Architectural Conservation in Singapore

Architecture and urban development have been undergoing varying phases of change in Singapore through the decades. **Johannes Widodo** discusses these changes in this article following his talk at SEAMEO SPAFA's *Capitals' Archaeology: Urban Origins and Conservation Lecture Series*, held on 29 April 2011, at the Siam Society, Bangkok, Thailand.

The Central Role of the Urban Redevelopment Authority (URA)

Soon after separation from Malaysia, and becoming an independent nation, Singapore was in dire physical and economic conditions. Two of the most important institutions, namely the Housing Development Board (HDB) and the Economic Development Board (EDB), were set up in 1965 to deal with the most pressing physical and economic issues, and to

develop Singapore. In 1967, the Urban Renewal Department (URD) was established under the HDB to tackle the physical, social, and economic regeneration of the city.

On 1 April 1974, the Urban Redevelopment Authority (URA) was created as an independent statutory board under the Ministry of National Development (MND) to take over the responsibility of the URD. The URA's primary task was to redevelop the central area, and resettle residents affected by the redevelopment. Within the period of 1967-1989, a total of 184 hectares of land were cleared, assembled, and sold under the URA Sale of Sites Programme, resulting in the development of 155 projects. Through this programme, the central area was transformed from an area of slums and squatters into a modern financial and business hub.

In 1980, the URA prepared a comprehensive long-term plan for the central area, including the development of Marina City on 690 hectares of reclaimed land. Three years later in 1983, the Urban Design Plan for the Central Area was created, and served to guide "an orderly transformation of the city skyline and the creation of an environment interwoven with the historical, architectural and cultural heritage of the older parts of the city", followed by the announcement of the Central Area Structure Plan in 1985. Thus, the URA was exercising its power to "develop" and at the same time to "conserve" the central area of Singapore. Although the URA's conservation policy seemed comprehensive in adhering to good conservation principles, in reality the results have not been satisfying. It focused too much on the physical and economic aspects of gentrifying most of the remaining heritage buildings in the central area, and not giving enough attention to preserving the existing community or social-cultural fabric.

"While Singapore continues to transform, it is important to enhance our sense of identity and identification with our city. Singapore is our home. People must feel this in themselves and in their surroundings. URA's role is to make Singapore a city with character and identity through our physical landscape. So far, more than 6,500 buildings and structures across the country have been conserved, despite our limited land and a relatively short history. Retention of our identity through conservation will become more important as more of our city becomes developed and redeveloped to cater to the needs of a larger population."

Excerpts from a speech by Mr Mah Bow Tan, Singapore's Minister for National Development, made at URA Corporate Plan Seminar 2007, Orchard Hotel on 9 February 2007 (http://www.ura.gov.sg/pr/text/2007/pr07-14. html)

The "demolish and rebuild" policy during the 1970-1980s has cleared or destroyed a large stock of old shop-houses and town-houses in a vast area of the island's central area, and communities have been displaced from the historic mixed-use settlement areas, and dispersed elsewhere. Some of the reasons for the demolition and population-removal policy were attributed to:

■ *over-crowding, prostitution, gambling, and organised crime;*
■ *environmental issues (causing problems relating to public utilities, sanitation, and structural dilapidation of buildings); and*
■ *commercial development (reclaiming and transforming unproductive areas to generate much higher values and returns).*

Vast areas with shop-houses inside the old central area (Kampong Glam, Middle Road, and Kereta Ayer) were re-developed and filled with high-rise housing-cum-commercial blocks to benefit some original communities while relocating others elsewhere.

The demolition and re-development were so extensive that the government realized the irreversible loss of tangible cultural heritage and the identity of places, especially in the central area. Therefore, conservation plans have been implemented to save the remaining valuable urban heritage since the 1990s, although it was mainly driven by the tourism industry and speculative property re-development schemes. Many old shop-houses were given a second lease of life by the "adaptive re-use" approach. Empty buildings were turned into new shops, restaurants, cafés, hotels, or offices. Major changes in the interior space to adapt to new functions, and comply with stringent building safety regulations were permitted, while façade features or style were retained. The original white-indigo lime-based plaster was removed and replaced by stronger PC-based plaster, often with new weather-proof and colourful exterior paints. Modern contemporary technology and materials replaced the dying traditional craftsmanship and the usage of traditional building materials, and resulted in the loss of authenticity and continuity in the production of material culture.

After the URA Conservation Plan was announced in 1989, conservation statuses were bestowed on historic districts such as Chinatown, Little India, Kampong Glam, Singapore River – including Boat Quay and Clarke Quay – as well as residential areas of Emerald Hill, Cairnhill, Blair Plain, and secondary settlements of Joo Chiat and Geylang, etc.. The naming

or labelling of these areas followed the Singapore Tourism Board's "branding" strategy to sell Singapore, which turned the central areas of the city into "theme parks".

URA Early Conservation Approach

Together with the Preservation of Monuments Board (PMB), the URA published "Objectives, Principles and Standards for Preservation and Conservation" in 1993, which was specifically written with the Singapore context in mind. The objectives, principles and standards were derived from local experience, and, where appropriate, drawn from international sources (Venice Charter 1964, Burra Charter 1988, etc.).[1]

The URA prescribed the "3R Principle": maximum Retention, sensitive Restoration, and careful Repair. This principle stressed that:

1) a building should not be altered, or parts of it demolished, if it can be preserved in its original condition;
2) when upgrading and adapting a building to new uses, the existing structure must be retained. This can be done through strengthening and repairing the structural elements in the most sympathetic and unobtrusive way, and using original methods and materials, wherever possible;
3) selective replacement should only be considered when absolutely necessary;
4) total reconstruction goes against accepted international conservation practices;
5) a thorough research of the conservation building will also facilitate the proper execution of works on site; and
6) the technical aspects and process of the various activities must be documented at every stage.

To implement the principles, the URA defines "7 Levels of Conservation Activities" and "Top-Down Approach". The seven levels of activities are:

1) Maintaining the essential character of the building
2) Preventing further deterioration

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[1] URA & PMB (1993), p. 12

3) Consolidating the fabric of the building
4) Restoring the building to original design and material
5) Rehabilitating the building without destroying its character
6) Replacing missing significant features of the building
7) Rebuilding severely damaged parts of the building

The "Top-Down" approach literally means that works start from the top (roof) and proceed downwards, while retaining the floor(s) and roof. This enables the lower elements of the building to be repaired or replaced without affecting the existing structure. The benefits from this construction method are: the building remains structurally stable, the work can be carried out under all weather conditions, and deterioration due to climate is minimized.

In shop-house conservation, the URA endorses "facadism", and prefers to retain the façade but allows alteration of the rest of the building. To facilitate this retention of the façade, classification is defined according to linear periodisation, with meticulous stylistic description of its parts:

1) Early Shophouse Style (1840-1900);
2) First Transitional Shophouse Style (early 1900s);
3) Late Shophouse Style (1900-1940);
4) Second Transitional Shophouse Style (late 1930s); and
5) Art Deco Shophouse Style (1930-1960).

Similar stylistic classification/approach was applied to different conservation areas (Chinatown, Kampong Glam, and Little India, etc.) with some adjustments to match the special "theme" designated for these particular areas. Three books that elaborate on the historical background of the places and the special physical and typological features of shop-houses in each conservation area were produced but they gave very little attention to the existing social-cultural significance.

To encourage and offer incentives to private conservation initiatives, 'The Architectural Heritage Awards' was created.[2] The URA presented "Good Effort" awards for well-restored buildings in 1994, leading to the annual "Architectural Heritage Awards", first introduced in 1995 to replace the previous award. In 2003, the awards category was further refined: "Category A" for national monuments and fully conserved buildings, and "Category B" for old buildings with new, innovative and sensitive interventions. The judging was conducted by an Assessment Committee that had been appointed by the URA.

In Singapore, conservation policies and guidelines are decidedly inclined towards the physical conservation of the country's multi-racial, colonial, and national heritage while the conservation of the social fabric of communities is noticeably missing. It became apparent later that the conservation policy which focused mainly on the tangible aspect of heritage led to problems.

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[2] URA (2004), Architectural Heritage Singapore – Architectural Heritage Awards 1994 to 2004

Holistic Urban Heritage Conservation and Regeneration

Cultural purification and elimination of parts of Singapore's layered or hybridized identity – formed over generations – are practices that are not truthful to the country's history and to its future generations. Buildings and elements from various cultures and influences from past to present have become indispensable parts of a nation's evolving cultural heritage. Inhabitation is always related to the articulation of built forms or material culture. When the social fabric (community, inhabitants) is gone, buildings and settlements turn into empty shells, and deteriorate. In this critical stage, the choices are demolition or re-development, especially when it takes place in the central prime locations.

The aim of conservation, preservation, restoration, and revitalization efforts of material and living heritage should be to facilitate cultural continuum of the community. This cultural continuum can be maintained by preserving the community's tangible and intangible cultural heritage through faithful and careful restoration, and through sensitive and sensible care and interventions. The disappearing traditional skills and craftsmanship can be revived and restored through training and education, and adopting advanced technology. Following the principles involved in using traditional medicine to cure sickness by invoking positive energy for a holistic healing of body and soul, effective and affirmative actions can be developed in the spirit of good will and good faith to preserve memory and identity through conservation of cultural heritage in entirety and holistically.

The community should be empowered by technical skills, and sustained by economic and institutional infrastructure, through holistic conservation and preservation strategies in mobilizing all stakeholders. Recognitions such as awards and status should be aimed at generating greater impacts on the development of a more sustainable and effective heritage policy, planning, and management of the community's tangible and intangible cultural heritage, and not for the sake of marketing or branding to gain profits from tourism.

Good conservation projects and practices are those which successfully demonstrate the following points:[3]

1) articulation of the heritage values to convey the spirit of place through conservation;
2) interpretation of the cultural, social, historical, and architectural significance of the structure(s) in the conservation work;
3) understanding of technical issues of conservation/restoration in interpreting the structure's significance;
4) appropriate use or adaptation of the structure;
5) use of appropriate materials;
6) how well any added elements or creative technical solutions respect the character and inherent spatial quality of the structure(s);
7) manner in which the process and the final product contribute to the surrounding environment and the local community's cultural and historical continuum;
8) influence of the project on conservation practice and policy locally, nationally, regionally, or internationally;
9) ongoing socio-economic viability and relevance of the project, and provision for its future use and maintenance; and
10) technical consistency, complexity and sensitivity of the project methodology.

Changes in Singapore's Urban Conservation Approach

Recognizing the need to involve the community in the urban planning process, the URA started to embark on public consultations in the urban planning process after drafting the Concept Plan 2001 (August 2000-May 2001). The ideas and contributions from the public were gathered through public forums, exhibitions, and public dialogues before the Concept Plan was finalized at the end of 2001. In 2002, a similar process was repeated

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[3] Refer to UNESCO Asia-Pacific Awards for Cultural Heritage Conservation criteria. Detailed information on the awards can be found in:
http://www. unescobkk.org/culture/wh/unesco-asia-pacific-awards-for-cultural-heritage-conservation/

when the Master Plan 2003 was drafted. Three Subject Groups were appointed by the Minister of National Development to study proposals relating to: 1) Parks & Water-bodies Plans and Rustic Coast, 2) Urban Villages and Southern Ridges & Hillside Villages, and 3) Old World Charm. The ideas and recommendations were incorporated in the draft of Master Plan 2003.

The Subject Groups comprised professionals, representatives from interest groups, and laymen. They felt that a shift in the balance between conservation and re-development was required, and a new framework was needed for holistic conservation in an integrated, synergistic approach that goes beyond physical structures to include communities and activities that contribute to the old world charm.[4] Holistic conservation encompasses the whole neighbourhoods, including contemporary and less architecturally significant buildings. It is multi-dimensional, and includes buildings, road patterns, streetscapes, open spaces and vistas; demands multi-disciplinary involvement across local and national levels; and incorporates all stakeholders (users, owners, heritage-supporters, decision-makers) of the conservation process.

Besides specific recommendations for different places across Singapore, the Subject Groups also suggested the following proposals to take conservation efforts in Singapore to the higher level:[5]

1) Valuing the priceless: conserving areas with rich heritage, charm, and social value, even though there may be loss in development potential at the local level.
2) Concentrating on different levels of conservation: conserving significant exteriors, interiors, and details of selected buildings; and controlling the use of selected buildings with strong social and historical values.
3) Acting fast: preparing a comprehensive list of buildings for safeguarding.
4) Networking of heritage assets: linking up areas of the conserved area with new developments that serve as heritage connectors.

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[4] MND (2002), *Parks & Waterbodies Plan and Identity Plan – Subject Group Report on Old World Charm,* p. 8
[5] Ibid. pp. 26 - 33

5) <u>Matching expectations and planning</u>: adopting different performance and planning standards that are sensitive to the urban structure of areas identified with the conserved area.

6) <u>Embracing new solutions, beyond efficiency</u>: exploring alternatives to widening of roads.

7) <u>Recognizing heartland heritage</u>: keeping blocks of public housing architecture and townships that encapsulated the range of public housing from the 1950s to the present.

8) Making a <u>wish list</u>: retaining more built heritage for future generations, including the more recent buildings that depict the history of Singapore in achieving independence and in nation-building.

9) Promoting <u>heritage economy</u>: recognizing how conservation contributes to the economy, and provides funding for conservation initiatives and efforts.

10) <u>Money talks</u>: introducing more incentives for owners of conservation buildings.

11) <u>Private sponsorship</u>: encouraging the establishment of a privately-run heritage trust.

12) <u>Getting insights</u>: commissioning a study on the property value of conserving buildings.

13) <u>Promoting traditional trades</u>: developing ways to recognize owners of traditional trades that are valued by the public.

14) <u>Active citizenship</u>: precipitating the formation of local business improvement groups.

15) <u>Renaissance community</u>: developing a heritage education programme that takes a more active and concerted approach to informing, educating, and inspiring people.

Recognitions and the Future of Conservation in Singapore

In October 2007, Singapore rejoined UNESCO after 22 years of absence, but even before this historic turning point, UNESCO had given Singapore three awards in recognition of the achievements of individuals, private sector organisations and public-private initiatives in successfully restoring and conserving heritage structures in this small city-state.

UNESCO aims to promote the stewardship of the world's cultural resources, including built heritage which constitutes collective cultural memory, and the foundation upon which communities can base their future. In Asia and the Pacific, UNESCO supports conservation activists at all levels, and particularly seeks to encourage the role of the private sector in preserving the region's cultural heritage. The UNESCO Asia-Pacific Heritage Awards for Cultural Heritage Conservation is one of the regional initiatives that support the organisation's global strategic objective of promoting the localisation and empowerment of the culture profession to develop and implement the best conservation standards.
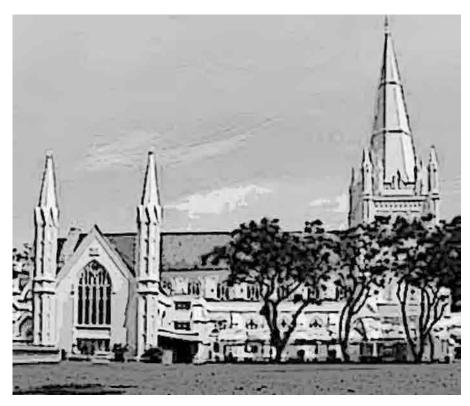
Since 2000, the Heritage Awards committee has received more than 300 entries from across Asia. Many of the entries have set technical and social benchmarks for conservation in the region, while simultane-ously acting as catalysts for local preservation initiatives. Over the years, the projects illustrate the increasing

Thian Hock Keng Temple

momentum and level of conservation in Asia and the Pacific. Four Singaporean conservation projects have so far won UNESCO Heritage Awards: the Thian Hock Keng Temple (Honourable Mention Award in 2001), the Convent of Holy Infant Jesus (Award of Merit in 2002), Old St. Andrew's School (Honourable Mention Award in 2006), and finally the Hong San See Temple restoration project that won the highest Award for Excellence in 2010.

On the community level, some individuals have recently registered themselves to become individual members of the International Council on Monuments and Sites (ICOMOS), which is the first important step towards the formation of the ICOMOS National Committee. The government is also interested in the possibility of submitting some sites in Singapore

Old St. Andrew's School

for UNESCO World Heritage listing. Although these developments seem preliminary, and it is still very early to generate real impacts, these are significant steps toward better preservation and conservation of heritage.

In Singapore, both land and heritage are scarce. These constraints should drive better and more effective conservation strategies and methods so that the full positive impact of conservation may contribute to strong economic development, nation-building, and a sense of home. In working towards these ends, it is essential to form a civic coalition, a community network and an alliance among all stakeholders to maintain a balance between conservation and development, and to ensure an orderly and healthy evolution of the built environment and the community that lives within it.

Society is obliged to prolong the life-cycle of its tangible and intangible

heritage for the sake of future generations. Conservation means nurturing the community's cultural continuum. Enhancing links with one's roots and transmission of memory from the past to the future by prolonging the duration of heritage should bear invaluable benefits for future generations.

As Sinnathamby Rajaratnam, one of the founding fathers of independent Singapore (1915-2006), said: "A nation must have a memory to give it a sense of cohesion, continuity and identity. The longer the past, the greater the awareness of a nation's identity."

Bibliography

Engelhardt, R. (Ed.). (2007). "Asia Conserved: Lessons Learned from the UNESCO Asia-Pacific Conservation Awards". Bangkok: UNESCO.

ICOMOS Charters, http://www.international.icomos.org/charters.htm

Ismail, Rahil, Shaw, Brian & Ooi Giok Ling (Eds.). (2009). "Southeast Asian Culture and Heritage in a Globalizing World – Diverging Identities in a Dynamic Region." Surrey: Ashgate.

MND (2002). *Parks & Waterbodies Plan and Identity Plan – Subject Group Report on Old World Charm*, Ministry of National Development, Singapore.

MND (2002). *Parks & Waterbodies Plan and Identity Plan – Subject Group Report on Urban Villages and Southern Ridges & Hillside Villages*, Ministry of National Development, Singapore.

Tan, Sumiko (1999). *Home. Work. Play*, Urban Redevelopment Authority, Singapore.

URA & PMB (1993). *Singapore – Objectives, Principles and Standards for Preservation and Conservation*, Urban Redevelopment Authority & Preservation of Monuments Board, Singapore.

URA (2004). *Architectural Heritage Singapore – Architectural Heritage Awards 1994 to 2004, Award Winning Projects by Singapore-registered Architects*, Urban Redevelopment Authority, Singapore.

URA (1995). *Chinatown Historic District*, Urban Redevelopment Authority, Singapore.

URA (1995). *Little India Historic District*, Urban Redevelopment Authority, Singapore.

URA (1995). *Kampong Glam Historic District*, Urban Redevelopment Authority, Singapore.

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