe and the Middle East to the West and North Asia and America to the East. It is blessed because it lies within a region rich in tin, timber and rubber. And it is blessed because it sits in the middle of a large tourism generating area.

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

Pamelia: Tourists will not travel half way around the world to see that which they can easily find at home. Singaporeans can easily have an international city that looks like any other developed city in the world. Therefore, if we are to be unique with special areas to visit and come all the way to see, the value of our historical areas must not only be recognised but optimised as well.

We are proud of our historic areas (Chinatown, Little India, Kampong Gelam and our Colonial hub) because they are genuine historic nodes. Each zone is vibrant in a different way, and each zone holds a special cache of memories. The soul of these places did not materialise

overnight. 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.

What were your thoughts about emphasising the importance of good conservation then?

Pamelia: The challenge facing us then was to restore, change and infill while maintaining the original integrity of the historic areas. Good conservation meant keeping as much of a building's patina as possible and ensuring new additions that did not overwhelm the original character of the building. Good conservation in my opinion should be subtle, respectful and timeless.

In encouraging quality restoration work then, I pushed for the cultivation of a common language of conservation. There was also a need to remind building professionals and owners that our old buildings do not belong to us alone – they belong to future generations who deserve to know the original character of our buildings, not just the façade.

The government's plan for the conservation of historic districts was focused on the hardware. The software aspect was left to market forces.

Pamelia: In preserving and revitalising these areas, we cannot stop the clock. The original historical areas developed out of decades of human ingenuity, need for practical solutions and enterprise, thus these preserved historical areas should be allowed to evolve over time.



Pamela Lee (in blue) at the "Action Plan for Conservation" exhibition in 1988, sharing the conservation guidelines for the three historic districts.

You had a hand in various restoration projects then. For CHIJMES, you fought to keep the wall.

Pamela: To fully appreciate CHIJMES (formerly a Catholic girls' school called the Convent of the Holy Infant Jesus), we must see it as a cluster of buildings lovingly built by the Catholic Fathers and the craftsmen they engaged. Watching the restoration process, I could see the reverence of the cloister.

The next time you visit the complex, take a good look at the decorative columns on the walkway leading from the Chapel to the adjoining building. Some of them are finer than any sculptured piece of art that you would find in an art gallery. As a member of URA's Design Review Panel, I fought hard to keep the wall that surrounds the Chapel and buildings.

While we were in France, we were told that our CHIJMES is the last remaining 19th century cloister in an urban space. While some felt the wall prevented the Chapel from a full view from the road, experts felt that the wall kept out the road noise that would hit the cloister from four sides.

Today, a visit to the site offers seclusion in the middle of downtown Singapore, despite the fact that it is a successful oasis of trendy restaurants and pubs.

Responses in this article are based on an interview with Pamela Lee and parts are also taken from her book, "Singapore, Tourism & Me" (2004).

Merci, Didier⁵

He awakened many to the charm and beauty of the old shophouses.

10 days, 14 craftsmen. That was what French architect Didier Repellin had in 1987 to restore an old shophouse along Armenian Street back to its former glory. His contributions did not end there – in 1996, he made sure the iconic stained glass windows of the CHIJMES that we know today were restored to their original appearance, sending them to Lyon, France.

Chief Architect for Historic Monuments and Inspector General of Historic Monuments in France, Didier was involved in various early conservation projects in Singapore. He has a soft spot for Singapore, having first set foot here back in 1987, after a series of encounters with Pamela Lee from the Singapore Tourism Board.

First encounters

He recalls sitting in his office one morning when he received a fax from her asking for his resume, due to a recommendation of then Tourism Consultant Robbie Collins. He did, and soon, Pamela replied: "I am going to do a tour in Europe to see how you deal with heritage. I will spend one day in France. Please show me the restoration works in France within a day."

Tickled, he did so and evidently left a good impression as he received a flight ticket to the island three days later. This was when he still had no inkling about the country. "To tell [you] the truth, I had to buy a guide book at the airport because I had no idea where I was going," he said.



Top and bottom: the restored Armenian Street shophouse and Didier Repellin (in bow tie) with the French conservation masters and the local team at the completion of the restoration project.

Venturing into the unknown, it was his love for conservation that brought him beyond his home country and led to his involvement in many key projects as a conservation consultant in the 1980s and 1990s, namely, the Armenian shophouses, CHIJMES and Empress Place Building.

When he first arrived in 1987, he was given only three days by Pamela to explore Chinatown, Little India and Kampong Gelam, the shophouses, as well as 20 other historic buildings before presenting his findings to her.

⁵This article was first published on the Going Places Singapore website (now closed). Seifert, Daniel (2016). Merci, Didier, URA.



Clockwise from the top: the former Convent of the Holy Infant Jesus school (now CHIJMES) in 1971, one of the stained glass windows restored and inscriptions found on the wall after scrapping paint off the chapel walls that means, come along with me and be perfect.



“When I was in the lift [after leaving Pamela’s office] I thought to myself that I was going to write a note to say that I am going back to my mother’s house. I was scared. I was totally scared,” Didier recalled.

Restored in 10 days

Of all the buildings he explored, it was the Armenian shophouses that inspired him the most. “Every one [the shophouses] was different. The engravings [ornamental mouldings] were beautiful, so spontaneous.”

The shophouses were not in the greatest shape though – being held up by beams and proppings with green plants growing all over them due to Singapore’s tropical climate.

Despite the dismal plight they were in, he saw their beauty through the damage. “There was so much personal and local expression behind them and I was very touched by the qualities. I wondered who was behind them.” Inspired, he requested to work on one 19th century house as a sample to be turned into a showcase of good shophouse restoration work.

Rather than using powered tools, traditional conservation techniques – such as that used on historic buildings in France – were employed in the restoration of the shophouse. Seven layers of paint and cement cladding from the side of the shophouse were stripped off and replaced with porous mortar. The roof was also replaced with exact copies of the traditionally used V-shaped tiles, which were made in France.

There was an underlying conviction behind this process: educating locals on traditional conservation techniques and getting them

to care about Singapore’s heritage. “The [local] people will have to do it [participate in the rebuilding of the shophouses]. It is their heritage.” Seven local building instructors from the Construction Industry Development Board were thus brought on board, where they worked hand-in-hand with skilled conservation masters from France and learnt from each other.

“Restoration is a science,” Didier stated to *The Straits Times* in 1987, “It has to be taught, it has to be learnt.”

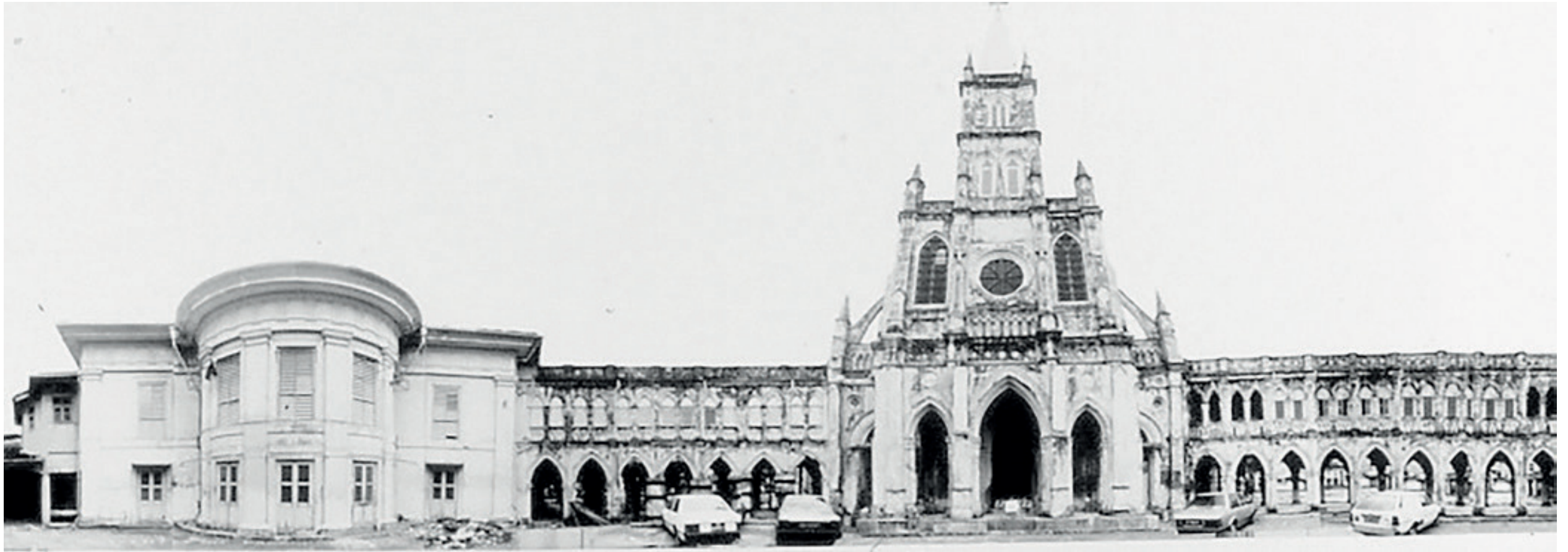
Between meals and laughs, the shophouse was restored in 10 days – a stunning feat, considering a project of such scale and scope could have easily taken a month. It also sparked awareness about the art and science of restoring shophouses.

The CHIJMES calling

Didier’s next project, CHIJMES, had origins that were close to his heart. Like him, Father Jean Marie-Beurel – who purchased the land for the convent school – hailed from France. Representing a significant chapter in Singapore’s colonial history, the convent school features a neo-gothic chapel with finely carved column capitals and stained glass windows.

For Didier, his role as restoration consultant went beyond advising: he also got his hands dirty. Scraping paint off the sides of the chapel’s walls, he found inscriptions that eventually became his motto for the restoration of the building, ‘Come along with me and be perfect.’

His idea of perfection meant restoring CHIJMES to its most authentic form. In sharing his expertise for the S\$65 million project undertaken by local



The former Convent of the Holy Infant Jesus school (now CHIJMES), undated.

architecture firm Ong & Ong Architects, careful steps were taken to ensure maximum retention. For instance, broken pieces of the stained glass windows were never replaced, only repaired – even if it meant sending the fragile glass windows all the way to Lyon for restoration.

Under his advice, the scale of the restoration and its sensitivity to the original structure and history of the iconic building were eventually what clinched CHIJMES the Architectural Heritage Award in 1997.

On his approach to conserving buildings, Didier feels that respect for their heritage is key. “It is not about duplicating the space as it was in the past because society is different today.

It is about respecting the space through simple ways. If the space has a long gallery with a nice promenade for instance, the latter should not be split into two parts.

Furthermore, the culture and history of the area should be preserved and reflected in the new ways the building is used.”

It does not matter what project or building he is working on. From small chapels and iconic buildings like the Chateau de Versailles in France, to the colonial structures and shophouses in Singapore and Penang, he stresses the importance of what he affectionately terms, the “human dimension”.

To him, behind the pile of bricks and stones of buildings is a greater story to tell – that of the people who built it, wandered through it – and ultimately, one that is to be preserved for generations to come.



Making it work

1990s

Throughout the 1990s, the focus was on clarifying and deepening conservation principles and standards that could hold up to global standards. Beyond the historic districts, conservation efforts expanded to other phases to include bungalows and secondary settlements. Major infrastructure works were also carried out for historic districts to meet modern needs.

Seminars and talks were organised to educate the industry and public on the value of conservation and restoration techniques. The Architectural Heritage Award which remains today was introduced to encourage and inspire quality restoration.

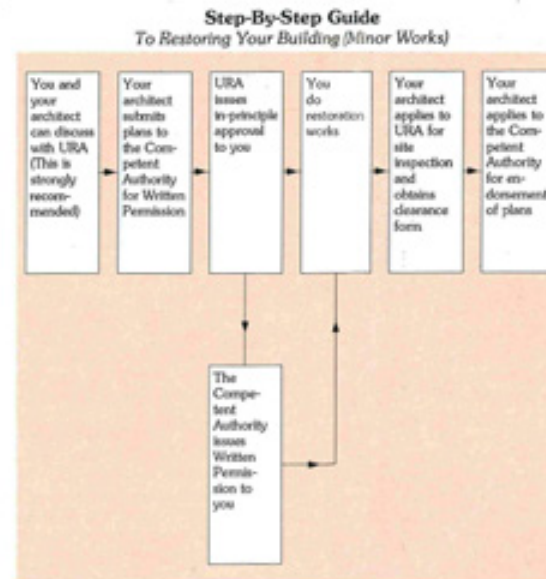
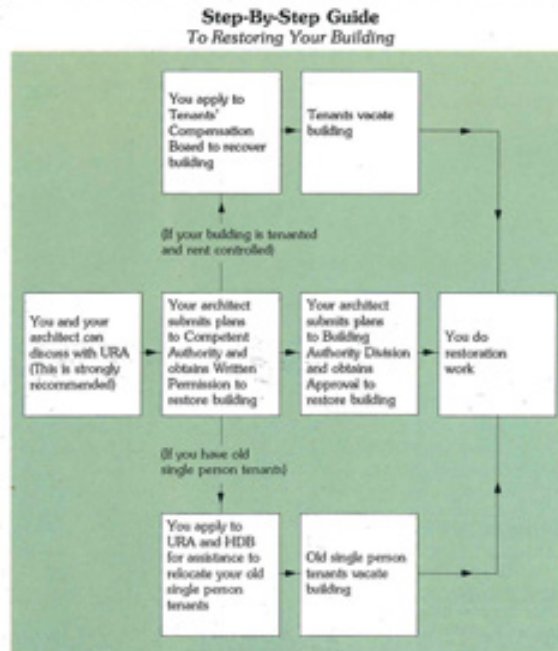
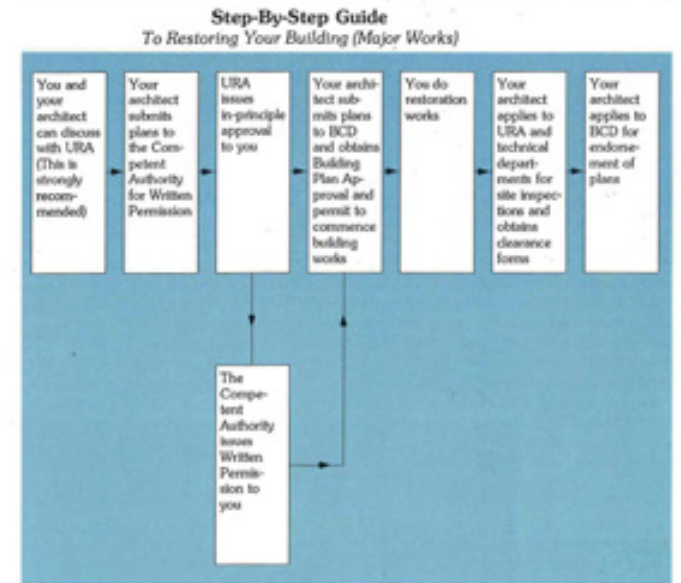
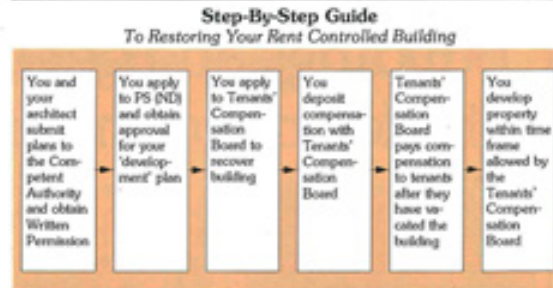
Richard Helfer, Executive Director and Chairman of Raffles Hotel then recalls the significant conservation, restoration and redevelopment work of Raffles Hotel that set a new benchmark while Ler Seng Ann, a young engineer in URA then reflects on some of the early challenges in carrying out infrastructure works for historic districts. Real estate developer Daniel Teo shares why he came forward to volunteer some of his properties for conservation and Er Kian Hoo, Principal Partner of Towner Construction discusses the challenges of restoration.

Procedures for conservation works

The Government recently designated Boat Quay, Bukit Pasoh, Caimhill, Clarke Quay, Emerald Hill, Kampong Glam, Kreta Ayer, Little India, Tanjong Pagar and Telok Ayer as Conservation Areas. Within these areas, owners may recover possession of their rent-controlled buildings from their tenants for the purpose of conservation.

URA has produced a conservation brochure to help owners to understand the requirements and procedures when participating in such conservation works.

Titled "Procedures For Conservation Works", the brochure offers a step-by-step information guide to acquaint owners with the requirements and procedures of conservation works, of recovering possession of rent-controlled buildings, and of relocating old single person tenants to HDB rental flats. The brochure is available at \$2 each at the 8th Storey Counter of the URA Building, Maxwell Road.



URA conservation procedures include rules to protect elderly single persons

Elderly single tenants affected by the recovery of buildings for conservation will be provided with alternative housing by their landlords. This ruling is spelt out in the URA brochure on "Procedures For Conservation Works".

The rules require owners to submit lists of elderly single tenants to the URA which will verify their eligibility.

Among the conditions, tenants must be citizens or permanent residents. Elderly women must be at least 40 years old and men 50 years.

The URA will interview tenants and certify their eligibility. If eligible, tenants will apply to the HDB for flats.

Owners will have to pay 4 years rental (ie. \$2,400 based on current rental rate) to HDB for every tenant allocated a HDB rental flat.

Tenants will share a flat with at least one person.

For those elderly tenants who are not eligible for public housing, the owners themselves will have to bear the responsibility of relocating them — to private housing if necessary.

Extracts from the "Procedures for Conservation Works", a step-by-step guide published in 1989 to help owners understand the requirements and procedures for conservation works, as published in URA Skyline, Jul/Aug 1989.



A photograph of Raffles Hotel around 1900-1910 showing the street lamp. © Richard Helfer.

1991: Raffles Hotel reopened

Raffles Hotel reopened following an extensive restoration from 1989. It was celebrated as a significant landmark in the city and as a good example of quality restoration that has brought back its glory and inspired people's imagination and experience of it.

A lifelong commitment

Conservation is a lifelong commitment, says Dr Richard Helfer who still has a soft spot for his first conservation/restoration project – Raffles Hotel.

Writer Justin Zhuang

Walk past Raffles Hotel today and one is struck by its grand façade with a welcoming cast-iron portico that harks back to the early 20th century. But what completes this historic view along Beach Road are four vintage street lamps in front of the Grand Old Lady of Singapore.

“We specially brought them in from Charlottenburg, Berlin, as part of the conservation, restoration and redevelopment of Raffles Hotel and Arcade from 1989 to 1991,” says Dr Richard Helfer.

“We had these conceptual models (of the hotel) and we knew what the front would look like... yet we thought that something did not look right,” recalls Richard. He oversaw the project and Raffles Hotel for 14 years as Founding Chairman and Chief Executive Officer of Raffles International Hotels & Resorts and Executive Director and Chairman of Raffles Hotel.

Typical modern street lights would not fit what he and his team expected to become “the most photographed view in Singapore”. Armed with an early photograph of the hotel showing the desired street lamps, Richard went hunting for lamps similar to those that once stood outside of the hotel at the turn of the century and located them in Berlin.

He had to convince the German city's mayor to sell four of the lamps, which up to this time were restricted to his city and then seek

approval from the Public Utilities Board in Singapore to make an exception.

The lamps were not required by the conservation guidelines for Raffles Hotel. However, Richard went through all the trouble because he was convinced that such details in the immediate streetscape were important in contributing to the aura and experience of Raffles Hotel.

“When you do proper conservation and restoration of a building, you need to have a clear vision,” 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.”

“When you do conservation, restoration and redevelopment, you hopefully sow the seeds properly for the people who come after you.”

The crown jewel

This vision still survives three decades on. Even after undergoing the recent two-year renovation, Raffles Hotel's architectural restoration and redevelopment work has held up. While Richard left in 2003, the hotel continues to thrive as a historic Singapore icon despite undergoing several changes in ownership over the years.

Today's Raffles Hotel is a far cry from the ageing property that Richard recalls working across from it in 1986. Richard had just moved to Singapore from Hawaii to open and manage the Westin hotels in the ultra-modern Raffles City next door. He recalls how Raffles Hotel was largely forgotten, and some Singaporeans were even calling for it to be torn down.

The hotel's fortunes changed when the Singapore Tourist Promotion Board identified it as "the crown jewel" of the tourism industry with Raffles Hotel gazetted as a national monument in 1987. These moves kickstarted a series of events, leading to the hotel embarking on a transformation into a suites-only development with a new retail arcade.

Returning to the finest hour

One of the first things Richard and his team did was to draw up a blueprint of what to restore Raffles Hotel to. Curator-writer Gretchen Liu was hired to uncover its century-old history. The research involved trawling the archives in Singapore and globally. It was supported by laser studies of the building's plasterwork, onsite exploration and an extensive search for additional historical information and artefacts. Such information guided the work carried out by Architects 61 and the DBS Land project team led by Simon Yong, who together brought the vision to reality.

It was decided that Raffles Hotel as an architectural milestone would focus on her "finest hour" experienced in 1915, when all major original structures were completed. After this, major decisions on what to conserve, restore or forgo became clear. One example was the existing ballroom. An add-on that blocked the historic façade of the main building, it was removed and replaced by a re-instated cast-iron portico based on original drawings and photographs. The original manufacturer, W. Macfarlane & Co, was engaged to re-create it based on original moulds. The crushed river rock driveway to cushion the tires of vehicles was also reinstated.

"We aimed to become the expert on Raffles Hotel through attention to detail and extensive research. Once you become that, more responsibility comes to you, but you also have the ability and importantly the knowledge to do what is appropriate."

As these were early days of conservation in Singapore, there were few guidelines on how to proceed. URA set up an architectural design panel to oversee the construction and development. Richard remembers how they would often meet in one of the hotel's construction offices to make decisions on-site.

Over two and a half years, while the buildings were restored and redeveloped, the important process of creating the allure of the legend began. Richard and the team sourced for relevant artefacts and furnishings to bring its history alive, many coming from Singapore families who wanted to support the effort.



Richard with the Singapore President then, Wee Kim Wee, and the President of the United States, George W. Bush, at Raffles Hotel in 1992. © Richard Helffer.





Raffles Hotel today showing the street lamps.

Richard personally sorted out over 400 pieces of original furniture from the hotel. These were restored for use again. The team sourced for over 7,500 period antiques, artefacts, artworks and Persian carpets from Singapore and the region. This included a serendipitous discovery of a late 19th century cast-iron fountain, in many pieces, which was originally from the old Orchard Road Market and also made by W. Macfarlane & Co. It was meticulously restored and placed in the hotel's Palm Garden. It remains to this day.

The responsibility of telling Raffles Hotel's story went on well after its opening day. Gretchen's in-depth research and the 'Friends of Raffles' campaign was the basis for creating an on-site museum.

"We continued to keep talking about the restoration process. It was not something we just did and it was done. We kept sharing it with people far and wide, aided by our award winning Fables Magazine, says Richard.

Curating uses within

But all the attention to history alone would not have been enough to make the S\$200-million project a success, he adds. A most important component was the appropriate lifestyle uses within. Raffles International conceptualised and designed 19 Food & Beverage (F&B) outlets, many of which were the first of their kind and became favourites of visitors and residents. General Manager Jennie Chua and

her team led these successful operations and the hotel itself.

A new retail arcade was added when the company won a bid to develop the land parcel behind Raffles Hotel. The government stipulated it to be built in a similar architectural style to the hotel. Richard, Jennie and the Raffles team leased out the units to select branded and speciality retail shops, with the Jubilee Hall, the hotel's own shops and Thos SB Raffles (purveyor of fine foods and spirits) being anchor tenants.

"While the project may have appeared to some as an expensive 'risk', the fact that it was done properly and paid immediate dividends to its shareholders and the people of Singapore, created a strong case study to follow for other such projects," says Richard.

"As one of the few national monuments that had a commercial function, the success of Raffles Hotel paved the way for the likes of CHIJMES, Fullerton Hotel and most recently The National Gallery, as well as other historic projects in the city-state and region."

Lifelong commitment

"Raffles Hotel's lasting success demonstrates how conservation is a lifelong journey of continual care for buildings and the life within," says Richard.

"The ownership and use of buildings will change, as well as the need to stay fresh requires modernising and upgrading of facilities to reflect lifestyle as well as market place changes.

While a number of renovations and updates will be made to historic structures over time, a completely integrated conservation restoration and redevelopment project can only be done once.

This underlines the importance of such decisions in the ongoing life of historic structures. You cannot go back to square one, once such an undertaking has been completed, all future renovations will be based on these decisions and actions."

"You have to be committed to such endeavours for the long term. You cannot determine that all is well at the beginning and think it is going to hang together for the next 100 years," he says. "When you do conservation, restoration and redevelopment, you hopefully sow the seeds properly for the people who come after you."



Tanjong Pagar today and the parcellation plan charting out the sale of shophouses for the Tanjong Pagar area in phases in the 1980s.

1990s: Infrastructure works

Infrastructure improvements were systematically and carefully carried out over the years to ensure that historic districts were equipped to meet modern needs.



Top and bottom: creating the back lane between the shophouses in Tanjong Pagar and Minister of National Development then, S. Dhanabalan, visiting 9 Neil Road. He said: "If I were not a Minister, I would seriously consider buying one of these units."

Nuts and bolts

It was uncharted territory then in tackling the nuts and bolts of enhancing the physical environments of historic districts. It involved experiments from back lanes, tiles to timber flooring.

A lot of unseen work goes on in support of historic districts and buildings to make them viable. The earlier years focused more on the physical realm, putting in place essential infrastructure in historic districts to meet modern needs and enhancing the experience of areas at the street level.

Ler Seng Ann, URA's current Group Director for development services led various infrastructure and restoration works over the years. He was a young engineer then when he joined URA in 1982. He shares some key highlights.

The back lane

He recalls one of the first few major infrastructure works carried out in the Tanjong Pagar area that was part of Chinatown. While 32 units were identified for restoration to demonstrate their value to the public, the area was in need of major improvements. It did not have a proper sewerage system. The bucket approach was used, where waste was collected manually.

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. The Tanjong Pagar and Duxton areas were also located on hill slopes at different levels," says Seng Ann.

“I learnt how to appreciate the structure and different construction methods used for buildings. Along the way, I developed a deeper appreciation for good architecture as well.”



The restoration work of 9 Neil Road as a showcase which took three months to complete showing the replacement of the fascia beam, staircase and remoulding the ornamentation.

The back lane served many purposes in supporting essential electrical and water supplies, including doubling up as a fire escape route. In cutting through the shophouses to create the back lane, care was taken to “respect the roof form although it could not be perfectly symmetrical,” explains Seng Ann. Today, this little jagged back lane has evolved with a sub character of its own.

Tiles and trees

Beyond infrastructure, at the street level, efforts were made to take care of the smaller details that could enhance the public’s experience of the areas. For example, for the sidewalks in the Tanjong Pagar area, terracotta tiles were introduced to add to the character of the area.

In determining the placement of trees along a historic streetscape, Seng Ann remembers having debates about them: “Should we plant in such a way that it will provide shade or plant in such a way that the conserved buildings can be unveiled?”

It was a fine balance to strike in providing sufficient greenery in areas with conserved buildings while ensuring that these buildings were not completely blocked by the trees.

Timber flooring

Within the shophouse interiors, there were also early challenges with the timber flooring for example. This is particularly for shophouses in historic areas such as Chinatown, Kampong Gelam and Little India where the timber material is required to be retained. “The timber material is important as it contributes to the authentic look and feel within the shophouse interiors,” says Seng Ann. But there were fire safety concerns as the timber material is combustible.

Seng Ann and his team worked hard with the Fire Safety and Shelter Bureau, experimenting on site to show how to mitigate the concerns. “For timber, once it chars, it becomes resistant to fire. Engineering wise, you could actually design a timber with a residual timber within the char area to be able to support the building. So we showed that there is a way to retain the material,” he says.

Right approach

In tying the various efforts together, a critical aspect of the early focus was in finding the right approach to restoration. “It was about how to save the building,” says Seng Ann.

“As a young engineer then; I learnt how to appreciate the structure and different construction methods used for buildings. Along the way, I developed a deeper appreciation for good architecture as well,” he adds.

1991: Bungalows and secondary settlements

Beyond the conservation of historic districts, efforts expanded to include bungalows and secondary settlements.

The secondary settlements reflect Singapore's urban development from 1900s to 1960s outside of the city centre. Beach Road, Jalan Besar, Geylang and River Valley were the first to be gazetted for conservation, followed by other areas added over the years such as Balestier, Joo Chiat and Tiong Bahru.

To date, more than 10 secondary settlements and more than 200 bungalows have been gazetted for conservation.



THE NEED TO CONSERVE Urban Relevance

At the junctions of roads in the area, the traditional shophouse has acknowledged and recognised the importance of nodal point that buildings were built with sweeping forms - marking these corners.



Jalan Besar - view from Lavender Road end. Note the high- and medium-rise apartment blocks of flats in the distance.

The shophouses in the area has a wide variety of architectural styles and are predominantly 2 storeys. This gives the area a balanced and harmonious street profile.

Far left and above: the conservation plan for Jalan Besar and a page from the detailed report produced elaborating on the conservation plan for Jalan Besar in 1990. Such reports are produced for each secondary settlement, presenting the need to conserve, the conservation plan and an analysis of the impact of conservation.

Volunteering conservation

Passionate about historic buildings, Daniel Teo has volunteered two of his properties for conservation.

From the 1990s onwards, many individuals came forward to volunteer their properties for conservation. One of them was real estate developer Daniel Teo.

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. He is the Chairman and Managing Director of Hong How Group and Director of property development and investment company, Tong Eng Group, both his family business.

What influenced your interest for historic buildings?

Daniel: I always had an interest and passion for old buildings, especially those that have a rich heritage. My interest is partly influenced by the beautiful historical buildings in Melbourne when I studied architecture there.

I also used to follow my father and uncle around when I was younger to look at some properties and developed a further appreciation then. Both of them were already in the real estate business. My interest grew over the years as I discovered more and more historical gems and had the chance to restore some of them.

What was your first taste of dealing with a historic building?

Daniel: My first acquisition was 11 Kim Yam Road. It was this property that sparked off a deeper interest in heritage buildings. It happened by chance. When I walked inside, I found that it had very beautiful antique furniture within which I have kept ever since.

I turned it into an art gallery at the ground floor and a residential unit on the floors above. I also worked closely with LASALLE College of the Arts to give out scholarships and exhibit their final year artworks here.

You have been deeply involved in the restoration work for your heritage properties.

Daniel: In restoring historic properties, there are always challenges. But it is very satisfying when we are able to restore a historic building well. As part of the restoration work, we spend a lot of time understanding the history of the building, going through archival records, tracing the buildings' old drawings and finding out who the previous occupants were.

You played an important role in turning the old Catholic High School into a centre of the arts and a private museum.

Daniel: I was an old boy of the Catholic High School at 222 Queen Street and 51 Waterloo Street (from 1956 to 1961) which was built in 1938. It was left vacant for some years. When I leased it from 2009, we discovered a lot of old books inside the building. I wanted to turn the place into a gallery and also share the history of the school with communities and visitors.

So many politicians, businessmen and others went to school there. It is rewarding to be able to see past graduates come back to the building which holds happy memories for many people.

Why do you choose to volunteer your properties for conservation?

Daniel: Singapore has a very short history. We should try our best to preserve as much of our history as possible and let the younger generation have a chance to enjoy and experience our rich variety of built heritage. When I have the opportunity to contribute to retaining a part of our built heritage, I will.

1991: Conservation voluntary scheme

The "Conservation initiated by Private Owner's Scheme" which remains today was launched to encourage private owners to volunteer their properties that are architecturally and historically significant for conservation. To date, more than 20 buildings have been volunteered for conservation.



Top and bottom: Junction of Armenian Street and Loke Yew Street in 1992 and 36 and 38 Armenian Street in 2001.



1992: Elevating the practice

UK specialist consultants were engaged to critique the legislative, architectural and engineering aspects of conservation and to carry out workshops and seminars on conservation and restoration to elevate the conservation practice to international standards.

1993: Raising the standards

To raise the standards of conservation, URA and the then Preservations Monuments Board published an important book, "Objectives, Principles and Standards for Preservation and Conservation" for districts and monuments including the appropriate methods for restoration work.

1995: Architectural Heritage Award (AHA)

To raise the standards for quality restoration and conservation work, the Good Effort Award was introduced in 1994 and was later reconstituted into the Architectural Heritage Awards in 1995 to recognise best practices in restoration works. AHA remains to this day a significant platform that encourages and inspires quality restoration amongst professionals and the community.

Good Effort Award/Architectural Heritage Award winners over the years, from the top: 77 Bencoolen Street (2012), 101 Jalan Sultan (2012), 74 Emerald Hill (1994), Hong San See Temple (2013), Abdul Gafoor Mosque (2003) and Empress Place (1994).

Mastering restoration

Principal Partner of Towner Construction, Er Kian Hoo and his firm have carried out over 40 restoration projects in more than 20 years.

Kian Hoo's first restoration project was a shophouse at Kandahar Street in 1995. Since then, his passion for restoration work has grown over the years. He relishes taking on the many different challenges that each restoration work brings, which make up about 30 per cent of his company's portfolio. Each project also provides a unique opportunity for him to contribute meaningfully to Singapore's built heritage.

Over the years, six projects by his firm have garnered the Architectural Heritage Award, ranging from Malay Heritage Centre (2005), to the Roman Catholic Church of Saints Peter and Paul (2016), 101 Jalan Sultan (2012) and the Warehouse Hotel (2017).

For the Roman Catholic Church of Saints Peter and Paul, the restoration work brought back the century-old gothic-style glory of the church. Flooring patterns sympathetic to the missing original tiles and the pressed-metal ceiling cornice were reinstated. A corrugated metal roof was also chosen to retain the original roof structure, which could not bear the weight of the tiles.

For the Warehouse Hotel, there was a careful integration of the old and new. The use of solid metallic materials with industrial finishes and look ensured the past prevailed at every corner. The lobby also showcased the original double-volume space of the warehouse and provided an unobstructed view of the Singapore River.

Unseen work

"Restoration projects are very different from any other construction work that we do. Every conserved building comes with very different challenges. And we have to take the time to understand how the building was built and the kind of materials used," says Kian Hoo. For example, he and his team spent two months studying and documenting the different structural elements and detailing of the 'India House' at Pierce Road before proceeding with the restoration work.

Working on historic buildings also means working in very tight spaces where access could be a problem. "There is a lot more planning and groundwork to do to ensure that we are able to plan the access and use of machinery and our resources wisely given the constraints," says Kian Hoo.

Some of the unseen work involved in a restoration project also includes strengthening the structural underpinnings of the building. "It can be very tedious work but it is necessary and critical to ensure that historic buildings are safe, secure and are able to last for a long time," says Kian Hoo.

Key challenges

One challenge for the industry in carrying out restoration work is the lack of local craftsmen who have the specialised expertise to work on the more intricate decorative elements that can be found in some conserved buildings, says Kian Hoo. "We often have to find the right craftsmen overseas." Sourcing for materials is also another challenge, which may involve travelling around the region to find the right ones.



© Darren Soh

But to Kian Hoo, the biggest challenge is the need to recognise and appreciate the extent of restoration work required for conserved buildings which may often go beyond the additions and alterations work scope. The work also involves time needed to test out the use of materials such as lime plaster. If a project is under time and budget constraints, such testing of materials may not happen.

Kian Hoo hopes that more attention and interest be given to restoration work and hopes to encourage builders, building owners, architects and other building professionals to take the time to appreciate and understand good restoration work and what it involves.



Two of the restoration projects by Towner Construction that won the Architectural Heritage Award - the Warehouse Hotel and 101 Jalan Sultan.

New frontiers

2000s

By the early 2000s, the critical mass of historic buildings had been conserved. The public's expectations had shifted, with the growing awareness and interest in shaping a stronger sense of the collective past and identity together. Efforts evolved to a more extensive and deeper public engagement and discourse in balancing identity and the intensive use of land.

The focus moved beyond the conservation of individual buildings to include heritage structures such as bridges and towers. There was a closer look at retaining and enhancing the special qualities of distinctive local areas and places. 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.

James Khoo, Chairman of the Conservation Advisory Panel (CAP) and architect Wo Mei Lan, a member of CAP reflect on the shift in public expectations on heritage and identity and the value of listening to a diversity of views. Peter Lee, honorary curator of the NUS Baba House shares the significance of restoring and maintaining one of the last remaining intact residential Peranakan houses as a living heritage museum.



Peter Lee at the NUS Baba House and its exterior.



2001: Concept Plan

The 2001 Concept Plan placed a stronger emphasis on identity and heritage arising from public consultation and the focus group recommendations that discussed the dilemmas of balancing identity and intensive land use.

2003: Identity Plan

Going beyond just the conservation of buildings, the Identity Plan was introduced as a land use plan “plus”. It presented ideas and proposals on how to retain and enhance the special characters of 15 places as part of the Master Plan 2003 Review. The plan continues to be updated with additional areas and efforts have been carried out to enhance the identities of places.

Focusing on identity

When the focus shifted to a stronger emphasis on Singapore’s identity in the 2000s, Dr James Khoo led discussions with people from all walks of life in shaping and defining this.

With a critical mass of important buildings and core historic areas conserved by the 2000s, there was an increasing public interest on how to shape and manage Singapore’s identity that went beyond just the retention of built heritage.

The review of the Concept Plan 2001 first opened up the discourse on this with extensive public consultation. The Focus Group on the “Identity Versus Intensive Use of Land” co-chaired by academic Simon Tay and developer Philip Ng emphasised in their final report in December 2000 that retaining identity should be a vital aspect of Singapore’s development as a “given and not an afterthought”.

The group also suggested that: “conservation should go beyond individual buildings to whole neighbourhoods...A new focus should be given to buildings and areas that are more recent such as Geylang and Katong.”

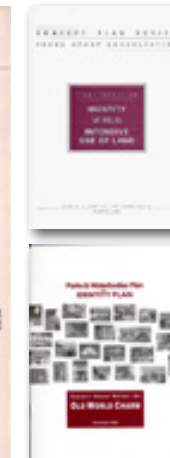
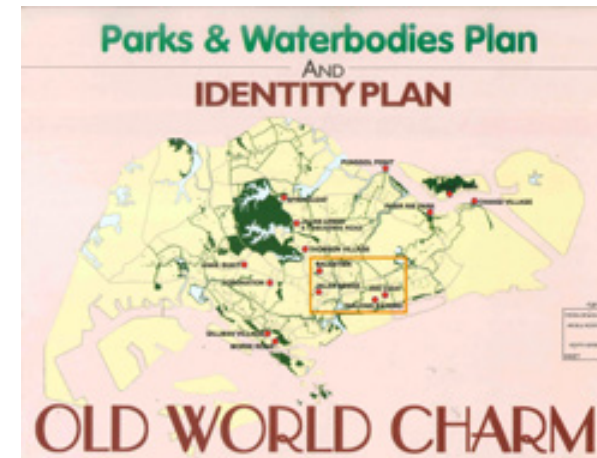
The Identity Plan

This led to the development of the Identity Plan as part of the Master Plan 2003. A land use plan “plus”, the Identity Plan presented ideas and proposals on how to retain and enhance the special characters of 15 local places close to people’s hearts.

Dr James Khoo, a neurosurgeon, led the public engagements in 2002 contributing to the Identity Plan as the Chairman of the Old World Charm Subject Group focusing on four areas - Balestier, Jalan Besar, Tanjong Katong and Joo Chiat. He also later became the Chairman of the Conservation Advisory Panel from 2002 to 2010, an independent platform that provided regular feedback on conservation proposals.

Reflecting on the growing public interest then, James shares: “The momentum was building amongst the public in wanting to live in not just a nice city with clean air and water, but one with beautiful surroundings with our built heritage that can root us. Questions were raised about how we could look at conservation in a more holistic way to include the social and cultural dimensions and whole streetscapes.”

A major outcome of the engagement exercise then was in helping owners in the areas like



The Parks & Waterbodies and Identity Plan, with the Old World Charm areas highlighted and various reports.

Balestier and Joo Chiat understand that conservation did not mean a loss of value for their properties, says James. “Most of the people we spoke to valued conservation and wanted a stronger sense of identity, but they did not know how to do it. They were also afraid that their properties would lose their value after conservation.”

“Through briefings by URA and our dialogue with them, we showed that that they could retain the value of their properties through the ‘old and new’ approach for secondary settlements (areas outside the city centre developed between 1900s to 1960s) by building up the back and keeping the front,” he adds.

The result of the engagements with residents and owners saw strong support for the conservation of close to 800 buildings in the four areas, which were gazetted in 2003.

The engagement exercise and public survey also gave people a chance to better appreciate the details around conserved buildings. On the design of possible new extensions at the

back of the conserved buildings, some survey respondents preferred traditional designs to tie in with the conserved portion while others wanted more innovative solutions. Respondents were also divided on whether certain trades in the areas should be retained or left to market forces.

The Old World Charm Subject Group concluded that conservation needed to take on a more integrated and synergistic approach that went “beyond physical structures to include communities and activities that contribute to the charm of places.” The group also recognised that holistic conservation meant users, owners, stakeholders and heritage supporters should be part of the conservation process.

Many of the proposals and ideas from this exercise have since been implemented over the years and identity remains an integral part of planning and conservation efforts. Conservation efforts have also evolved to focus on software aspects. Communities are taking the lead to develop programming and other place-making activities for historic areas.



Dr James Khoo (at the bottom) at one of the Conservation Advisory Panel meetings.

Tapping on diverse views

Another important milestone then was the formation of the Conservation Advisory Panel (CAP). Made up of a diverse group of individuals, from teachers, developers, architects to taxi drivers, James found the platform valuable in providing new perspectives on conservation proposals. It also enabled people to understand each other's different points of views.

“We tend to understand things only from our own perspective. So having such a diverse group is important in ensuring we cover all bases. I made sure that everyone on the table had the opportunity to share their views. Everyone contributed,” says James.

In evaluating conservation proposals, James recalls refining the scoring system in evaluating conservation proposals. Given his medical background, he believed the scoring system could offer a more rational and objective evaluation. The panel members would assign scores to proposed buildings for conservation based on their architectural merit, cultural significance, contribution to identity and their economic value. Those that had a score of more than 60 points would be more highly considered for conservation by the panel.

Over the years, CAP has evaluated 34 proposals covering 1,000 buildings. Its tenure ended in 2018.

“We tend to understand things only from our own perspective. So having such a diverse group is important in ensuring we cover all bases. I made sure that everyone on the table had the opportunity to share their views.”

2002: Conservation Advisory Panel (CAP)

To create a more regular platform for individuals to shape conservation proposals, the CAP was set up as an independent panel to provide inputs on URA's built heritage proposals, to propose buildings for study and to promote greater public education and understanding of the gazetted built heritage. Its tenure ended in 2018.

2008: The NUS Baba House

The NUS (National University of Singapore) Baba House at 157 Neil Road served as an excellent example of community contribution in good restoration work and turning one of the last remaining intact Peranakan houses into a living heritage museum. It is also used for research in architectural restoration.

Moving forward, James continues to advocate for public education and outreach in raising awareness and appreciation for Singapore's heritage and identity. He believes this needs to start from the young. “We need to teach our young to be more aware of their built surroundings. Our children must know what came before us in order to understand the present and the future.”



A visit by one of the Subject Groups to Changi Boardwalk with the then Minister for National Development, Mah Bow Tan.

Love for historic buildings

How a conserved building fits into the social and cultural contexts is key to ensuring its relevance, says architect Wo Mei Lan, who has lovingly restored many buildings over the years.



Wo Mei Lan with Liu Kah Teck in their office and one of Mei Lan's restoration project, the Malabar Mosque.
© Liu & Wo Architects.

Mei Lan is the co-founder of Liu & Wo Architects formed in 1984 with architect Liu Kah Teck. Over the years, her firm has built up a diverse portfolio of restoration projects that have fuelled her passion and fascination for historic buildings and their importance to Singapore's built heritage.

Her appreciation and understanding of historic buildings deepened when she became a member of the Conservation Advisory Panel (CAP) from 2006 to 2012, which enabled people from different walks of life to contribute their perspectives in considering the merits of conservation for identified buildings.

What were some of your key takeaways being a part of CAP?

Mei Lan: I was quite surprised at how diverse the group was. This enabled us to learn more from each other given our different backgrounds and perspectives. Because of the diversity of the group, we were able to provide a wide range of views that covered more dimensions.

I was also amazed at how detailed and thorough the research and considerations were in putting together the proposals evaluating the merits of each building put forth for conservation. We were given the time to consider and debate about the different aspects of conservation proposals, in looking at the historical and social relevance and how the buildings contribute to the larger neighbourhood and fabric. All of us found the discussions and conversations fascinating and enlightening.

What was one important role and value of the CAP to you?

Mei Lan: It offered a platform and 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 the conserved buildings can fit into the physical, cultural and social contexts and how they can be relevant for future generations.

Your office is located in a shophouse at Duxton Hill. That has influenced your early experience and understanding of historic areas and buildings.

Mei Lan: We bought our first unit at Duxton Hill in one of the first few phases of the shophouse tender for sale for the Tanjong Pagar area. It was quite small with a forecourt in front, so many did not find it an attractive option. But we found it so charming.

We later bought a second unit just beside it and connected both units for our office. We have stayed ever since for the last 30 over years. We are considered one of the oldest stakeholders in the area since the 1980s. We have seen how the Duxton Hill area has evolved over time. This has contributed to our appreciation for and understanding of why we need to retain such a historic area and how we need to continue to manage its uses and the experience of the area carefully over time.

Duxton Hill in a way serves as a focal point for the neighbourhood that sets the ambience and tone for the area. Its low-rise character contrasts with the high-rise developments around it, making it even more endearing to us.

Tell us about your first restoration project.

Mei Lan: My first restoration project was in the 1980s for 94 Emerald Hill, the home of Pamela Lee of the Singapore Tourism Board. I learnt so much from this project on what to look out for and the approach to take when restoring a shophouse. Pamela Lee did extensive research on the house and taught me the importance of restoring a building to its authentic form. She went to great lengths to restore the different elements of both the interior and the exterior of the house.

I recall going to Malacca to learn from their approach to courtyard spaces in determining how to restore and create one within the house. We also worked with different experts, for example, painters who worked on Har Par Villa were engaged to help repaint decorative mouldings on columns that we discovered.

For this project, I had a lot more time to work on it, which allowed me to carry out experiments and to learn well, which contributed to a good understanding of restoration work.

From the many restoration works you and your firm have done over the years, what are important considerations to bear in mind when restoring conserved buildings?

Mei Lan: You have to first understand fully and deeply the building, its context, its history and the way it was built. Only when you understand and respect the building's original form can you decide how you want to give it a new lease of life and determine its relevance for use in today's context.

In balancing and managing the shift from old to new, the challenge is how to ensure that restoration and the use of the building after that enables it to remain useful and practical, yet charming and unique.

In considering new additions, you need not follow exactly to what was before because if you follow exactly, there is no progress. You can do it very differently, modernising it, but still respect the heritage. For every restoration project that we work on, we are mindful of what kind of story are we telling about the building.

Most importantly, you have to be open to listening to different perspectives. At the end of the day, you are restoring and adapting buildings for current users and for future generations.



A precious jewel

The NUS Baba House is a labour of love across generations.

Entering into the NUS Baba House at 157 Neil Road feels like visiting a friend in his or her family home. It also stirs in one a sense of mystery and curiosity in slowly discovering the rooms, spaces and items as if one were sneaking around in someone else's 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. Built around 1895, it is more than just a living museum and a showcase of good restoration work; it is also a true labour of love with many involved in its creation. Even after 13 years of it being acquired by the National University of Singapore (NUS) in 2006, the Baba House continues to fascinate in its form, curation and role in teaching and inspiring conversations about our past, present and future.

Peranakan scholar, curator and author, Peter Lee, was at the crossroads of serendipitous encounters leading up to creating the NUS Baba House. He is its honorary curator and worked with NUS and URA to restore and curate the Baba House. An avid collector of textiles and photographs sourced from around the world, he donates generously to museums. He started doing curation work for various museums since the 1990s and has authored the book, *Sarong Kebaya: Peranakan Fashion In An Interconnected World 1500-1950* (2014).

Tell us about your first encounter with the Baba House.

Peter: It was through Ng Ah Choon, owner of the Guan Antiques shop at Kampong Bahru that I met with the owner of the house, Wee Lin. The family that owned the house from 1910 to 2006 descended from Wee Bin (1823-1868), a wealthy shipping tycoon in Singapore.

More than just preserving the house and its interiors, Wee Lin wanted to explore how the house can be of value to Singapore's heritage.

When I entered the house for the first time, I was bowled over by its architecture and interior. I had never seen anything of this quality before. Many original elements in the house were still in place. It was such an exciting discovery. Nobody in the family lived in the house at that time. It was used as a training centre for migrant foreign workers.

How did this first encounter lead to NUS acquiring the property?

Peter: It was another serendipitous moment. I knew the important value of the house but it would require significant funds to restore and curate it well. There was a struggle on possible funding options then. At around the same time, Agnes Tan, my aunt, approached me, looking for philanthropic options to support projects that would meaningfully remember her father who was Tun Tan Cheng Lock, the late Malaysian business and community leader.

Agnes already had prior connections to NUS, having contributed to other projects such as the Tun Tan Cheng Lock Centre for Asian Architectural and Urban Heritage. NUS became the natural best option. There was a synergy in



Gilding is a prominent type of decorative technique on the furniture and architectural features at the Baba House. The contrasting gold tint on dark wood draws attention to the carved details. Clockwise from left: reception hall, ancestral hall, airwell and master bedroom.

educational objectives. The house presented opportunities for education in architecture, social history and archaeology. It was also a potential living site for a different way of learning. Thus, after careful consideration, Agnes donated the funds (S\$4 million) for the purchase and restoration of the Baba House in 2006.

Wee Lin's role was also crucial for the success of the process leading up to its eventual acquisition. It took some time for the paperwork and legal aspects to be addressed. Wee Lin was very patient with the process and made things easier for everyone in seeing to the various details. The key partners for the restoration and curation work were the NUS Department of Architecture, NUS Museum, The Peranakan Association of Singapore and URA. The house was officially opened in September 2008. It is currently part of the NUS Centre for the Arts and is managed by the NUS Museum.

In curating the Baba House, what were the considerations and focus?

Peter: Several factors influenced our approach - the history of the house and the site, the history of its residents, the surviving architecture of the interior and exterior of the house, the quantity of available artefacts belonging to the house, photographic and anecdotal records of the house's interiors and the viability of restoring the authentic interiors. Another determining consideration was the fact that URA had designated the Blair Plain conservation area as a residential historic district. Apart from certain exceptions, commercial use was and remains strictly prohibited in the area.

These considerations provided a conceptual framework for presenting the house to the public within the time constraints of the house's acquisition, restoration and opening and as a stage or site for interactive interpretations of its multi-layered histories – social, commercial, architectural, art historical, geographical. Although the name may suggest that the house serves only to showcase the culture of the Babas or Peranakans, it also fosters contemporary engagements with the Peranakan culture and community, the study of architectural heritage and conservation, and explores the social histories of the Blair Plain neighbourhood.

You had another serendipitous encounter while researching the house.

Peter: While researching the house to understand its interior, I accidentally came across my uncle Lee Kip Lin's groups of photographs taken of exactly this house. He was a passionate architectural historian who began to take photographs of many streets and houses in Singapore from the late 1960s.

He randomly knocked on the door of the house one day and Wee Lin's mother let him wander in to take the photographs. Because of his collection, I was able to recreate the placement of furniture and items in exactly the same positions as he had captured in the photographs.

Is the house typical of a Peranakan home?

Peter: It is far more elaborate and ornate, in the style of grand houses built by the Peranakans in the 19th century and there are very few of such grand houses left. In the late 1920s, many wealthy Peranakans typically preferred to live in huge country or seaside villas. Shophouses built with

such elaborate interiors in the 20th century had therefore very different and specific functions.

When the Wee family bought this house, they had intended it to house their ancestral shrines. In terms of the design of the interior, the general layout and placement of furnishings was generally the same although there were also many variations in the types of furniture, artwork, ornaments and other household items.

While there was no strict consistency in style between Peranakan houses, many also wanted the same things in terms of decorative items and furniture based on the popular culture of the times. Many pieces of the furniture you see in the Baba House today are original to the house. Wee Lin donated a large portion of the furniture, re-assembling many pieces that were dispersed among various family members.

The Baba House is unusual as a museum – it does not have captions, signages or velvet ropes as barriers.

Peter: I pushed very hard to not present the house like a typical museum. Everyone on the team agreed. I wanted it to be a place where a visitor would feel like someone entering a house to meet its resident. This is the most important aspect of the Baba House. If everything were to be presented in a strictly museum-like manner, many elements would have to be placed out of reach to visitors.

The minute you put in captions, signages or barriers, it would disrupt the experience. Some wanted air-conditioning for the spaces. But I was adamant about not having it as this kills the experience of being in a tropical house. The architecture of the house was designed for natural ventilation. You have to come in and sweat and feel the natural breeze.

“The Baba House in a way offers a multi-sensory experience, and triggers so much learning in many directions. It is such a dynamic way to understand heritage.”



2006: ULI Recognition
The Singapore Conservation Programme was awarded the Urban Land Institute (ULI)'s Asia Pacific and Global Awards for Excellence for its active and collaborative approach in balancing the preservation of Singapore's rich heritage and redevelopment.

2009: Heritage structures
Conservation efforts extended to include heritage structures such as bridges, look-out towers and pavilions in parks and reservoirs.



Various activities organised at the NUS Baba House. © NUS Baba House.

The Baba House can only be experienced through guided tours.

Peter: The house itself is fragile. We want to protect the house and its aura. Thus, guided tours are a way to limit and manage the people visiting it. The house is a precious jewel and in a way, we want to also attract the kind of visitors who really want to learn and be here.

Training of the docent guides is very rigorous. Each of them develop their own narrative

and encourage visitors to interact and ask questions. There are also many other ongoing activities organised which makes the Baba House continually relevant, from poetry reading, to workshops, cultural demonstrations and performances. The Baba House in a way offers a multi-sensory experience, and triggers so much learning in many directions. It is such a dynamic way to understand heritage.

Closer partnerships

2010s

The 2010s till today sees 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 of making the built heritage more accessible and relevant through stories, talks, films and tours. Stakeholders are also actively leading place-making efforts in sustaining the rich heritage and culture of historic districts and key neighbourhoods.

Straits Times heritage journalist Melody Zaccheus reflects on how heritage stories are helping to connect communities while four people from different backgrounds - an alumni president (Jayson Goh), a heritage group champion (Kwek Li Yong), a real estate entrepreneur (Ashish Manchharam) and an architect (Jonathan Poh), all with interest in heritage share how they are finding different ways to promote and shape built heritage.



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© Dax Lim



© Save Dakota Crescent



© My Community

Clockwise from the top left: a heritage tour by My Community, journalist Melody Zaccheus at the iconic playground at Dakota Crescent, architect Jonathan Poh with the Save Dakota Crescent team, the MP Lim Biow Chuan and grassroots leaders at The URA Centre and residents creating a quilt at the museum by My Community.

Keeping the past relevant

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

Writer Justin Zhuang



Melody at Dakota Crescent and with Straits Time photographer Ng Sor Luan doing leg work for a story on Telok Blangah graves.



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.

Inspiring deeper conversations about Singapore's heritage and giving a voice to forgotten historical figures and everyday people with stories to tell, are some of the reasons why *The Straits Times* has a reporter covering the heritage beat, says Melody. Since 2012, she has assumed this role in Singapore's main English-language newspaper, carving out a niche in the newsdesk.

Beyond just the recounting of nostalgic events, much of Melody's job is to figure out how to make a story relevant to readers today. Over the years, her coverage has ranged from reporting on new historical discoveries to overlooked heritage, and occasionally, even correcting misperceptions about the past.

In 2016, Melody reported on the research of Harold Johnson, Nadia Wright and Linda Locke, which proved that Locke's great-great-grand aunt Agnes Joaquim actually cross-bred Singapore's national flower. This led to the amendment of official records to acknowledge her contribution.

In a separate story in 2017, she broke the news of history researcher Lim Shaobin discovering detailed Japanese papers which shed light on an under-the-radar World War II operation where

rat fleas were bred in Singapore's College of Medicine Building which were then used to kill thousands in China. It was an instructive lesson to readers on how the country's infrastructure can be used for nefarious purposes then and even today.

Helping the community care

"Every time we write a story, we do our best to draw the reader in from the get-go. It is our duty as journalists," explains Melody.

This is even more so for a beat like hers, she said. After all, not all readers are necessarily interested in the past. The need to catch readers' attention has also led her to try new ways of presenting heritage beyond crafting a compelling story in words. For instance, she has produced videos, multimedia web projects, and in 2017, even became a vendor for a day at the now defunct Sungei Road Thieves' Market.

"Up until then, media interviews had generally focused on obtaining soundbites from vendors who were fretting about its impending demise. I wanted to tell the story in a different way." Reporting about heritage is not always about loss as Melody's career can testify. One of her most rewarding experiences was tracking the development of Dakota Crescent, the 1950s Singapore Improvement Trust public housing estate. Melody wrote several stories about the group and highlighted its conservation proposition for the site, which encouraged a larger public discussion about its merits and why it should be retained.

"The low-rise estate has a peaceful quality to it with building heights that vary, green yards, lush trees and a canal that runs behind it. It is an example of an early estate that aspired to serve its dwellers by taking into consideration

residents' needs in its design which is not always the case today," she says. "I feel that our Dakota Crescent coverage demonstrated to readers and Singaporeans how collective efforts from the ground can lead to positive changes."

No matter the topic at hand, she believes her job is to carve out an objective platform for Singaporeans from all segments to have constructive discussions on tangible and intangible heritage. "The paper is a public medium and my hope is that my articles not only raise pertinent issues in a timely manner but also help stimulate conversations, and among other things, offer endangered sites a chance to be debated and documented even if they eventually have to go."

Connecting people to places

At the heart of it, 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.

The desire to break stories that are yet to be told and chronicled in Singapore's history textbooks is one of the reasons why Melody continues to pound this beat after seven or so years. While the millennial born in 1988 has always been fascinated with history, and even took a few modules in the subject during university, it was only as a heritage reporter that she began visiting historical sites and meeting people with stories to tell.

"It was great because I got off my couch and got to go to these different corners of Singapore," she says. "To me, it was looking at Singapore with fresh eyes."

Every community has a story

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.

Writer Justin Zhuang

2010: My Community

My Community, a civic and heritage group was started by two students to initially offer guided tours in Queenstown, one of Singapore's oldest housing estates. The group has since grown into a volunteer-led organisation that runs a museum, conducts heritage research and organises community events.



When My Community opened a heritage community museum in Queenstown in early 2019, it received a surprisingly strong reaction from the residents. They wanted to know the purpose of Museum @ My Queenstown and some even questioned its relevance to the community.

This reaction was a reminder to never take the community for granted. “Instead of speaking to the residents (about the museum), we just assumed that the community would embrace its premise and curation right away,” says Li Yong who founded My Community with his friend Jasper Tan, in 2010. My Community is a civic

and heritage group that originally offered guided tours in Queenstown, one of Singapore's oldest housing estates.

The community museum is the first of its kind located within the Queenstown neighbourhood. “We had already incorporated artefacts and photographs in the museum from the residents but they did not just want them to be displayed, they wanted to be an active part of the planning and curation process.” Since then, My Community has roped in residents to work with its volunteers and artists to co-curate exhibitions and programmes for the museum.

What started as two students going door-to-door in Queenstown to document residents' memories of the town has since grown into a volunteer-led organisation that runs a museum, conducts heritage research and documentation as well as organises community events. Today, My Community operates primarily in Queenstown, and has also ventured into the neighbouring estates of Tiong Bahru, Commonwealth, Holland Village, Labrador and even Sentosa.

Memories and stories matter

A reason for the group's growth has been its highly accessible programmes, which centre on the sharing and exchange of personal memories. One of its longest running is various heritage tours that bring to life all of Queenstown's historic sites. 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 the 29-year-old.

Many of My Community's tours involve members from the area, such as residents or workers, offering visitors an insider's perspective. However, more importantly, this helps them reflect on what the town means to them. “When the community participates, you are presenting your personal story. It is a process of actualising your identity,” says Li Yong, who has a degree in economics and masters in heritage studies. “Every community has a story to tell.”

The desire to open up the curation of the museum to volunteers and residents has also led My Community to present heritage in unconventional ways. At the museum, children can colour on

sheets featuring Queenstown's historic buildings and participate in designing tote bags based on the town's icons. Recently, the group came up with an escape room game that involves solving puzzles based on the history of Queenstown. Li Yong credits the volunteers, many of whom are not from the heritage profession, for such creative ideas. In turn, My Community has organised capacity-building workshops to equip volunteers with certain skills, such as learning how to conduct oral history interviews.

Having engaged the grassroots on heritage matters for over a decade, Li Yong feels that buildings of significance to the community are also important. Thus, My Community proposed to conserve 18 sites in Queenstown in 2013, including residents' favourites such as its public library and the former Commonwealth Avenue wet market, which have since been conserved by URA.

Figuring out what to keep

Heritage is about ensuring the past stays relevant to the present, adds Li Yong. Particularly as Singapore continues to develop and society becomes more diverse, old buildings and traditional practices help root people to a place. Removing them prematurely could fracture communities. Thus, Li Yong believes conservation must involve even more consultations with the people to figure out what to keep.

“Our role is not so much fighting for conservation or for what to keep, but creating that platform for communities to keep anything they want (community artefacts),” he says. “Over time, we realise the opinions to heritage are really diverse. What it means (to each individual) is really multifarious.”



Li Yong (at the top right in red T-Shirt) with his team and community activities in Queenstown © My Community.

Li Yong encountered this first-hand as the residents of Tanglin Halt estate, including Museum @ My Queenstown were preparing to relocate to the nearby Dawson estate. To decide on what to bring over from the historic estate, residents were invited to select community artefacts, make a case for them and then vote. Although Li Yong wanted to keep the 1960s door from the estate's 55-year-old Meng's Clinic, he ultimately did not receive enough support.

"We have to respect the community even though we have a differing view," says Li Yong. "I had to let it go."

Storyboard evokes vivid memories

A simple storyboard at Block 450 connects generations of those who served in the 160 Squadron, Singapore's longest-serving air defence unit. The President of its alumni group, Jayson Goh, reflects on its significance.

Writer Jennifer Eveland

We assign importance to heritage buildings based on our relationships to them. A casual observer may appreciate an old building for its architectural aesthetic. A passer-by might catch a sense of nostalgia at the sight of vintage facades. But for those who actually occupied a heritage building, their memories linger on each wall and window and down every corridor and stair.

Such is the meaning of Block 450 at Seletar East Camp to the people who served in the 160 Squadron, Singapore's first and longest-serving air defence unit.

2015: Community heritage storyboard

URA introduced the community heritage storyboard to encourage the community to produce storyboards for buildings of significance and value to them. The first storyboard to be put up was for block 450 at Seletar East Camp, the place where servicemen and women served in the 160 Squadron, Singapore's first and longest serving air defence unit.

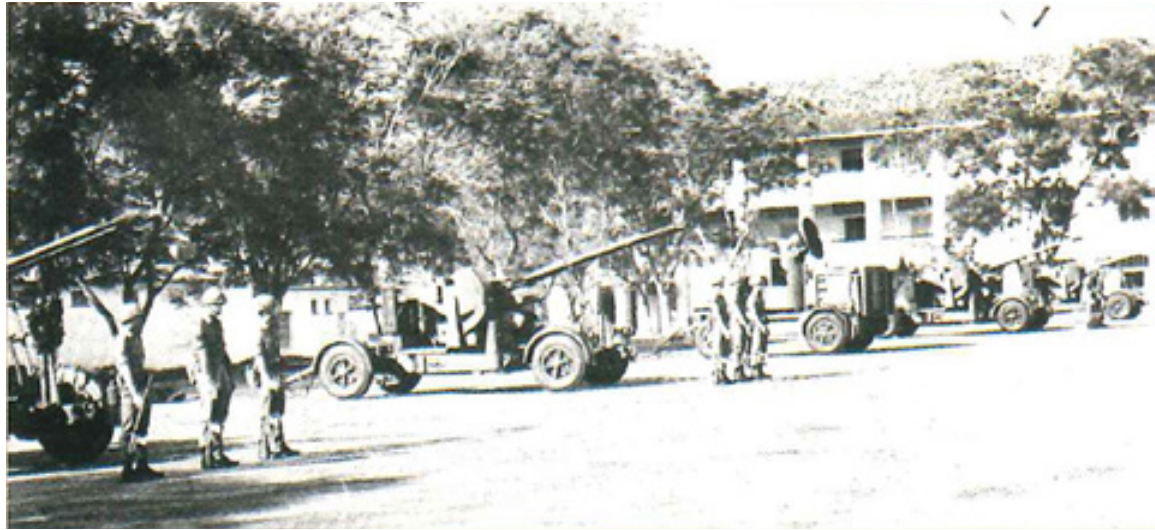
"Block 450 is the physical manifestation of the home spirit of every one of the servicemen and women who have gone through Squadron 160 and contributed to the air defence of this country for the last 50 years," says Jayson Goh, President of the 160 Squadron Anti-Aircraft Alumni Association.

Emotional connection

It has been 27 years since Jayson enlisted in the National Service, and he still feels an emotional connection to the block, which was once part of a compound that consisted of another identical building across a parade square plus a small hut-like mess hall.



Block 450 © 160 Squadron.



Top and bottom: The gun system parade in the parade square in 1970 and the last parade held at the square in 2002. © 160 Squadron.

The sight of it stirs in Jayson memories of sunset jogs in air cooled by breezes blown from the nearby seaside; or the flock of colourful birds that would congregate in a nearby tree each dawn, sounding reveille with a cacophony of chirping; and the esprit de corps engendered here during downtime, when everyone would share a meal and stay up talking. So close were the people here, that former squadron members were known to return to this place in the evenings just for the camaraderie.

Jayson also recalls occasions when elderly British gentlemen would appear at the gate, asking to enter the compound and look around. It had been their home while they served under the Royal Air Force (RAF) here, in what is now considered the oldest RAF base in the Far East.

“When they took us around and told us their stories, that emotion was contagious,” says Jayson. “You understand what a place means to these people even after so many years.”

The RAF built the compound in the 1920s, and the 160 Squadron took it over in 1970 after the British vacated. That was the year the nation’s ground based air defence was founded. Four of the 160 Squadron’s pioneer members flew to Switzerland to train with Oerlikon, manufacturers of the 35 mm anti-aircraft gun system that would defend the skies above Singapore.

But time marches on, and over the decades, the gun system has been replaced by radar, the squadron shifted to another home 32 km away and the compound was all but razed along with most of the former military camp to make way for Seletar Aerospace industrial park. Of the small compound, only Block 450 remains.

In June 2014, Jayson was surprised to hear that the block had been gazetted for conservation together with Block 179 (former Station Headquarters) and 32 other bungalows in the area.

He discussed with URA the possibility of erecting a heritage storyboard at the site under a URA initiative seeking proposals from the community to produce heritage storyboards sharing stories and buildings’ value to the community.

Connection across generations

Jayson offered to compile the information and images for use on the storyboard. He has ready materials having spent years researching and preserving the memories of the squadron, since his National Service days when he was tasked to produce a publication to commemorate the squadron’s 25th anniversary.

Over the years, as the alumni association held anniversary celebrations, he used the historical data, anecdotes and images to create displays that have been hugely popular with attendees.

In 2014, Jayson received another surprise when he was contacted by an elderly British RAF Seletar Air Base veteran who wanted to give the 160 Squadron Alumni Association all of the memorabilia from their days at the camp. As their numbers were dwindling, they were losing custodians for the collection.

“They gave us an entire database and history of this place before 1970, and probably the best collection of photographs from between the 1920s and 1970s. It was like treasure to us,” says Jayson, who, with his compatriots, pored

over the old photos, identifying where each was taken and marvelling over the changes that had occurred over time.

The RAF memorabilia was unveiled at the squadron's 45th anniversary celebration in 2015, the first time pre-1970 history was featured. This was also the first celebration to be held at Block 450 since the squadron left in 2002, and the reveal ceremony for the official heritage storyboard, produced by the 160 Anti-Aircraft Alumni, 160 Squadron and URA.

Jayson says that the storyboard is important because, while we can conserve buildings, we are only dealing with the physical aspects and the architecture. "We need to tell the stories behind the place to connect the building to memories and generations of those whose identities are linked directly to the building," he explains.

"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."



Clockwise from the top: Blk 450, the unveiling of the storyboard in 2015 with Minister Chan Chun Sing (Jayson Goh is on the far left), the first batch of anti-aircraft gun operators in 1970 and four officers attending a course for the 35 mm Oerlikon gun operators in Switzerland in 1969.
© 160 Squadron.

Keeping historic districts fresh

Real estate entrepreneur Ashish Manchharam is re-adapting the use of shophouses, keeping historic districts relevant and engaging.

Writer Jennifer Eveland

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 as Founder and Managing Director of 8M Real Estate. He is in a unique position to re-energise historic streets through a variety of unique commercial uses, ensuring that the shophouse properties bring out the special qualities and charm of historic districts.

His family settled in Kampong Gelam in 1908, the year his grandfather arrived in Singapore to set up business as a trader. At the time, Arab Street was a major corridor of commerce. Merchants typically lived with their families in quarters above their shops. However, by the time Ashish was born, families were beginning to vacate the shophouses for residential areas elsewhere, and it was not long before his family followed suit.



The KēSa House along Keong Saik Road.

Over the years, Ashish saw the area evolve from a residential neighbourhood to an increasingly popular mixed-use district. He would often return to help with the family business or visit relatives' shops during Deepavali until the early 2000s when his family traded their retail interests to focus on real estate management. This transition inspired Ashish to pursue a career as an entrepreneur.

Haji Lane's evolution

At the same time, Haji Lane, an unknown alley of tiny warehouses behind Arab Street, began to take off in an unexpected fashion. Ashish was approached by several young designers interested in opening boutiques, and the spaces there were perfect – small, accessible rents and vacant. Once the first shops shook

the place up, it did not take long before the entire lane sprang to life.

“That is really where I learned about re-adapted uses for heritage properties,” says Ashish. “As times change, the use and demand for space will evolve, so you have to be at the forefront in determining what is going to work in these spaces. That change is typically led by a bottoms-up demand,” he says.

Ashish believes Haji Lane's evolution is still ongoing, as start-up food and beverage (F&B) operators have recently taken interest in units there, stirring the tenant mix once again. It is an exciting prospect for Ashish, who has a passion for food. He travels regularly to cities such as London, Sydney, Tokyo and New York to check out new trends in F&B and

consider their suitability for Singapore. He is also on the lookout for local up-and-coming chefs whom he can link up with experienced F&B operators. Ashish is keen to see more casual eateries serving classic local dishes in historic neighbourhoods.

Balancing old and new

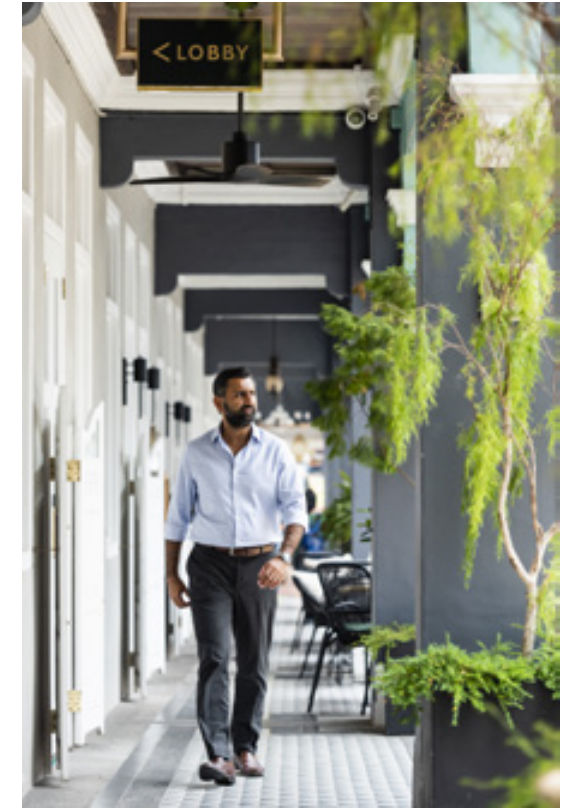
In managing shophouse properties over the years, Ashish is careful to introduce uses that complement and accentuate the unique characters and heritage of each historic district. Such areas also attract certain types of businesses.

Restaurateurs love shophouses for their stand-alone independence and unique frontage, as opposed to nondescript shopping malls, says Ashish. Tech companies will also embrace the space constraints typical to shophouses because they understand the appeal of urban enclaves to target creative talent.

By curating uses such as F&B and flexible-living accommodation at his properties, he has injected new buzz in key areas. His latest boutique integrated lifestyle destination, KēSa House, opened earlier in 2019 and is spread across a row of 10 shophouses at Keong Saik Road.

Ultimately, shaping the use of shophouses is really about ensuring the heritage and essence of historic districts remain. It is a challenge of balancing the right mix.

“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. There has to be a commercial element whilst you are retaining the heritage in order to make it relevant.”

2014: Dakota Crescent

Architect Jonathan Poh initiated a “Save Dakota Crescent” campaign, which paved the way for the retention of six blocks of the historic public housing estate developed by the Singapore Improvement Trust. This reflects more ground-up efforts by individuals and communities in proactively shaping Singapore’s built heritage.



An overview of Dakota Crescent, from the report submitted by Jonathan Poh and his team. © Save Dakota Crescent.

Saving Dakota

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

When it was announced in July 2014 that Dakota Crescent would be redeveloped under Mountbatten’s estate renewal plans, Jonathan, Principal Architect/Director, Provolk Architects, was personally interested and curious as a resident living nearby.

He has walked past the estate before and was intrigued by its intimate and low scale character which possess many “special qualities” that cannot be found in other neighbourhoods. The estate is an example of early public housing designed by British town planners. The Singapore Improvement Trust (SIT) built it in 1958 for public rental housing and handed it over to the Housing & Development Board in 1960, when the statutory board was formed.

While large parts of the estate have been progressively redeveloped over the years, 17 original blocks of low-rise, brick-clad flats remain. The neighbourhood has become a familiar everyday landscape to ordinary citizens. It was also home to long-time elderly residents.

Save Dakota campaign

Seeing its significant links to the past, present and future and its unique architectural and spatial qualities, Jonathan initiated a “Save Dakota” campaign in 2014. “I decided to start the campaign to raise awareness of Dakota’s importance in our built heritage and the stories

and social memories of the residents and communities as much as possible, knowing that it would go,” says Jonathan who had no specific expectations or a full action plan in mind then.

The reaction to the campaign was surprising and began to gain momentum in pushing for the retention of key blocks in the estate. “I was asked to give a talk on the area and was surprised to see how much interest there is in the area including the many personal stories that residents and other groups such as Dakota Adventures had to share.” Jonathan spent the next two years delving deeper into the architectural and social significance of the area and learning more about the personal connections and stories intertwined with the estate.

In 2016, the MP for Mountbatten, Lim Biow Chuan, approached him to understand more about the estate. Jonathan took the opportunity to put together an informal proposal and met the MP several times. He also met with staff from URA and the National Heritage Board, grassroots leaders together with his Save Dakota Crescent group⁶, which he formed to support the efforts.

Through these site visits and discussions, Jonathan saw the openness to review options and consider possibilities. With that, he spent some months developing a more formal proposal for the estate.

⁶The core team of the Save Dakota Crescent group consists of Tan Chiew Hong, Quack Zhongyi, Luke Lim, Linda Loy and Cai Yinzhou.

Coherent and balanced proposal

Putting together such a proposal for the first time, Jonathan received advice and help from various experts⁷. “I wanted to put together a well thought through and researched proposal. They taught me how to structure the proposal in a way that made it more coherent, balanced and well understood. I also learnt the importance of considering not just the community’s views but to chart out the potential future use of the estate, which was as important as retaining it.”

The result of two years of campaigning and time spent walking the estate and brainstorming the different options was a 52-page report submitted to URA in September 2016. The proposal included four different options from retaining all blocks to partial retention. It also suggested potential future mixed uses to retain its intimate characteristics and sustain its viability and vibrancy. This would enable future residents, workers, locals and expatriates to interact with one another, creating new social memories.

Examples of future uses suggested in the proposal were to use the blocks for office space for private companies, start-ups and social enterprises. It also recommended that the blocks could be converted into interim rental public housing for families awaiting their flats or be used for heritage hotels and hostels.

Lessons learnt

In December 2017, it was announced that six blocks (Blocks 10, 12, 14, 16, 18 and 20), the estate’s courtyard, and iconic dove playground would be retained. The blocks represent the four types of SIT buildings – two seven-storey “butterfly” blocks, two seven-storey slab blocks, one three-storey block and a two-storey block.

Jonathan is happy with the outcome. Inspired to continue his newfound interest and passion, he is already working with other groups to help shape proposals for other historic buildings.

Reflecting on lessons gained, he shares: “It is important to put across proposals that are well thought through and researched to present a complete and coherent picture of the historic buildings and its larger context. This I think is what made a difference.”

“It is also important to listen well to many different voices and views on ground, to make the connections and to learn to bring together different ideas and options to the table. The other lesson learnt is also the time we needed to be able to study the area and put together the proposal. It took quite some time to understand the area fully, the people and the context. This perhaps may be a luxury but is certainly a lesson to think about for the future, whether we can afford to set aside more time for options to be considered and stakeholders to be heard before things go,” he adds.

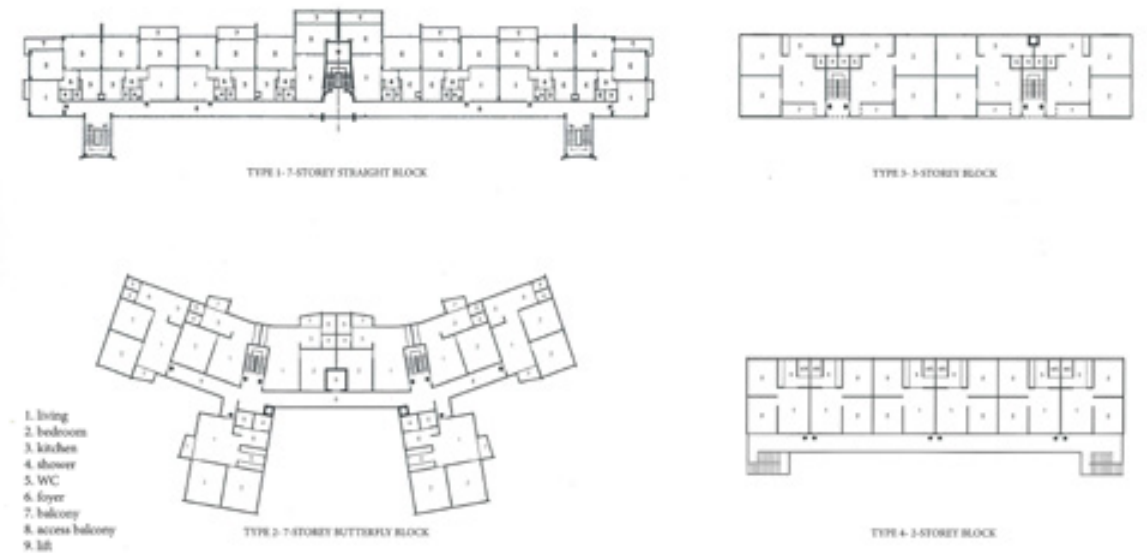


2012: Singapore River One

The non-profit company was set up dedicated to carrying out place management activities for the Singapore River. This reflected more active place management efforts led by stakeholders for historic precincts. Place management groups in other areas such as Little India, Kampong Gelam and Chinatown have also been actively leading efforts in their precincts.

2017: Modern architecture

Through careful balancing of land use needs and in consultation with the Conservation Advisory Panel and stakeholders, a significant number of modern buildings are protected over the years. These were presented in the exhibition, ‘Heritage of our modern past’ to celebrate their importance to Singapore’s built heritage.



Top and bottom: Jonathan Poh leading a tour together with the Dakota Adventures group and the block plans of Dakota Crescent. © Save Dakota Crescent.

⁷Examples of experts Jonathan consulted were Dr Imran Bin Tajudeen, Assistant Professor, Department of Architecture, School of Design and Environment, National University of Singapore, Dr Chua Ai Lin, Executive Director, Singapore Heritage Society and Kwek Li Yong, Co-Founder, My Community.

The way forward

What does the future of conservation look like? Even while the city continues to renew and revitalise itself, how should we define and shape our heritage and the narrative within our collective and personal memories and the public realm?

Chan Sui Him, Chairman of the Heritage and Identity Partnership and Dr Chua Ai Lin, Executive Director, Singapore Heritage Society discuss challenges and solutions ahead in shaping the built heritage.

For buildings to last well, Dr Yeo Kang Shua, Associate Professor, Singapore University of Technology and Design, Dr Nikhil Joshi, Researcher and Consultant and Tan Kar Lin, Co-Founder, Studio Lapis, suggest the need for the industry to focus on materials science, lime plaster and making restoration work mainstream.

2018: Heritage and Identity Partnership (HIP)

The new platform takes on an expanded role from the Conservation Advisory Panel, which ended its tenure in 2018. Beyond providing advice to URA on ways to protect and conserve buildings, the HIP also contributes ideas to sustain the built heritage and memories of places.

Sustaining heritage

The Chairman of the new Heritage and Identity Partnership, Chan Sui Him, reflects on ways to make our built heritage even more accessible.

Chan Sui Him is the first Chairman of the new Heritage and Identity Partnership (HIP) formed in August 2018 to support public-private-people collaboration in shaping and promoting Singapore's built heritage and identity.

The HIP takes on an expanded role from the previous Conservation Advisory Panel (CAP),

which ended its tenure in May 2018. In addition to taking on the CAP's role of providing advice to URA on ways to protect and conserve buildings, the HIP contributes ideas on sustaining awareness and interest in the built heritage and memories of places.

An architect for over 50 years who began his career in 1968, Sui Him was the Chief Executive Officer (1999-2004) and Chairman (2004-2015) of DP Architects, one of Singapore's largest and oldest architectural firms. He reflects on ways to make heritage more accessible and the need to keep learning from others.

How can we make our heritage more accessible?

Sui Him: People learn better and remember more clearly if they can see, touch, and be engaged in all the senses. In the core historic districts such as Chinatown, perhaps a more dedicated physical educational centre can be set up to facilitate the learning experience.

This is especially important for younger students. It will arouse their interest. Such centres can help to facilitate the learning experience, where continuous and regular programmes and activities can be organised and used to engage not just the students but also the communities within. Some of the vacant shophouses in historic districts can be readapted for the educational centre or for use by the wider community.

At the tertiary level, we should also explore delving deeper into an appreciation for conservation as part of the curriculum to enable our young to remember clearly and vividly how far we have come in our conservation efforts and what it takes to continue to manage this.

How do you envision the use of historic buildings for the wider community?

Sui Him: I noticed that we still have a fair number of historic buildings that are vacant and not in use at any given time. Some are in the historic districts while others are outside of the Central Area. Some of these are Black and White bungalows, for example in the Kent Ridge area.

We could possibly comb through our list of historic properties and identify a select few, which can be put for student housing use for example. The rates could be reduced to ensure these are affordable.



Chan Sui Him (standing with blue shirt) with some HIP members and URA management staff.

The way forward

When such vacant buildings are in use, we ensure that they do not deteriorate over time. This is one way of making our built heritage more accessible. At the same time, it ensures our historic buildings are well maintained and communities can access and appreciate them in a more direct way.

In balancing old and new, what should be our focus?

Sui Him: It is about creating liveable and sustainable environments. I am impressed with the murals that have started to come up in our various historic districts. It started from Penang and Malacca and this idea was brought to Singapore. I drove around to admire some of the latest ones in Chinatown.

I see the murals as an example of the need to create a lively urbanscape. At Smith Street, there is a good example of a canopy that was created while the shophouses and murals are below. This is a good blend of the old and new and makes the street more interesting. We need to find creative ways on how to blend the old and new that continues to engage us and yet not alter our heritage.

Looking ahead, how can we continue to sustain our efforts?

Sui Him: We need to keep learning from others and other cities. European cities, which have retained a large part of older segments of their cities or second and third tier cities in China and India offer lessons we can learn.

For cities in the region such as Kuala Lumpur, Malacca and Penang where their communities and programmes may be similar to ours, we



Smith Street showing the canopy and mural.

can certainly learn from them too. A heritage or conservation symposium can be created every two years for cities to learn from each other. Learning is also a form of memory, being conscious of how to continue to develop our city with conservation foremost in our minds.

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.

Eye on past and future

Some three decades on, the Singapore Heritage Society continues looking forward for Singapore's past.

Writer Justin Zhuang

“Heritage is about the future,” says Dr Chua Ai Lin, the 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. Over the decades, the society has helped to champion important issues around heritage in ensuring its relevance to today's context.



One of the SHS's events - Ah Ma Drinks Stall opening © MJ Photography.

The way forward

Beyond nostalgia

As heritage becomes more mainstream, Ai Lin believes the 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.”

Over the decades, the society has evolved in its relationship with the government since she joined the SHS as a student in 1996 and became the Vice-Chairman in 2011. By the time she became President between 2013 and 2017, Ai Lin could easily reach out to policymakers via various formal and informal channels.

Over the years, the society has also been invited to participate in community groups, such as the Friends of Ubin Network that seeks to preserve Pulau Ubin’s rustic charm, natural environment, biodiversity and heritage.

While acknowledging that the government has become more inclusive in engaging heritage and conservation issues with citizens, Ai Lin says such conversations could happen even earlier. She suggests that Heritage Impact Assessments are important.

This structured approach uses a range of information such as social memories and assessment of historical significance to determine what is unique about a heritage asset, identifying possible threats to it and how to mitigate their impact.

“I have often said that heritage impact assessment is the most important advocacy issue for SHS because it is a policy-making tool that can be applied to any heritage site,” she says. However, such assessments are “not sexy enough” to donors and the public. Many also incorrectly fear that it would halt developments entirely.

“It almost never stops the change from happening completely, but the solution is revised in some way to impact the unique character (of the heritage asset) less,” she explains. “It results in a more iterative process to produce an end result that better addresses different needs.”

Other policy-related issues on the SHS agenda include the conservation of Singapore’s modern buildings. This involves rethinking how to approach the issue because the likes of People’s Park Complex and Golden Mile Complex are unlike many conserved buildings that have a single owner or are state-owned.

“The next frontier is what you do with strata-title buildings where there are a lot of owners. What are the policy tools to deal with such new forms of buildings that have not yet been conserved?” asks Ai Lin.

Challenges on ground

Even as SHS focuses on conservation at a macro level, it is also well aware of the challenges on the ground, for example, the manager of the 114-year-old Seng Wong Beo temple in Tanjong Pagar is struggling to find ways to document and share its heritage with the community.



A tour of Chinatown by resident and blogger, Victor Yue and the five past Presidents of the Singapore Heritage Society, clockwise from top left, Dahlia Shamsuddin, Dr Chua Ai Lin, Dr Kevin Tan, William Lim and Kwok Kian Woon. © SHS.

In Pulau Ubin, Ai Lin also realised that many of the residents did not participate in meetings to protect the island because they did not speak English or understand how policies worked.

“There is a challenge because stakeholders of some of these heritage assets may not have access to the kind of discourse that we are having now in English in an intellectual way,” says Ai Lin. “Some of our heritage assets may be overlooked because they are not a part of our modern system — precisely because they are heritage.”

Even though Ai Lin never went to Chinatown or Pulau Ubin much in her youth, her interactions with the community and learning about their histories have helped the history buff appreciate how meaningful and rich these places are.

“We keep thinking there is nothing in Singapore. We keep trying to invent new festivals, new things to bond the community or something to engage the public when you already have something there that is so special,” she says. “If you start to open your eyes to what is still here, a lot more possibilities open up.”



Dr Yeo Kang Shua (with white helmet at the top image) at the Yueh Hai Ching temple restoration (© Lim Shao Bin) and a Light Detection and Ranging (LIDAR) image of the temple used to help with the restoration work.



Science of restoration

To ensure historic buildings last, we need to pay closer attention to the science of restoration, suggests Dr Yeo Kang Shua, a conservation expert.

Writer Justin Zhuang

Exposing an old building's brick walls has become trendy to show its historic value. But this could be doing more harm than good, says Dr Yeo Kang Shua.

Not all bricks are fired to withstand the elements openly, and the contemporary practice of applying an adhesive to create such designs often damages a building in the long run.

As adhesives are hard and the bricks are soft in comparison, such walls will typically cave in over time, says Kang Shua, the Associate Professor of architectural history, theory and criticism at the Singapore University of Technology and Design.

Focus on materials

Such “purely aesthetic” practices may cause Singapore to lose its built historic fabric. Thus, Kang Shua has been advocating for a more scientific focus for restoration work. He first got interested in this topic while interning at RSP Architects Planners & Engineers, which was then restoring the Lian Shan Shuang Lin Monastery and the House of Tan Yeok Nee.

Since attaining his PhD in architecture history and theory at the National University of Singapore, Kang Shua has taken up a variety of roles as an academic, advocate and even

practitioner — all with an eye on improving the profession's understanding of the materials that make up Singapore's historic buildings

“When we say restore back to original, at the end of the day, a temple looks like a temple, a church looks like a church, you do not change the motifs,” he says. “The question is how do you do it? How do you make sure there is no change? There is a lot of very grey areas.”

To guide practitioners, Kang Shua has contributed to a series of conservation technical handbooks as part of a team from the International Council on Monuments and Sites, Singapore (ICOMOS) working in collaboration with URA. The handbook series detail the hows and whys of conserving and restoring different parts of a building.

Another project Kang Shua 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. Ultimately, it adds to a fuller understanding of the past so that any refurbishment and renovation work can be done appropriately. “When you use inappropriate materials, the eventual loss is even more than if you leave it alone,” he says.

Focus on architectural heritage

Conservation and restoration does not just concern individual buildings alone. It is also about the immediate urban street and fabric. “In most cases, we tend to be inward-looking. We only look at our own site, whereas conservation also needs to consider the context as well,”

The way forward

says Kang Shua. He notes that many shophouses today have closed off their entrances for privacy and modern-day comfort such as air-conditioning, this may inevitably kill off the vibrant street life that used to take place along the five foot ways.

He points to a good example set by a recently completed hotel in Little India, The Great Madras. The architects and owners consciously chose not to air-condition the ground level of this conserved building, which was originally built by the Singapore Improvement Trust as public housing. It ensured the street life around it continues, and this was one of the reasons why the project won the Architectural Heritage Award in 2018.

It is also important to first determine what defines the heritage value of the building. “We use the word ‘restore’ or ‘conserve’, but restore to what? To which period are we talking about?” he asks.

When restoring the Yueh Hai Ching Temple in Philip Street and Hong San See Temple along Mohamed Sultan Road, both of which were recognised by the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation, Kang Shua first started by digging deep into their histories. The research paired with a methodology to pinpoint what defines their heritage values contributed to a framework created to guide decisions on what interventions could be carried out and how to ensure they were sensitive to their history.

“In conservation, first and foremost, the designer — whether the architect or non-architect — has to suppress his or her ego because you are not designing out of nothing,” he says. “Unfortunately most of the time in Singapore,



it is the architecture that takes precedence, not architectural heritage.”

Heritage is shared

Similarly, he believes it is not just practitioners who should become more objective and academic when it comes to conservation, so should the general public. “There is no good going to a negotiation table and say save it because we like it. We are not getting anywhere,” he says. “It is not about me and my emotion. It is about what is the value of that heritage asset.”

Deepening technical know-how

Tan Kar Lin, the Editor of URA’s new Conservation Technical Handbook, shares why this series is important for both the industry and the public.

Writer Ian Tan



This is best determined through a public discussion and an objective and transparent decision-making process. All parties also have to be mature enough to listen to one another’s argument before making decisions, and ultimately, agree to disagree.

“Heritage is not yours or mine. It is shared because it shapes you as an individual and it also shapes a community,” says Kang Shua.

To raise the industry practice on technical know-hows for works done to conserved buildings, conservation guidelines were developed from the 1990s and have been updated regularly over the years. In addition to this, to keep pace with advancements in the practice, building technology and materials science, URA produced a new Conservation Technical Handbook from August 2016 in collaboration with ICOMOS Singapore.

The way forward



The founding committee and advisors of the ICOMOS Singapore (Kar Lin is second from right). © ICOMOS Singapore.

ICOMOS Singapore was set up in 2014 as the local chapter of the International Council of Monuments and Sites, a global non-government group and an advisory body to UNESCO - this partnership would help to continue to ensure Singapore's conservation practices are aligned with international best practice standards.

Tan Kar Lin, the Editor for the handbook shares key highlights of the handbook and believes this will help the industry and public deepen their appreciation for quality conservation and restoration works. She is also the Founding Director of the ICOMOS Singapore and a partner of Studio Lapis, an architectural restoration consultancy.

What does the handbook cover?

Kar Lin: The handbook is an eight-volume series covering different aspects of technical restoration, architectural elements and material usage for heritage buildings.

The series contains recommendations for best practices on restoration works, and detailed information on locally used materials, construction methods and restoration techniques. The e-books are available for free online.

How did the opportunity to produce the handbook come about?

Kar Lin: URA was then considering an updated edition of the Conservation Guidelines

Technical Supplement that they compiled almost 20 years ago, and separately sounded out Ho Weng Hin (Co-Founder of Studio Lapis), Yeo Kang Shua (SUTD Associate Professor) and Wong Chung Wan (Principal, MAEK).

All three parties happened to be members of the then newly formed ICOMOS Singapore, so we counter-proposed to conceptualise this as a URA-ICOMOS Singapore collaboration project, where we can pool expertise and invite other expert writers to contribute.

How does the handbook complement URA's conservation guidelines?

Kar Lin: In general, the conservation guidelines stipulate the architectural outcome of a conservation project, but not how this should be achieved. Given the generally limited technical knowledge, many builders, professionals and owners face challenges in executing conservation works - some may even claim that these are not locally achievable.

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.

Is the handbook accessible to a layperson without deep knowledge in architecture or local history?

Kar Lin: Our target reader is anyone with an active interest in architectural conservation, but he/she does not need to be technically

2016: Conservation technical handbook

To deepen the appreciation for quality restoration and to keep pace with advancements in the building technology and materials science, URA produced an eight-volume conservation technical handbook series in partnership with the local chapter of the International Council of Monuments and Sites.

trained to read the handbook. Hence, the contents are organised in digestible parts. Each chapter begins with a historical overview, followed by diagnostic and conservation sections that focus on key working principles rather than technical details.

Box stories also enliven each chapter with self-contained bite-sized information. Contributing authors have also scoured through archives and provided exclusive access to their own projects to present engaging and instructive images, complemented by original illustrations created for the series.

What are some interesting surprises arising from the handbook?

Kar Lin: We have come across a few exciting discoveries during the research. For example, Singapore's first fully reinforced concrete building was built in the 1910s (Volume 4) instead of the late 1920s as previously assumed. Singapore also had its own locally made ornamental tiles by the 1910s (Volume 6) and metal windows by the 1930s (Volume 5 Doors and Windows). These discoveries deserve a separate book!

The way forward

What is a major challenge in continuing to encourage quality conservation and restoration work?

Kar Lin: Conservation in Singapore has largely been driven by the relatively structured regulatory framework that we have and predominantly framed in terms of property, tourism and cultural dollars.

To this extent, mainstream architectural practice still mostly treats conservation work as part of the compliance scope, or as a history-themed A&A (additions and alterations) design exercise; many designers still tend to feel justified in taking liberties with conservation parameters, seeing these as ‘restrictive’ of creative freedom.

Appreciation of and sensitivity to historic materiality is still relatively rare, unfortunately, and this remains one of the biggest challenges we face.

To access the e-handbook, go to <https://www.ura.gov.sg/Corporate/Guidelines/Conservation/Best-Practices>

More than wall finish

The use of traditional lime materials for historic buildings is critical, says Dr Nikhil Joshi, a conservation expert.

Writer Ian Tan

“An area around Serangoon Road used to be called Soonambu Kambam, meaning Village of Lime in Tamil.” Poring over old maps and historical accounts, conservation expert Dr Nikhil Joshi traced the area’s origins back to 1820s, where the British established lime kilns to produce Madras Chunam, a type of lime mortar essential for constructing early buildings in Singapore.

Restoration projects on buildings such as the former Empress Place Building, today’s Asian Civilisation Museum, and the former Town Convent turned CHIJMES, completed in 1989 and 1996 respectively⁸ featured decorative columns capitals and stucco works sensitively restored by craftsmen using lime mortar.

“Unfortunately” Nikhil muses wistfully, “limestone, kilns and skilled craftspersons working with lime had vanished from Singapore around the mid-twentieth century”. Nikhil, a research fellow at the National University of Singapore (NUS)’s Department of Architecture, has been proactively advocating for the use of lime plaster for historic buildings. He is also a researcher, teacher and consultant on conservation projects and community development in the region, India and the UK.



Professors and students at Nikhil’s first course on lime plaster for NUS in 2016. He is on the far right. © Nikhil Joshi.

What is lime, and why is it important for historic buildings?

Nikhil: Historic buildings were built with porous materials such as clay bricks, sand, earth and timber, as compared to non-porous modern materials such as steel and concrete. 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 wall to “breathe”.

The key difference between traditional and modern buildings is for the former, the entire structure allows for the movement of moisture. Water vapour can evaporate off to keep

materials such as brick or timber in good condition. For modern buildings, a system of moisture barriers is designed to keep water out of the structure.

Is lime different all over the world and does this difference affect the quality of conservation?

Nikhil: Limestone or calcium carbonate, the raw material to make lime, is found naturally in chalk or seashells. However, it cannot be used directly for building purposes. Limestone needs to be heated in a kiln to become calcium oxide. When combined with water, the slaking process produces calcium hydroxide or quicklime, suitable for making lime mortar. It can then be used to re-point brick joints, or as plaster and whitewash for building walls.

⁸See Lee, San Chouy. The men who gave The Empress life. The Straits Times, 11 April 1989, p.5 and Hoe, Irene. Old Covent Glows Brighter than Before. The Straits Times. 23 March 1996.

The way forward

Even though quicklime is produced similarly around the world, the composition of lime mortar and its application differs from place to place depending on culture and climate. Although Singapore used to have craftspersons skilled in making lime suitable for the local climate, they vanished in the mid-20th century due to the popularity of modern construction. This has significant impact on heritage conservation. For instance, Singapore relies on imported materials and foreign craftspersons to restore its heritage structures. This increases cost and runs the risk that the lime used may not be suited to the local climate.

How can we encourage building professionals and owners to embrace lime for their old buildings?

Nikhil: Traditional lime mortar is hardly used for conservation in Singapore these days. It is not available locally, and hardly any building contractor can work with lime. Instead, conservation architects and contractors use 'lime-based' products. Some are exclusively marketed for 'conservation and restoration'.

It hurts me to say that most professionals taking on conservation projects are not suitably trained to manage traditional buildings. Hence, we often see inappropriate materials used for repairs that fail within a short period. Instead, old buildings should be only repaired using original or "like" materials. This prevents problems caused by incompatible materials during repair. To encourage professionals and owners to use traditional lime in conservation, we need to raise awareness through talks, workshops and publications catering to both technical and laypersons.

Share with us your experience in leading the lime plaster course at the NUS Baba House.

Nikhil: Organising a hands-on training course on traditional building materials was tricky. It was a daunting experience to source high-quality quicklime in Malaysia and to get that "white" material through the Singapore Customs. The officers were quite understanding, and after some explanations on why I am carrying a van-load of lime putty, they allowed me to enter. It was also challenging getting interested participants especially for my first course at the NUS Baba House in 2016.

The first course, mainly for NUS students and Baba House staff, was an introduction to building limes and a practical experiment to test various lime plaster mixes on the walls of the Baba House. Details such as surface condition, moisture content and the composition of lime mixes were recorded meticulously. I then monitored the plaster samples over 18 months to see their changes. Given the experience of this course and the results of my experiments, I organised a second course in April 2018.

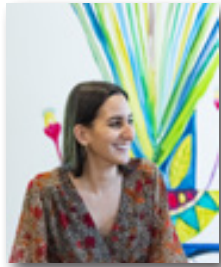
As a 'lime advocate', I support hands-on training to promote traditional building techniques. Architecture students especially should have more exposure and opportunities to learn heritage conservation. Thus from 2020 onwards, NUS's Department of Architecture will roll out several heritage conservation training courses that will cover this.



Participants plastering a wall as part of the programme in April 2019 on the technology and use of lime plaster in buildings. © Nikhil Joshi.

Final reflections

Residents, stakeholders and an architect reflect on their links with buildings and places.



“I produced a series of paintings earlier in 2019 to recreate the sense of home, inspired by my grandfather’s home which still remains after all these years.”

Chloë Manasseh
Singapore-based UK artist returned to the house her grandfather, Leonard Manasseh, renowned architect, was born in 1916 at 28 Nassim Road, now the official residence of the British High Commissioner.



“Buildings are beautiful. Just like books, they have stories and memories to tell us. They are tiny yet important jigsaw pieces of a country’s history board.”

Hidayah Amin
Founder & CEO, Archipelago Consultancy. Her family lived in Gedung Kuning from 1912 to 1999.



“...I am glad that my old house is still there....If you go to cities with older features, you feel the warmth towards you and you imagine the history behind it. It is human.”

Professor Chan Heng Chee
Ambassador-at-large, grew up at 125 Joo Chiat Place.



“Little India is my life...Once you move away the life, you cannot bring it back.”

Rajakumar Chandra
Chairman, Little India Shopkeepers & Heritage Association, grew up in Little India and has been leading place-making efforts in the area since 2006.



“When you talk to somebody about the institute, they will say, ‘Oh, the building with a semi-circular front’,...Most people who pass this area identify it with the building too.”

Thomas Jacob
Chief Executive, Singapore Institute of Science, which has been operating in a landmark building at 593 Serangoon Road in the Jalan Besar area.



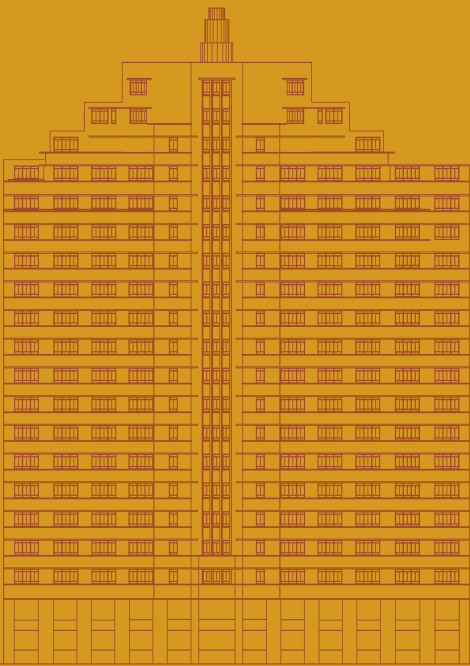
“For conserved buildings, usually one of the qualities they must have is aesthetic merit. So I’m dealing with a beautiful thing, and then I get to make it even more beautiful. How great is that?”

Tan Kok Hiang
Principal Director, Forum Architects, restored the iconic modern building Jurong Town Hall, together with his team, in 2017.



“It has a very friendly environment with a strong community. The area is also rich in history with many iconic buildings like the Sultan Mosque and a diverse mix of businesses amidst beautiful streets.”

Saeid Labbafi
Chairman of One Kampong Gelam, has been driving place-making activities in the area since 2014.



OUR HERITAGE
Is In Our Hands

