

# FUTURARC

The Voice of Green Architecture in Asia-Pacific

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## Old is GOLD



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137 Pillars House, Thailand



CHUMES, Singapore



Old House in Mui Tsz Lam, Hong Kong



Vivekananda Ashrama, Malaysia



Kawagoe City, Japan



Old Tai Po Police Station (Green Hub), Hong Kong



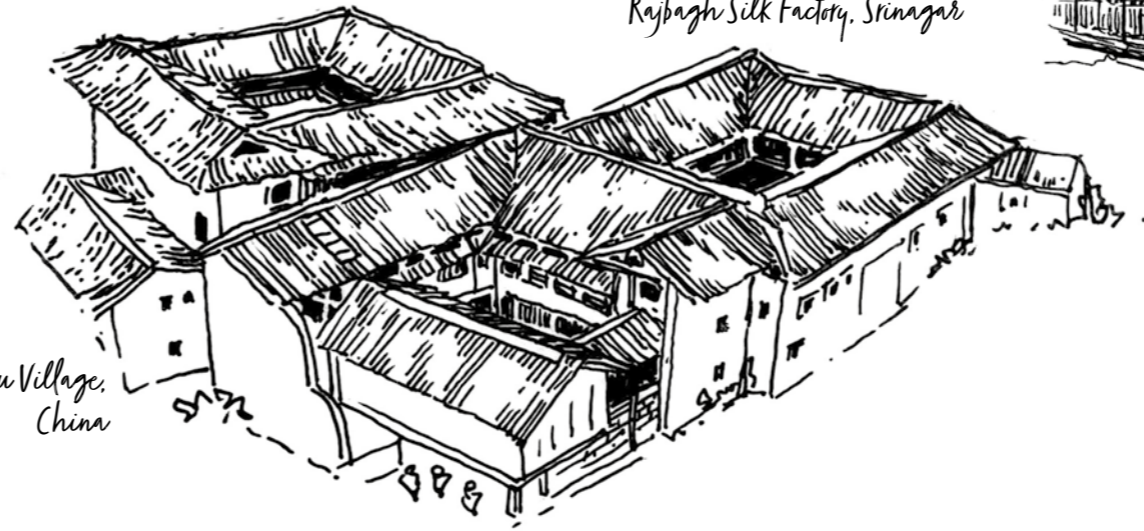
The Arcadia, Singapore



Rajbigh Silk Factory, Srinagar



Hao Sy Phuong, Vietnam



Tulou in Naniou Village, China





Photo © School of Architecture, CUHK

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### Dear *FuturArc* readers,

In attempting to embark on a journey of uncovering and highlighting old architecture that is still in use today—with some even serving its original functions—and have been designed to be climate- and context-responsive eons ago, we thought the word gold will fit the topic nicely.

The word is not only often used to convey something old yet precious, but it also resonates with something Dr Johannes Widodo (The FuturArc Interview) said when he raised key questions of the whats and whys of conservation and heritage. He pointed out that the most important factor now is economic viability: “If there is no money, there is no honey.” One needs gold (money) to conserve/create gold (heritage architecture), as it seems in today’s predominantly capitalist market, the sustainability argument of not demolishing and building anew for the sake of reducing carbon emissions is not enough!

Heather Banerd (Main Feature) made a case for conserving culturally and socially significant architecture such as the ‘middle-aged’ condominiums in Singapore, even though they are not considered “colonial-era architectural heritage”, which are more commonly preserved. With the current built environment forming two-thirds of all global building stock within the next couple of decades, Banerd highlighted how it seems “wildly optimistic to imagine that we can reduce emissions by tearing down and rebuilding, and ludicrous to think that in doing so, we would be losing buildings that are already more climate-appropriate than many new developments.”

On how one decides what to conserve, Gurmeet S. Rai (In Conversation) had this to say, “If somebody wants to conserve a building because it’s part of their culture or identity or history or for any other reason, you conserve it.”

Among the most enlightening insights from Dr Widodo was when he said, “Change is inevitable. Therefore, conservation is the management of change. And heritage is always in motion, moving from the past to the present and the future.”

One seldom sees heritage as something fluid, let alone a movement of the past to the present and future. And yet, it is. Through what lens are we looking at heritage architecture? We are using today’s climate and today’s socio-political eyes to see architecture of the past. How then do we appreciate them? How do we ‘see’ them as relevant today? Would we see them the same way if they have not been restored to some use (based on the current definition of use)—which could either be culturally/historically appropriate (i.e., authentic to its original intent, spirit or use) or what is presently needed?

We highlighted several projects that we hope will convey the delicate and sensitive nature of conservation—from reviving countryside architecture, ecosystems and livelihoods to centuries-old houses and decades-old condominiums—through restoring not just buildings, but also the mindset and soul of the people.

In the following pages, you will also see through the lens of our very own *FuturArc* designer Hans Lim as he takes you on a journey through his snapshots and sketches of what’s endearing to him about the old—and gold—places in Malaysia.

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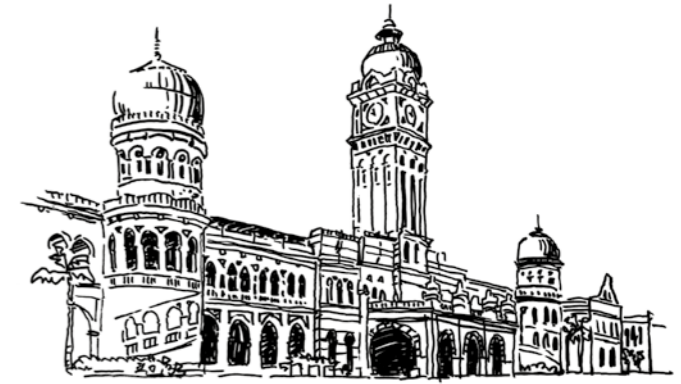
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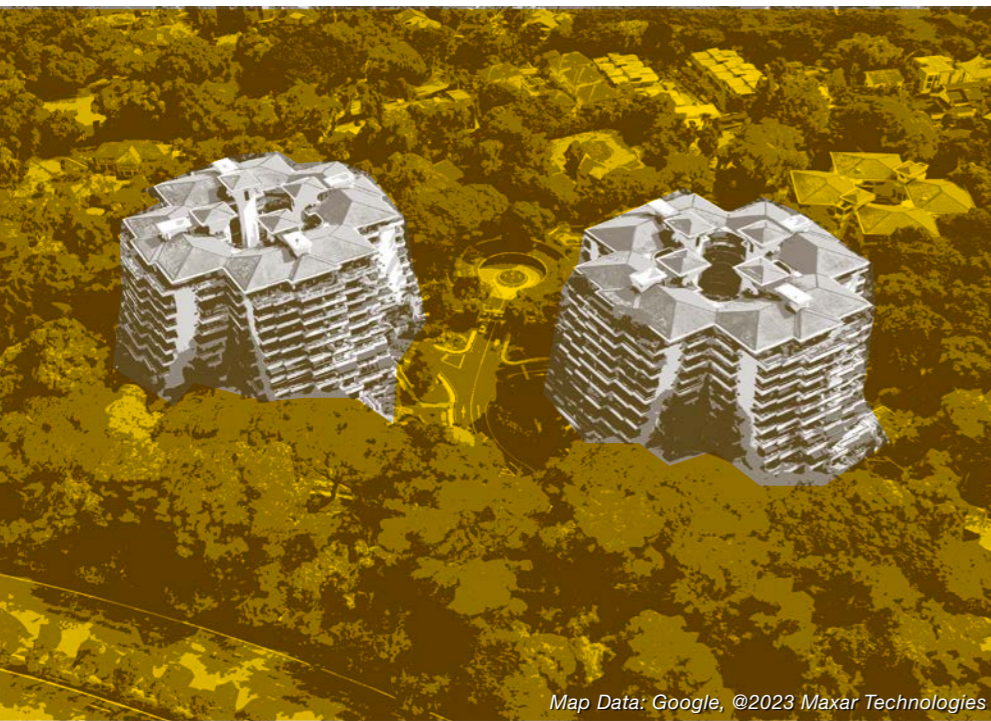
All photos & drawings by Hans Lim

**Sultan Abdul Samad Building**

The Moorish-inspired architectural style has made this historical and architectural heavyweight one that is hard to miss. It has carried key administrative and official functions in its day, and witnessed milestone national moments, rendering it one of the most well-loved and preserved heritage buildings till this day.

# Pioneers of Tropical Living: Singapore's 'Middle-aged' Condos

by **Heather Banerd**



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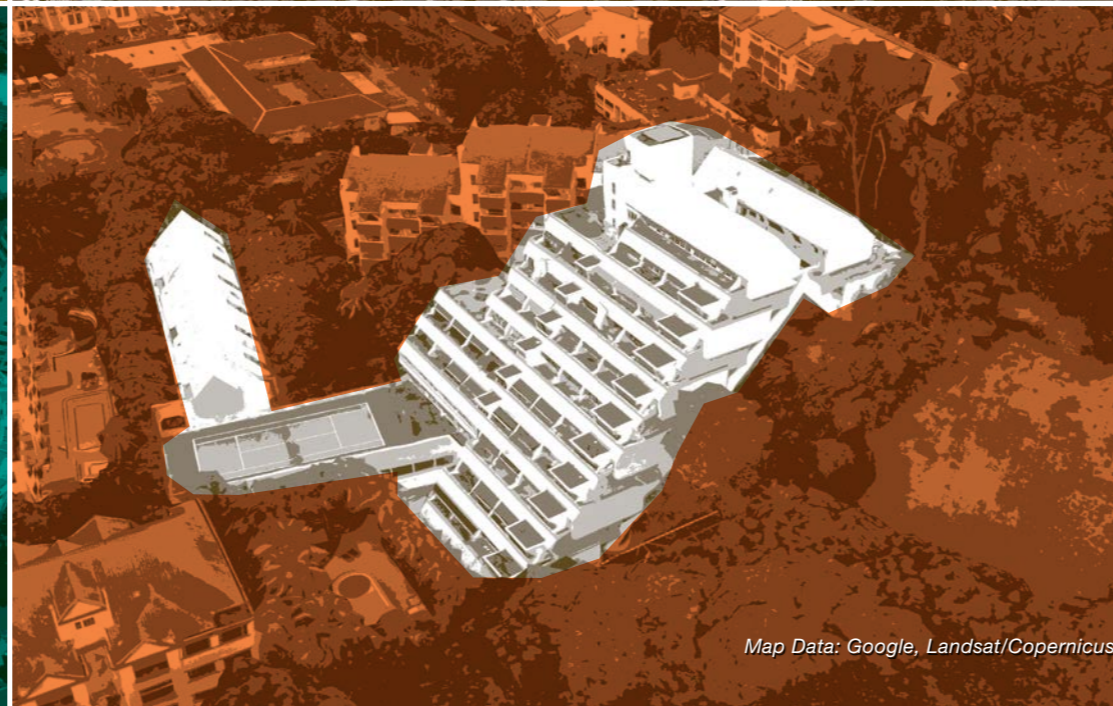
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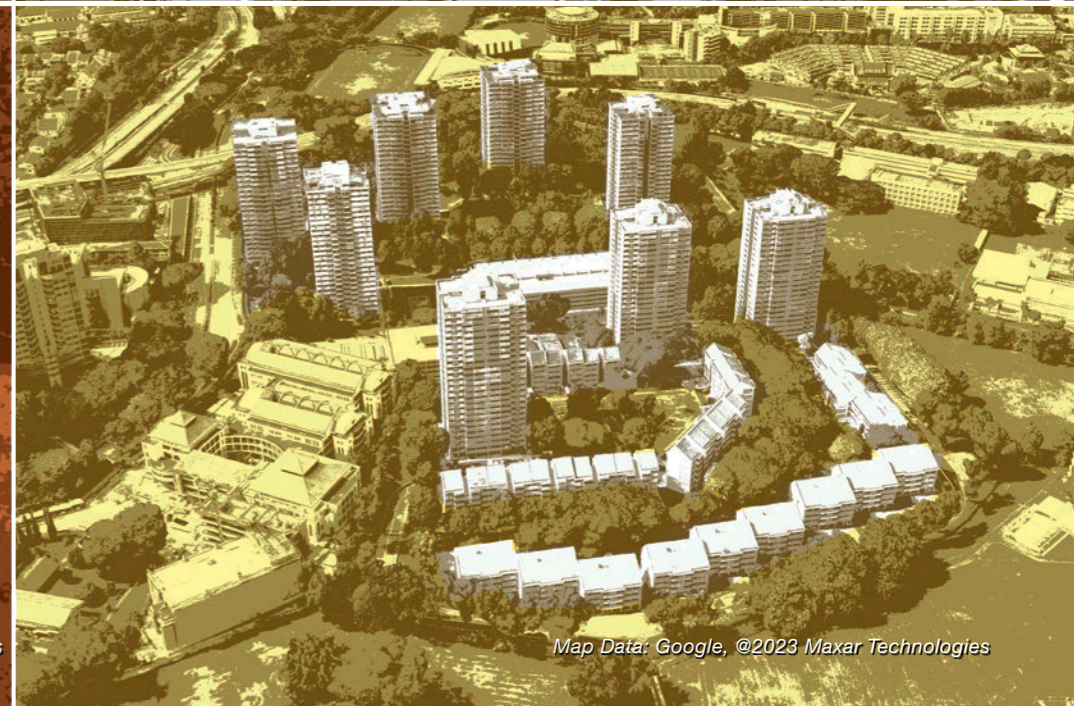
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Over my nearly 20 years of living in Singapore, the city has changed almost beyond recognition. I moved here as a teenager, when Sentosa had a few ramshackle beach bars and Orchard Road had a huge green space where ION now sits. Of course, change is the only constant in Singapore and other Southeast Asian countries. Growth is so rapid that the city struggles to keep up, and the default setting is to tear down the old and rebuild—newer, denser, though often with smaller unit size. In doing so, however, something intangible in the fabric of the city is lost, a core part of our architectural identity. Colonial-era architectural heritage is recognised and preserved, but the iconic buildings of the post-war era, crafted by a legion of local architects pioneering a new tropical style, too often fall through the cracks.

For many long-term residents like me, these are the buildings we call home. Perhaps it is nostalgia, or perhaps the ones who stick around are not those on shiny expat packages, but the older, first-wave condominiums are often where you will find this group, mixed in with the multi-generational families of original owners or early buyers. These developments are something of a cult housing niche. They are not shiny, or pretty, and often the maintenance is fairly haphazard, but they make up for this with space, a sense of community, and the opportunity to live as though you are actually in the tropics. I have lived in my current condo, built in 1987, for eight years. Yes, there is always something leaking, and until recent re-wiring, our power would often cut out in a thunderstorm (no rare event in Singapore). But we live with doors and windows thrown wide open to capture the three-way cross-breeze, rarely using air-conditioning, and we have the precious commodity of space. The thick concrete walls insulate us from the neighbours; we look out over a lush green estate, and beyond to the dense forest of the central catchment; on the balcony, we feel as though we are perched far above the world, sheltered yet open to the elements. This is the luxury of a building designed for the tropics, and this is what is lost when we do not consider these developments as valuable built heritage.

Sustainability in architecture has made great strides in the past decades, but in Southeast Asia in particular, there remains a disconnect between what is being built, and what is logical for efficiency and comfort in this climatic context. Culturally and economically, there is a preference for tearing down and rebuilding in the name of optimisation—despite most buildings having an intended lifespan of 50 to 70 years. A 2010 report by Singapore's Building Construction Authority (BCA)<sup>1</sup> noted that many buildings in the city are torn down and rebuilt after only 10 to 15 years. Yet many of the early condominiums, iconic, era-defining developments designed for tropical living, are far more sustainable than the shiny glass towers we build now. Annually, the built environment contributes a shocking 40 per cent of global CO<sub>2</sub> emissions, with operations making up 27 per cent alone, and 20 years from now, the current built environment will form two-thirds of the global building stock. Looking at these numbers, it seems wildly optimistic to imagine that we can reduce emissions by tearing down and rebuilding, and ludicrous to think that in doing so, we would be losing buildings that are already more climate-appropriate than many new developments. We need to take a more nuanced approach and enable more reuse, renovation and adaptation of existing buildings, alongside newer, Greener ones—and we can start with high-rise residential.

### THE RISE OF THE CONDOMINIUM

Just 40 years ago, the condominium was a completely new housing paradigm. They were originally conceived to fill a gap in the market between private landed properties and public apartment blocks. Architects and developers saw the need for greater density and a shift to high-rise living, but needed to create a model that would attract a market used to the privacy and space of private housing. Singapore was one of the earliest markets to respond in the 1970s, followed by Bangkok in the 1980s. With the success of these early pioneering cities, others such as Jakarta, Manila and Ho Chi Minh City joined the shift to high-rise living in the decades that followed.

Parallel to these market forces, the culture of design in Asia was undergoing a shift. The post-war years had seen waves of political independence and economic growth across the region. While the 1950s and 1960s still saw design dominated by foreign architects, by the 1970s and 1980s a generation of locally-born designers trained overseas had returned and were ready to shape their growing cities for the modern era. This meant taking what they had learnt of modernist design and adapting it to the local climatic context—driven by the primary elements of shade from the sun, shelter from the rain, and capturing cooling winds.

The result was a bevy of pioneering developments envisioning the potential of high-rise living for a modern tropical market. These were in a class of their own, a mid-tier, achievable luxury that was designed to entice buyers away from landed properties to more communal living, with the introduction of attractive new amenities without compromising on privacy and space. Remnants of this era are reminders of the once-lofty aspirations of high-rise living. They share key features—large balconies, overhangs, cross-breezes, spacious layouts—that are the hallmark of condo developments of this era. While each development had distinct qualities and styles, the spatial characteristics and architectural features follow a shared logic in how they respond to their tropical environment and mitigate against density. They prioritise space and privacy, integration of greenery and lifestyle amenities, and test unique layouts and forms to achieve these goals.



Photo by Darren Soh



Photo by Finbarr Fallon; first published in UNIT, a glimpse into Singapore's 1970s - '80s private apartments, by The Unit Project

**1** (Clockwise from left) The Arcadia; Pandan Valley; The Palisades; Braddel Hill; Pepys Hill; Pine Grove  
**2** The Arcadia, designed by Hawaiian architect George J. Wimberly of the architectural firm Wimberly, Whisenand, Allison, Tong & Goo (WWAT&G), has been designed to optimise cross-ventilation with its cruciform layout **3** Designed by Tan Cheng Siang and Archynamics Architects, Pandan Valley's cascading balconies offer views of the Bukit Timah Nature Reserve



### Old shop lots, Selangor

An increasingly rare sight nowadays, bamboo blinds (or 'chick blinds') were a common feature of shophouses, especially those from the pre-war era in Southeast Asian countries such as Malaysia and Singapore. These blinds were made of long strips of bamboo tied together with strings, and could be rolled up or down via a simple rope-pulley system.

As a shading device, they are extremely effective not only in cooling the shops themselves, but also the area along the five-foot way. Beyond this practical function, however, what makes these old-school blinds stand out is their story—a symbol of simpler times, they double up as advertising 'medium' for each unique shop, conveying a story with splashes of colours or illustrative messages—reminiscent of the time when movie posters were still hand-painted.

All photos & drawings by Hans Lim



# The FuturArc Interview

by Candice Lim & Dinda Mundakir

## **DR JOHANNES WIDODO**

**Director of Graduate Programmes in  
Architectural Conservation,  
National University of Singapore**





# Change is inevitable. Therefore, conservation is the management of change. And heritage is always in motion, moving from the past to the present and the future.

Lao Tze said, “To attain knowledge, add things every day. To attain wisdom, remove things every day.” What happens when you meet the guru of conservation and heritage to discuss the topic close to his heart? You gain some wisdom by removing common misconceptions of a subject thought to be old and staid. Far from it, **Dr Johannes Widodo** peels back the invisible layers to reveal a deeper understanding of what it means to conserve.

## THE ECONOMICS OF CONSERVATION

**DM:** Many projects are transforming heritage or old buildings into different commercial functions, such as hotels, restaurants, and so on. And there's the underlying assumption that this is the only way we can ensure their continuity into the future. What do you think about this approach?

**JW:** Let's start from the basic question: why do we need to conserve? I'm running a conservation studio right now, and the first step that I ask my students to do is to build a digital twin using Revit, starting from Heritage BIM. It means that they have to calculate from the carbon point of view first, because carbon is the new gold; carbon is money now. Like what Dr Hossein Rezaei said: “Demolishing a large building is analogous to setting fire to a forest.”

And second, the use of concrete in modern buildings. Of course, there is the issue of sustainability (from the use of concrete), but the Romans used it 2,000 years ago—and the aqueducts, the Colosseum are still there. These lead to questions such as why are some of the leases in Singapore only for 99 years; why not 1,000 years? The structural age of buildings can be much longer, although the functional age is shorter because of lifestyles and so on.

Now comes the next issue, which is the most important right now, and that is economic viability. If there is no money, there is no honey. That's the principle, especially for Singapore, and for private properties. Most buildings like offices are private properties, or they belong to the government. So, to justify the conservation we need to show the money—where is it coming from?

If we talk about embodied carbon, some countries already have rules about carbon offsets and also rules about incentives [for conservation]. For example, if you manage to keep the People's Park Complex in Singapore and then get a Green Mark Platinum rating for Super Low Energy building, the Building Construction Authority (BCA) will give you right away SGD600,000, and the Urban Renewal Authority (URA) will be very ready to give additional gross floor area (GFA). Such incentives say to the building owner that it is better to keep rather than to destroy.

Talking about the past, we need to address the issue of authenticity. What is the authentic function [of a heritage building]? We know that functions are short-lived—every generation has different aspirations, so change is inevitable. Therefore, conservation is the management of change. And heritage is always in motion, moving from the past to the present and the future. Whatever we create today becomes the heritage of tomorrow. It's a very dynamic field. In order to keep a building intact, you must justify what the appropriate functions are. So, it has become a matter of appropriateness, rather than authenticity.



The eighth-century Borobudur temple in Indonesia is now being prioritised for its original function as a Buddhist place of worship, limiting access for general tourists.

Ardiyanto\_Nugroho/Shutterstock.com