

REVITALIZATION IN ASIA

ADAPTIVE REUSE
in MACAO, MUMBAI, and PENANG

Edited by Lavina Ahuja and Lynne D. DiStefano

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Introduction

Lynne D. DiStefano and Lavina Ahuja

Background

This book is a continuation of *Asian Revitalization: Adaptive Reuse in Hong Kong, Shanghai, and Singapore* (hereon *Asian Revitalization*), published in January 2021 by Hong Kong University Press. *Asian Revitalization* filled a research gap by providing an overview of adaptive reuse in three urban centers in Asia through city-specific essays, timelines, and a range of case studies based on five shared building typologies (industrial, institutional, military, mixed use, and residential). Centers were chosen based on access to experts who understood adaptive reuse within the places. The introduction offered a detailed understanding of the term “adaptive reuse.” Opening essays considered adaptive reuse as a heritage conservation approach, touching on dimensions of sustainability ranging from understanding the economic impact of adaptive reuse to recognizing heritage as a driver for sustainable development. City-specific essays considered adaptive reuse within the local context of heritage conservation and urban planning; detailed case studies looked at aspects of sustainability, especially economic sustainability. Concluding comments argued for more research on the topic—and more Asian examples. *Revitalization in Asia: Adaptive Reuse in Macao, Mumbai, and Penang* (hereon *Revitalization in Asia*) is a response to this challenge.

Revitalization in Asia

Urban Centers

Envisioned as a continuation of *Asian Revitalization*, this book considers the shared and unique aspects of adaptive reuse in Asia through the lens of three “new” urban centers, which are also World Heritage Sites—Macao, Mumbai, and Penang. The centers are chosen for their distinctive histories of conservation and adaptive reuse, both within their countries (Macao SAR, India, and Malaysia) and within Asia. They are also chosen based on access to experts with firsthand knowledge of adaptive reuse within these places. Interestingly, these three centers have a commonality: a shared colonial past.

Following the format of *Asian Revitalization*, a series of essays on aspects of sustainability complement center-specific essays and timelines that provide a heritage conservation and urban planning framework for adaptive reuse in each place. For

the case studies, even though the building typology approach worked well for *Asian Revitalization*, the editors decided it was instructive to show the evolution of conservation (specifically, adaptive reuse) practice in this book. Accordingly, case studies were selected for each urban center that are not only impactful projects within themselves but also provide an implicit narrative of development in adaptive reuse practice for each center when read as a series. The selection of case study projects is also based on a vision to bring variety and diversity in terms of accessibility (public/private), heritage recognition (listed or not listed), scale of project (building size as well as funding available), user profile (government/official use as well as community use), and so forth. The rationale for selection is mentioned in the opening few sentences for each case study.

There is much to learn from the adaptive reuse journeys of these three centers, which set the context for understanding the case study projects that have been recognized locally (and some regionally) as exemplars of best practice in conservation.

Sustainability

The past few decades have seen a wider understanding of cultural heritage. Recognition has expanded from a narrow focus on archaeological sites and buildings/structures per se to acknowledging the inextricable linkage of places to their intangible attributes and the interconnectedness of culture and nature, the nature-culture link. Also, there has been an expansion of stakeholders; an increasing number of “actors” are taking ownership of their cultural heritage, thus devolving the responsibility from the hands of government or “experts” to the community and civil society.

In this book, the interrelationship of cultural heritage conservation and sustainable development is further explored and aligned to the three dimensions (pillars) of sustainability as well as the United Nations’ Sustainable Development Goals (SDGs) as benchmarks for sustainability initiatives. As mentioned in *Asia Conserved Volume III*,

Heritage is no longer viewed as the preserve of experts focusing solely on technical conservation matters, or as a real estate proposition to add value to a historic property. Rather, heritage is increasingly seen as an integral pillar for sustainable development in all its dimensions, and therefore deeply relevant to everyone. Indeed, the 2030 Agenda for Sustainable Development recognizes heritage, both cultural and natural, as a fundamental part of the global development agenda.¹

With the increased awareness of the importance of sustainability, there is also more understanding of the underlying role of culture as an enabler for implementation of the SDGs. Although heritage considerations play a role in adaptive reuse, this should be seen as an added incentive for reuse. So-called ordinary or nondescript buildings and structures are as important as those deemed heritage in the context of sustainability. In fact, one of the Mumbai case studies speaks explicitly to this.

Revitalization in Asia posits adaptive reuse as a conservation approach that can help achieve the SDGs and contribute to broader well-being—economically, environmentally, and socially, the three dimensions or pillars of sustainability. It recognizes that tenable actions can ensure sustainability for a heritage place and, in turn, can generate positive impacts beyond site boundaries in the long term. It can, for example, create economic opportunities that adapt to local realities and needs,

1. UNESCO, *Asia Conserved Volume III: Lessons Learned from the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation (2010–2014)*, ed. William Chapman (Bangkok: UNESCO, 2019), 324.

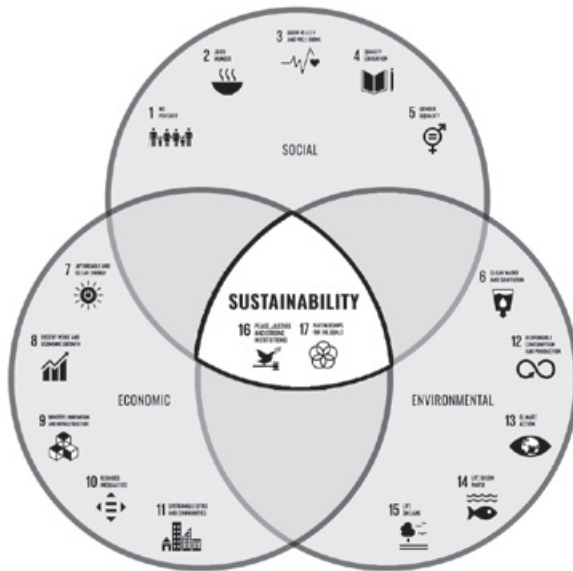


Figure 1.1: The diagram shows the interrelationship of the three dimensions of sustainability and the seventeen SDGs, illustrating the commonalities between individual goals and the economic, environmental, and social dimensions. However, and more important, the seventeen SDGs are theoretically applicable to all dimensions of sustainability. (Source: Drawn by Lavina Ahuja based on icons of the United Nations' SDGs.)

contribute to strengthening the nature-culture link, and help establish a resilient community network.

Revitalization in Asia discusses the adaptive reuse of existing buildings, structures, and spaces demonstrating how such projects—at either the micro or macro level—can exhibit the pillars of sustainability and meet multiple SDGs. The end result, when successful, transforms a physical asset into a viable community asset or, when at the macro level, a viable community. The following quotation from Carl Elefante’s article “The Greenest Building Is . . . One that Is Already Built” is especially relevant in this context:

Taking into account the massive investment of materials and energy in existing buildings, it is both obvious and profound that extending the useful service life of the building stock is common sense, good business, and sound resource management.²

Adaptive Reuse

The meaning of adaptive reuse can be as simple as identifying a new use or reverting to an original use for a building or structure (not a façade!) that is vacant or as complex as finding new uses for buildings, structures, and spaces within an entire community. Professionals argue as to what constitutes an appropriate new use. Should it be close to the original use, or is it a straightforward matter of linking a vacant or underused building, structure, or space with a new use? This is a “matchmaking” exercise that has existed for centuries but has become more formalized and seen as part of a larger discourse—revitalization and ultimately sustainability. But no matter how formal or informal, physical interventions and changes in use can be subtle, and arguably, such subtlety, especially at the community level, can contribute to sustainability. (*Asian Revitalization* explores the meaning of adaptive reuse in greater detail and provides references to relevant conservation documents.)

2. Carl Elefante, “The Greenest Building Is . . . One that Is Already Built,” *Forum Journal: The Journal of the National Trust for Historic Preservation* 21, no. 4 (Summer 2007): 32.

A Dilemma

One of the dilemmas faced in adapted reuse is how to evaluate the success of a project in terms of sustainability. Economic sustainability may be the easiest to determine, although a simple “bottom line” approach can be misleading—that is, critical products or services may have been eliminated to produce a balanced budget. Environmental sustainability is harder to measure, although more data are available now to “defend” the retention of buildings and structures (embodied energy) instead of replacing them. Social sustainability is complex and sometimes difficult to measure. What are the indicators? Are there adequate baseline data?

A note of caution. “Checklists” for sustainability actions can be misleading or seductive. Although the Sustainable Development Goals (SDGs) have performance targets and a range of indicators, to be useful, they need to be modified to reflect local capabilities—a daunting but important task for many parts of Asia.

Book Format

Essays

Revitalization in Asia is organized into two sections. The first section features six essays that focus on the relationship between cultural heritage, including the nature-culture link, and sustainable development and the implementation of the Sustainable Development Goals (SDGs) in adaptive reuse projects. They offer new insight and understanding about what sustainability means and how it is (and can be) applied in the field of conservation, both natural and cultural.

The first essay, “Patrick Geddes: The Conservative Surgeon” by Ken Nicolson, considers the work of Patrick Geddes, an early city planner, who coined the expression “destructive impatience” to describe the needless demolition of structurally sound buildings. He was an advocate of sustainability well before the post–World War II “rush” to acknowledge the need for sustainable actions. Montira Unakul’s essay, “Heritage, Urban Revitalization, and a New Sustainability Mindset,” which follows that of Nicolson, leads the reader through international sustainability documents and initiatives, some of which echo Geddes’s early work and provide a framework for revitalization in general and adaptive reuse in particular.

In the third essay, “Adaptive Reuse from an Urban Planning Perspective,” Elizabeth Vines looks at the environmental dimension of sustainability from an architectural and urban planning perspective. Katie H. L. Chick, in the fourth essay, “Transforming a Dilapidated Rural Village into a Nature-Culture Interface for Social-Ecological Sustainability: Lai Chi Wo, Hong Kong,” focuses on the social dimension using an important nature-culture example, while Sharif Shams Imon, in the fifth essay, “Nizamuddin Urban Renewal Initiative: Socio-economic Sustainability through Conservation,” considers all three dimensions in a standard-setting example.

Last, Fergus T. Maclaren, in “Creating Sustainable Urban Visitor Economies: Adaptive Reuse of Asian Cultural Heritage Places for Tourism,” considers tourism from the lens of socioeconomic sustainability and its impact on communities and built heritage resources, especially those adapted for tourism purposes. For readers with a specific interest in the economic dimension, Donovan Rypkema’s essay, “Measuring the Impacts: Making a Case for the Adaptive Reuse of Heritage Buildings,” in *Asian Revitalization* offers a succinct analysis of the financial benefits of adaptive reuse.

Urban Center Essays, Timelines, and Case Studies

The second section includes an essay, timeline, and case studies for each of the three urban centers—Macao, Mumbai, and Penang. The essays and timelines set out the heritage conservation and urban planning frameworks for each place, providing a context for the adaptive reuse projects mentioned in the essay or explored as case studies. The case studies (fifteen, five for each place) are considered milestones in the development of adaptive reuse practice in each of the urban centers. The case studies address all three pillars or dimensions of sustainability.

For ease of comparison, each case study is presented using a set framework, which includes the following categories: Project Information (basic facts) and Project Description, Site History and Project History, Development Environment, Intervention (conservation approach[es]), Key Challenges, Keeping Heritage Alive (continuity), Long-Term Viability, and Impact (using the dimensions of sustainability as indicators). Plans and photographs accompany each case study.

Case studies are an art in the best of times, but in the time of COVID-19 there have been unique challenges, especially having easy access to individuals for interviews and to facilities for research. Access to projects for interior photography proved to be challenging, too.

Conclusion

The conclusion summarizes the understanding and applicability of the Sustainable Development Goals (SDGs). It considers and compares evolving practices in adaptive reuse in the three urban centers, particularly in regard to revitalization and sustainability. Concluding remarks are made, noting the similarities and differences between the urban centers. Reflections on the future role of adaptive reuse in Asia draw the book to a close.

A Note for the Reader

This book is intended for classroom use and professional readership, including government decision-makers. It is not a book to be read from cover to cover. Each essay is intended to be valuable and complete in itself. Although this does create some repetition of key principles, it allows for essays to be extracted as individual readings for classroom or workshop use. The case studies in particular are of considerable value in Asia and elsewhere, as few such materials exist for discussion and instructional purposes. Through this book, we hope to provoke practitioners and students to question their own practice. The examples included in the publication are not perfect but are real and show the way to navigating challenges in heritage conservation practice.

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MACAO

Essay | Timeline | Case Studies

A Cornerstone in East-Meets-West Representation: Macao's Approach to Adaptive Reuse in Colonial and Postcolonial Eras

Jennifer Lang

Introduction

This chapter explores the development of adaptive reuse in Macao. A brief review of Macao's history and growth as a city is followed by a discussion of relevant conservation laws and heritage regulatory systems. The chapter includes an assessment of a selective group of adaptive reuse examples over time that indicates the evolution of Macao's conservation practice. Concluding remarks are made on adaptive reuse and sustainability in Macao.

The Portuguese began occupying Macao in the mid-sixteenth century and extended their influence in the area for nearly five centuries. As a vital international port from the sixteenth through the eighteenth centuries, Macao was an important link in trade and cultural exchange between China and the West.¹ It was the first place where modern Western architecture was introduced to China. This interface between foreign and local architectural traditions resulted in a variety of architectural styles—a blend of Portuguese architectural styles, traditional Chinese architectural styles, and Sino-Portuguese mixed styles; as a result, Macao developed into a city with a unique character. Although considerable land reclamation has altered the shape of the peninsula, the historic core of Macao developed during its occupation by the Portuguese from the seventeenth century has remained relatively intact.²

Macao remained a quiet enclave with little change until the outbreak of the Sino-Japanese War in 1937 and the Japanese invasion of Hong Kong in 1941. These events led to an abrupt increase in the local population as people from Guangzhou and Hong Kong took refuge in Macao, a safe wartime refuge due to Portugal's neutrality. However, the increased population had an impact on the small colony's limited building stock, and many buildings were subject to increased wear and tear. After the war, a weakened economy further accelerated the dilapidation of buildings, including those of historical value.

The situation started to change around the 1970s with the enactment of Macao's first conservation law. Additionally, the economic climate of the city was improving

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1. The State Administration of the Cultural Heritage of the People's Republic of China, *The Historic Monuments of Macao (Nomination Dossier for World Heritage Inscription)* (Paris: UNESCO, 2005), 22, <https://whc.unesco.org/uploads/nominations/1110.pdf>.
 2. Pui Yu Chan, "Community Participation in Heritage Management: A Case Study in Macau" (MS thesis, Columbia University, 2016), 38.

during the 1980s and 1990s owing to the revenue from a growing gaming industry. Together, these provided sufficient guidelines and resources for built heritage conservation. Since the late twentieth century, Macao has conserved an impressive number of buildings, and in 2005, the Historic Centre of Macao was inscribed on UNESCO's World Heritage List. With its wealth of well-conserved heritage buildings, including civic, public, and residential buildings, as well as its long experience in built heritage conservation, there is much to learn from Macao.

Relevant Laws and Regulations on the Protection of Macao's Architectural Heritage

Macao has robust heritage protection laws that have benefited from continuous updates. The development of these laws and the establishment of corresponding government and advisory bodies reflect Macao's early understanding and appreciation of its cultural heritage.

From 1953 to 1976, the Portuguese government began to identify and formulate a list of historical buildings and cultural relics of importance in Macao (further elaborated in the Macao Timeline).³ The first law regarding the overall conservation of these "sites, buildings and objects . . . considered to be of public interest" was promulgated by the government in 1976: Macao Decree Law No. 34/76/M.⁴ This first comprehensive law concerning the protection of Macao's heritage comprised a protection list of eighty-nine items, which were classified under five categories, three of which are directly related to built heritage.⁵ The Committee for the Protection of Macao's Urbanistic, Natural and Cultural Heritage was set up as the statutory authority responsible for classifying these cultural heritage properties based on their heritage values, among other duties. This initial legislation focused primarily on built heritage, and as the law was promulgated by Portuguese architects and lawyers, most items included in this legislation were Portuguese-designed structures.⁶

In 1984, the government screened and reclassified the items included in the protected list with the introduction of Macao Decree Law No. 56/84/M—Protection of Architectural, Natural and Cultural Heritage, which repealed the decree of 1976. This decree includes a more comprehensive definition and classification of cultural heritage properties as "monuments, complexes, and sites"⁷ and outlines a detailed protection plan for the different types of cultural heritage properties, updating the

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3. Lier Mi, "Protection and Recycling of Architectural Heritage in Macao's Urban Renewal," *Advances in Social Science, Education and Humanities Research* 471 (2020): 214, https://www.researchgate.net/publication/346041963_Protection_and_Recycling_of_Architectural_Heritage_in_Macao's_Urban_Renewal.
 4. "Legislation on Heritage Protection: Statutory Order No. 34/76/M August 7," Cultural Affairs Bureau, Macao SAR Government, accessed May 23, 2022, <http://www.icm.gov.mo/rc/viewer/20038/1345>.
 5. The five categories are "1. buildings of historical interest; 2. urbanistic complexes, buildings, inscriptions and vestiges that constitute representative evidence of ancient peoples or periods in Macao's history; 3. sites of scenic or natural interest, including green zones, groups of trees or single trees whose size is especially worthy of notice; 4. sites that contain objects or vestiges of anthropological, archaeological or historical interest; 5. objects of historical or documentary interest found on the sites referred to in No. 4." See Cultural Affairs Bureau, "Statutory Order No. 34/76/M."
 6. Frederick Lee and Hilary du Cros, "A Comparative Analysis of Three Heritage Management Approaches in Southern China," in *Asian Heritage Management: Contexts, Concerns, and Prospects*, ed. Kapil D. Silva and Neel Kamal Chapagain (Abingdon: Routledge, 2013), 113.
 7. The decree classifies cultural heritage under seven categories; this essay focuses on categories a), b), and c) as they are directly relevant to built heritage. The full list can be found at "Legislation on Heritage Protection: Statutory Order No. 56/84/M June 30," Cultural Affairs Bureau, Macao SAR Government, accessed May 23, 2022, <http://www.icm.gov.mo/rc/viewer/20038/1345>.



MUMBAI

Essay | Timeline | Case Studies

Built Heritage Conservation and Adaptive Reuse in Mumbai: Challenges and Opportunities

Lavina Ahuja and Lynne D. DiStefano

Introduction

This essay considers the emergence and development of built heritage conservation in Mumbai with particular focus on adaptive reuse as a conservation approach. To understand the present-day stance of built heritage conservation in Mumbai, the essay presents a background of relevant events, government policies, and civic initiatives that shaped the city's conservation practice. Challenges and opportunities of the city's approach are addressed within this context, coupled with concluding remarks on the future of adaptive reuse in Mumbai.

“Bombay” and “Mumbai”

Before considering the historical development of built heritage conservation in Mumbai, it is helpful to know that the city has two names—Bombay and Mumbai. The name Bombay is an anglicized version of the Portuguese name, “Bom-Bhaia,” introduced by the British when the city was colonized in the seventeenth century. Although the name “Mumbai” was used historically by the local fisherfolk community, Bombay's official name change to Mumbai happened in 1995. The then-ruling political party saw the name “Bombay” as a legacy of British colonialism and wanted the city's name to reflect its Indigenous heritage, hence renaming it “Mumbai” to pay tribute to the goddess Mumbadevi.¹

In this essay, the historical records of the city are presented using the name “Bombay” and the post-1995 records are presented using the name “Mumbai.” With the renaming of the city, several government departments also changed their names. These changes are clarified as they occur throughout the essay.

The Beginning of Bombay

The historical account presented in this section is based largely on the research carried out by Sharada Dwivedi and Rahul Mehrotra—Bombay-based scholars whose work

1. Sridevi Nambiar, “A Brief History of How Bombay Became Mumbai,” *The Culture Trip*, September 19, 2016, <https://theculturetrip.com/asia/india/articles/the-history-of-how-bombay-became-mumbai-in-1-minute/>.

remains an unparalleled resource for those interested in understanding the forces that made Bombay the city it is today. Among their many published works, *Bombay: The Cities Within* is an exceptional account of the city's history and sets the stage for identifying its heritage.²

Although Bombay's earliest origins can be traced back to the sixteenth century, when it was an archipelago of seven islands under Portuguese rule, its true development as an integrated town began only when the British acquired the islands through a marriage treaty in 1661.³ Later, the islands were leased by the Crown to the British East India Company, and Bombay was established as a port to maintain trade links between Britain and India.

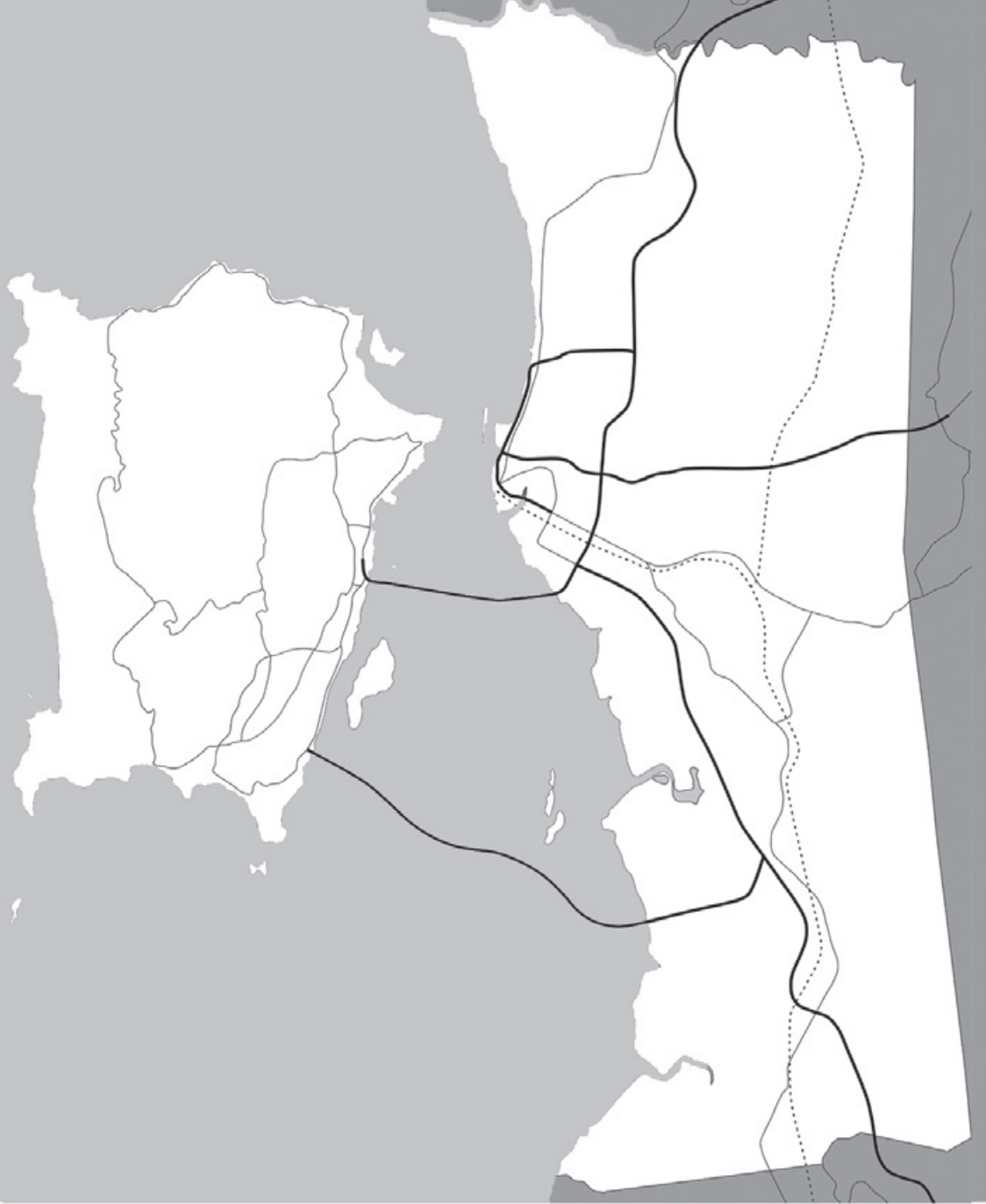
The strategic importance of Bombay became explicit when the British East India Company transferred its maritime activities from nearby Surat to Bombay in 1686. As the town rapidly grew, its main island was fortified, and several iconic buildings were constructed within the fort. Mercantile communities were encouraged to settle in the town with assurances of religious freedom as well as the liberty to trade and build homes. The walled town soon became congested and overcrowded, encouraging development to take place outside the limits of the fort walls. Diverse communities became part of the developing town, giving Bombay its cosmopolitan and inclusive spirit. By the 1850s, Bombay's seven islands were linked with reclaimed causeways, transforming the town into an integrated land mass connected to the mainland.

At this point, Bombay was already distinct from other colonial or traditional urban settlements in India as its development was never planned. The opening of the Suez Canal in 1869 and the establishment of the Bombay Port Trust in 1873 revolutionized maritime trade giving momentum to Bombay's growth as a city. Government support and private enterprise worked in tandem to create the *Urbs Prima in Indis*—the first city of India.⁴



Figure 15.1: Victorian Gothic and Art Deco Ensembles of Mumbai, World Heritage Site. (Source: Abha Narain Lambah Associates.)

2. Sharada Dwivedi, Rahul Mehrotra, and Umaima Mulla-Feroze, *Bombay: The Cities Within* (Bombay: India Book House, 1995).
3. Dwivedi et al., *Bombay*, 11.
4. Dwivedi et al., *Bombay*, 13.



PENANG

Essay | Timeline | Case Studies

Adaptive Reuse within the Context of Penang's Bottom-Up Conservation Movement: Creating a Sustainable Future for Heritage

Laurence Loh and Lin Lee Loh-Lim

Introduction

Located on the northeastern cape of Penang Island, George Town is the capital city of the state of Penang in Malaysia. It was founded by Captain Francis Light, a British trader, and became a trading port in the Straits of Malacca in the 1800s. He was responsible for laying out the original grid of streets in George Town; however, the city's development during the nineteenth century can be attributed to the early migrant communities who found in George Town a place to make a living and begin a new life.¹

George Town is set against the backdrop of Malaysia's culturally complex society and political and cultural policies. In addition to the Malays, it is home to a relatively large proportion of minority cultures and races (such as the Acehnese, Chinese, Indians, and Nyonya Babas). The architecture of George Town reflects its cultural diversity, with architectural styles reflecting an eclectic mix of colonial and Asian attributes.

George Town is Malaysia's sole UNESCO World Heritage Site, jointly inscribed with Malacca (listed as Melaka and George Town, Historic Cities of the Straits of Malacca). It has the largest intact collection of pre-World War II buildings in Southeast Asia, with over five thousand within the World Heritage Site. This is due primarily to Malaysia's Rent Control Act that controlled the rentals of buildings built before January 31, 1948.² The provisions of this act contributed to inadvertent conservation of a number of prewar buildings in the inner city of George Town.

This essay discusses the evolution of Penang's conservation practice, which has been largely a bottom-up movement. It covers key milestones of every decade, starting

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1. State Government of Penang, *Heritage Management Plan, State Government of Penang* (Kuala Lumpur: State Government of Penang and Badan Warisan Heritage Services Sdn. Bhd., February 2008), <https://whc.unesco.org/en/documents/103167>.
 2. Rent control in Malaysia existed even before World War II. The Control of Rent Ordinance 1948 repealed the following ordinances: Control and Charged Land (Restriction) Enactment 1940; Rent and Charged Land (Restriction) Ordinance 1947; Increase of Rent (Restriction) Ordinance 1939; Increase of Rent (Restriction) Enactment (Johore) 1939; and Rent and Charged Land (Restriction) Enactment (Kedah) 1360 Hijra/1941. See Mohammad Abdul Mohit and Mohd Bashir Sulaiman, "Repeal of the Rent Control Act and Its Impacts on the Pre-war Shophouses in Georgetown, Malaysia," *Journal of the Malaysian Branch of the Royal Asiatic Society* 79, no. 1 (2006): 107–21, <http://www.jstor.org/stable/41493817>.

from the 1980s when conservation was first officially mentioned by federal and state governments. With particular focus on the emergence of adaptive reuse as a conservation strategy, the essay also touches on examples that illustrate the challenges faced by heritage practitioners in Penang. Projects that have emerged as success stories in the face of these challenges and become exemplars for the city (and beyond) are also discussed. Concluding remarks are made on the lessons learned from the adaptive reuse journey of George Town and Penang.

Genesis of a Bottom-Up Conservation Movement

In Malaysia, there is a three-tier governmental system of managing built heritage—federal government, state government, and local authorities. Conservation issues are controlled at the federal level by the Ministry of Tourism and Culture and partially by the Ministry of Housing and Local Government. In Penang, the state government, the Penang State Executive Council (EXCO), is responsible for general policy with respect to the planning, use, and development of all land and buildings within the jurisdiction of local authorities. The State Planning Committee (SPC), chaired by the chief minister, makes decisions on planning policies relating to the conservation, use, and development of land in the state and may give directions to the local authority to adopt and implement decisions of the SPC. The Municipal Council of Penang Island (Majlis Perbandaran Pulau Pinang [MPPP]) is the local authority, and its statutory functions are provided in accordance the Town and Country Planning Act (1976).³ The federal-level Town and Country Planning Act introduced a two-tier system of development planning—the State Structure Plan, which provides general policy, and the Local Plan, which sets out specific policies. In addition, there is provision for a Special Area Plan, which comprises detailed projects and programs. MPPP adopts a general statutory framework of a number of laws, among which is the Antiquities Act, 1976 (superseded by the National Heritage Act, 2005).⁴

This section sets out the conservation and revitalization journey in Penang starting from the 1970s. It presents the genesis of a bottom-up conservation movement that changed Penang's approach from renewal to revitalization.

1970s–1990s: Building Conservation Consciousness

The story of conservation in Penang cannot be separated from that of ideological contestation and the pivotal role of civic society in raising awareness of the need to conserve built heritage. In his article “Conservation on the Move—A Penang Perspective,” Laurence Loh wrote,

The concept of conservation in Penang had humble beginnings . . . as with all things that have great potential and promise. . . . Its first official appearance came in the form of a conservation plan for the City of George Town prepared by the Central Area Planning Unit [CAPU] of the City Council.⁵

CAPU was formed by the Penang government in the late 1960s. In the early 1970s, CAPU introduced a policy on conservation areas in George Town. A Conservation

3. Majlis Perbandaran Pulau Pinang (MPPP) was renamed as Majlis Bandaraya Pulau Pinang (MBPP) in 2014. This essay uses the name MPPP for the historical account of Penang. State Government of Penang, *Heritage Management Plan*.

4. State Government of Penang, *Heritage Management Plan*.

5. Laurence Loh, “Conservation on the Move—A Penang Perspective,” *Majalah Arkitek* 3, no. 1 (January/February 1999): 60.

Conclusion

Lavina Ahuja and Lynne D. DiStefano

Introduction

Asia is unique—the way we built, inhabit, and conserve are all different from the rest of the world. During the early days of “formal” conservation practice, most documents with guidelines on best practice had Eurocentric views. This has changed and continues to change, as we now see a number of Asia-based conservation guidelines (or Asian adaptations of existing guidelines). One of the purposes of the two books—*Asian Revitalization* and *Revitalization in Asia*—is to highlight the specific challenges faced in Asian urban centers when it comes to conserving and revitalizing built heritage. These challenges can range from economic factors, such as resource availability, environmental factors, such as Asia’s diverse climate and its related impacts, to social factors, such as poverty and population explosion. Yet within such unique contexts, noteworthy and standard-setting examples of adaptive reuse have emerged. Something is being done right in these places and the impact is unfolding. Capturing these Asian stories is the primary aim of the two books.

Revitalization in Asia considers conservation, specifically adaptive reuse, in three urban centers—Macao (SAR, China), Mumbai (India), and Penang (Malaysia). The book is a continuation and expansion of *Asian Revitalization*, which looks at adaptive reuse in Hong Kong (SAR, China), Shanghai (China), and Singapore. The main objectives of this book are twofold: establishing a broader understanding of adaptive reuse against the background of a sustainability framework (in this case, the Sustainable Development Goals [SDGs]) and providing examples of adaptive reuse in three Asian urban centers. The examples are set within the context of the conservation initiatives of each place, thus allowing a holistic understanding and (possibly) appreciation for the projects. In this concluding chapter, the theme of sustainability is summarized by revisiting the SDGs as a framework that can be applied in conservation practice, and the conservation efforts of three urban centers (Macao, Mumbai, and Penang) are compared. Key takeaways on the broadened scope of the term “adaptive reuse” are suggested. The way forward is reflected on with thought-provoking questions and deliberations.

Sustainability in Adaptive Reuse Practice

As mentioned in the “Introduction” of this book, “heritage is increasingly seen as an integral pillar for sustainable development in all its dimensions, and therefore deeply relevant to everyone. Indeed, the 2030 Agenda for Sustainable Development recognizes heritage, both cultural and natural, as a fundamental part of the global development agenda.”¹ This book aligns itself with the Sustainable Development Goals (SDGs) as a theoretical basis for sustainability. The SDGs form an international framework, which practitioners across a number of sectors are aiming to meet through plans and actions. As important as the SDGs are, they are complicated, lying in a realm that seems distant from conservation practice. It is often seen as a challenge to understand and distill the SDGs into practical action plans that have cultural heritage as their primary focus. The opening essays of this book draw reference to specific SDGs to emphasize the applicability of certain goals/targets. However, the case studies chalk out a broader sustainability approach. As tempting as it may seem, using and promoting the SDGs as a checklist of seventeen goals and 169 targets is not the intention of this framework or this book.

However, the SDGs can broaden our understanding of the three dimensions (pillars) of sustainability—economic, environmental, and social (it would be helpful to refer to Figure 1.1 in the Introduction). In regard to the economic dimension, the SDGs push the envelope of this dimension to include how cultural heritage can promote new forms of productivity and socioeconomic development. In some cases, cultural heritage can contribute to enhancing the identity of a place and eventually branding it. The example of Nizamuddin Urban Renewal Initiative (elaborated in the essay “Nizamuddin Urban Renewal Initiative: Socioeconomic Sustainability through Conservation”) is a standard-setting example of how cultural heritage programs can contribute to sustainability. The case study demonstrates that “conservation of tangible heritage and incorporating intangible heritage in the process—while improving people’s quality of life—can create a sustainable heritage management program that contributes to the SDGs.”² On the other hand, Fergus T. Maclaren’s essay, “Creating Sustainable Urban Visitor Economies: Adaptive Reuse of Asian Cultural Heritage Places for Tourism,” is a candid assessment of the impact of tourism on heritage assets. The essay reminds us that catering to tourists may be seen as an “easy win,” but there is a real risk that such actions can destroy the very thing it showcases. Although heritage can be (and should be) leveraged for economic sustainability, the approach needs to be thoughtful and responsive to the intrinsic character of each heritage place.

Positioning the environmental dimension within the framework of the SDGs suggests, among other things, strengthening the nature-culture link of cultural heritage places, including building resilience in the face of climate change, natural disasters, and so forth, by reducing vulnerabilities. The Lai Chi Wo project, discussed in the essay “Transforming a Dilapidated Rural Village into a Nature-Culture Interface for Social-Ecological Sustainability: Lai Chi Wo, Hong Kong,” focuses on the importance of recognizing and reinforcing the nature-culture relationship that involves a number of actors, especially the local community. “The Lai Chi Wo project demonstrates that cultural landscapes can generate tremendous value for society—promoting social inclusion and rural-urban interaction, fostering green economic

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1. UNESCO, *Asia Conserved Volume III: Lessons Learned from the UNESCO Asia-Pacific Awards for Cultural Heritage Conservation (2010–2014)*, ed. William Chapman (Bangkok: UNESCO, 2019), 324.
 2. Quoted by Sharif Shams Imon in the essay “Nizamuddin Urban Renewal Initiative: Socioeconomic Sustainability through Conservation,” which is included in this book.

development, and helping to enhance the overall well-being of both the local community and society at large.”³ Other aspects of the environmental dimension are those of embodied energy and operational energy. Most projects discussed in this book demonstrate how adaptive reuse, when compared with demolition and rebuilding, retains the embodied energy of a place. However, there are often challenges with long-term performance of adaptive reuse projects with regard to operational energy. In *Asian Revitalization*, Donovan Rypkema’s essay titled “Measuring the Impacts: Making a Case for the Adaptive Reuse of Heritage Buildings” discusses environmental internal metrics for adapting heritage buildings. This sheds light on a quantitative approach to adaptive reuse using embodied energy as a unit of measurement. The application of this approach can be instructive in long-term planning and management of heritage places. Eventually, the way forward is to build resilience against environmental factors, which can be done if all actors involved in a city’s mechanics work alongside each other with a sustainability mindset.

As for the social dimension, the SDGs encourage wider understanding of the concept by questioning how future generations can be engaged in maintaining the continuity of cultural heritage and how it can become a response to the needs of local communities (including marginalized minority communities). The “R and R, Mumbai” case study shows that the seemingly simple intervention of reclaiming social space can build a community’s resilience and contribute to its cultural continuum.

In this book, although specific SDGs are mentioned in several of the essays, the case studies address sustainability broadly, using the more familiar terms of economic, environmental, and social sustainability. It is worth mentioning once again, the SDGs are not meant to be used as a checklist. In fact, in some cases the SDGs were introduced well after the project completion dates. The approach of this book is to demonstrate how sustainable actions—whether they are implied or articulated—are integral to each successful project, reflecting a sustainability approach rather than the application of specific SDGs. This approach reinforces the growing awareness that culture has a role to play in all seventeen SDGs (as illustrated in the ICOMOS publication *Heritage and the Sustainable Development Goals: Policy Guidance for Heritage and Development Actors*) and not only SDG 11—Sustainable Cities and Communities and, more specifically, target 11.4: “Strengthen efforts to protect and safeguard the world’s cultural and natural heritage.” This approach not only acknowledges the importance of the SDGs but also seeks to make their intent more accessible and better understood through sustainability clusters under the three dimensions of sustainability.

Macao, Mumbai, and Penang

Looking at the three centers chosen for this book, each has its own significance, stories, and complexities. In terms of adaptive reuse, each center has its own trajectory, but there are commonalities as well as differences between them. All places focus on identifying—or reinforcing—appropriate uses for existing places of community, regional, or national importance. Some of the projects have become standard-setting examples, others have contributed more quietly to the vitality of communities. In all cases, the objective has been to conserve as much of the building and structural fabric as possible or to revive spaces for public enjoyment.

3. Quoted by Hiu Lai Chick, Katie in the essay “Transforming a Dilapidated Rural Village into a Nature-Culture Interface for Social-Ecological Sustainability: Lai Chi Wo, Hong Kong,” which is included in this book.

Differences are seen in the level of community involvement (from bottom up to top down), the funding model (from privately or publicly funded to public-private partnerships), the management structure (from governmental departments to privately owned and operated enterprises), and the scale (from small-scale projects to community-wide initiatives). For Macao, the conservation initiative is largely government led. The World Heritage listing of the Historic Centre of Macao has been a contributing factor to the recognition and conservation, often through adaptive reuse, of the heritage grain of the city. In Mumbai and Penang, the conservation movement gained momentum with the power of civic voices, and sometimes these voices were loud. Key actors have contributed to the survival of heritage in both of these urban centers. A notable difference is that in Penang, the drive to inscribe George Town on the World Heritage list was spearheaded by the government and supported by heritage practitioners and thinkers. In Mumbai, the nomination dossier for the World Heritage listing of the Victorian Gothic and Art Deco Ensembles of Mumbai was drafted by citizen groups and civil society organizations.

Adaptive reuse is not articulated as a distinct government policy in many of the places (although Mumbai's Heritage Regulations mention it), but it is embedded in how each urban center has found—and continues to find—new (and sometimes continuing) uses for a broad cross-section of officially or unofficially valued buildings, structures, and spaces. Heritage preservation and revitalization are the primary push for almost all of the cases featured in this book. An important and sometimes unintentional outcome is a project's contribution to all three dimensions of sustainability.

Looking at the three urban centers of this book in terms of sustainable conservation practice, Penang shows structured and clear long-term visions for most of its projects. In Mumbai, the urgency to save heritage from disappearing often supersedes the amount of thought and time that could go into planning long-term sustainability actions and leveraging the maximum impact of projects. However, many projects have emerged with noteworthy sustainable impact, some intentional and some happy coincidences. In Macao, the adaptive reuse of heritage as museums is still a popular choice. Their long-term sustainability and relevance to societal needs can be debated.

There is much to learn from the three centers and much they can learn from each other. The common thread that emerges is that the recognition of culture—and cultural heritage by extension—can indeed be a driver for sustainable development, not only within site boundaries but also beyond.

Revitalization: More than Adaptive Reuse

In *Asian Revitalization*, the "Introduction" mentions that "the term 'adaptive reuse' generally implies both change of use and change to the fabric of the place."⁴ Through the research and writing of this book, a certain elasticity in the use of the term "adaptive reuse" has emerged, suggesting that "revitalization" can be viewed as an umbrella term, with adaptive reuse as one of its implementation instruments. Places, as seen in the case study examples chosen for this book, can be revitalized with little change of use or change to the fabric of the place. The long-term goal is to promote a conservation practice that conforms to principles of sustainable development and is not limited by textbook definitions of approaches and interventions.

4. Katie Cummer and Lynne D. DiStefano, eds., *Asian Revitalization: Adaptive Reuse in Hong Kong, Shanghai, and Singapore* (Hong Kong: Hong Kong University Press, 2021).

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