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# A COMPARISON OF URBAN RESTORATION OF HERITAGE BUILDINGS: A CASE STUDY IN ARNAVUTKÖY, ISTANBUL AND GEORGE TOWN, PENANG

Nur Sofia Hanim Sophian, Syaza Farzana Nazry and Illyani Ibrahim\*
International Islamic University Malaysia

# **ABSTRACT**

This research presents a comparative analysis of heritage building urban restoration in Arnavutköy, Istanbul, and George Town, Penang. The method of this study is using observation and review analysis. This study also analyses on the restoration, community involvement, and the preservation of architectural heritage to unveils unique strategies employed in each site. The findings contribute valuable insights to the field of heritage conservation and urban development, aiding in the formulation of effective restoration approaches for diverse cultural contexts.

**Keyword:** urban restoration, heritage building, process, challenges, heritage conservation

\*Corresponding author: illyani\_i@iium.edu.my

# INTRODUCTION

Urban restoration of heritage buildings in cities is critical for conserving cities' historical and cultural identities, as it adds to their visual appeal, and fostering sustainable urban growth (Bogdan et al., 2022). As cities continues to change and encounter modernisation problems, the preservation of heritage buildings becomes increasingly crucial to maintain and sustain their historical appeal that will continuously generate vibrant urban environments.

Heritage building preservation and restoration involve a thorough grasp of the historical context, cultural relevance, and community dynamics. Furthermore, government policy and community participation are critical in designing restoration methodologies and guaranteeing project sustainability (Bogdan et al., 2022).

Arnavutköy in Istanbul, Turkey, has a variety of historic Ottoman residential buildings as well as a distinct architectural history. Its historical significance and distinct architectural characteristics have drawn attention in recent years, motivating attempts to preserve and repair its heritage structures (Liberatore, 2018) . While for the state of Penang, United Nation Educational, Scientific and Cultural Organisation (2018) explained that George Town, in Penang, Malaysia has a rich architectural legacy with an eclectic mixture of the European classical style, along with the influence of the Islamic, Malay, Indian, Chinese and later Art Deco motives. Its lively streetscapes and well-preserved heritage structures have made it a popular tourist destination in the region. In relation to this, the introduction of new townships at the edge of many historic cities in Malaysia has exposed them to severe pressure of commercialisation, poor design and cultural uniformity that has faded away their place identity (Said et al., 2013).



Figure 1: Preserved Residential Buildings in Arnavutköy, Istanbul (Source: Authors, 2023)



Figure 2: Preserved Commercial Buildings in George Town, Penang (Source: Renée, 2021)

The purpose of this comparative study is to investigate and analyse the restoration plans, policies, and challenges encountered in the development of the cities namely Arnavutköy in Turkey and George Town in Penang. Exploring similarities and differences in their approaches can provide significant insights for best practices approach in urban restoration of heritage buildings. The study will also investigate the historical background, cultural relevance, government initiatives, and economic considerations that have shaped the restoration procedures in these two cities.

The study's findings will provide a thorough understanding on the restoration procedures used in Arnavutköy and George Town, giving insight into the efficiency of the strategies and its implications on for urban development. The study also seeks to uncover significant lessons and recommendations that can be applied to other communities facing comparable issues in maintaining heritage structures and encouraging sustainable urban growth.

## LITERATURE REVIEW

"Restoration is not architecture proper; it situates itself on the periphery of architecture." (Arrhenius, 2002). The study on restoration requires thorough understanding on history and national heritage. In other words, if we define significance of restoration from architectural perspective, the restoration of historical structures and their reflections shall require cultural understanding. Ruff (2012) addressed how the ruin, repair, and destruction of architectural structures reveal social, political, and aesthetic hierarchies. He used Rome in the fourth and fifth centuries as an example of a vital component of the political spectrum of architecture (Arrhenius, 2002).

Restoration is defined as an area devoted to regenerating and conserving the built heritage or the urban environment, including the ecosystems. Restoration is a complex ensemble of actions which can include the integration and replacement of non-original elements, reconstruction, retouching and infilling. It is aimed at facilitating the appreciation, understanding and utilisation of the cultural heritage.



Figure 3: The Mansion and The Grove of Vahdettin before. (Source: Daily News, 2023)

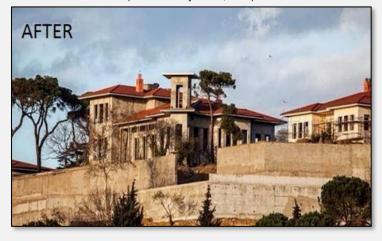


Figure 4: The tower's onion dome was disappeared after the restoration. (Source: Daily News, 2023)

In the eighteenth-century, England signified restoring a structure to a given time by deleting any characteristics from other periods. In the nineteenth century, restoration architect Viollet-Le-Duc defined restoration as reinstating a building in a condition of completeness that could never have existed at any given time (Jackson, 2004). Restoration, according to John Ruskin, was a lie from beginning to end (Jackson, 2004). These definitions from these prominent architects in the past has the foundation for defining historical restoration. The Secretary of the Interior of the United States defines restoration as the process of returning a building to a specific point in time, usually to its original condition, based on historical evidence.

#### **CONCEPT OF URBAN RESTORATION**

A concept that focuses on revitalising and improving urban environments to enhance their overall sustainability, livability, and functionally.

#### **OBJECTIVES OF URBAN RESTORATION**

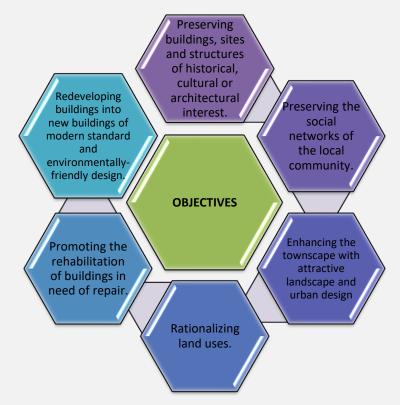


Diagram 1: Objectives of urban restoration.

## **ELEMENTS OF URBAN RESTORATION**

By integrating environmental, social, and economic considerations, cities can create spaces that are not only aesthetically pleasing but also promote well-being and prosperity to their residents.



Diagram 2: Elements of urban restoration

#### PROCESS OF URBAN RESTORATION

The process of urban restoration on heritage buildings typically involves several key steps, which may vary in details depending on the specific project and context.



Diagram 3: The process of urban restoration

# **CHARACTERISTICS OF URBAN RESTORATION**

Urban restoration exhibits several characteristics that distinguish it from other urban development approaches.



Diagram 4: Characteristics of urban restoration

These characteristics collectively contribute to the transformation of urban areas into sustainable, resilient, and vibrant spaces that enhance the residents' quality of life, preserve cultural heritage, and promote social and environmental well-being

## IMPORTANCE OF URBAN RESTORATION

Urban restoration plays a crucial role in preserving and revitalizing heritage buildings.

Cultural and Historical Preservation Urban restoration preserves a community's cultural, architectural, and historical character by preserving its unique features and historical significance, ensuring future generations can appreciate and benefit from its rich heritage.

Sense of Place and Identity

Heritage buildings in urban areas enhance place and identity by serving as landmarks and symbols. Urban restoration maintains and enhances these buildings, reinforcing distinctive character, fostering stronger community and place attachment.

Economic Revitalization

Heritage buildings can drive economic revitalisation in urban areas by transforming them into cultural, commercial, or tourism destinations, attracting visitors, stimulating local businesses, creating job opportunities, and contributing to community growth.

Tourism and Cultural Tourism Heritage buildings attract visitors seeking architectural, historical, and cultural heritage, while urban rehabilitation boosts accessible tourism and generates income for nearby businesses.

Sustainable Development

Urban restoration focuses on resource efficiency, waste reduction, carbon emission reduction, and adaptive reuse of structures, aiming to create a sustainable urban environment by saving energy and extending infrastructure lifespan.

Social Cohesion and Community Engagement

Urban restoration initiatives involve community involvement, consultation, and participation, promoting shared responsibility, social cohesiveness, and fostering cooperation in preserving and enhancing built environments.

Environmenta Benefits Urban restoration of heritage buildings promotes environmental sustainability through resource conservation, waste reduction, and construction waste reduction through sustainable design methods and eco-friendly materials.

Diagram 5: The importance of urban restoration

# FINDINGS SITE PROFILE

#### Arnavutköy, Istanbul

Arnavutköy is a historic neighbourhood of Istanbul, Turkey's Beşiktaş district. It spans along the banks of the Bosphorus Strait on the city's European side, giving stunning vistas and a strategic location. Arnavutköy is a prestigious and sought-after neighbourhood due to its great location along the Bosphorus. Arnavutköy falls under the administration of the Beşiktaş Municipality, which is responsible for the governance and management of the district.



Figure 5: Districts in Istanbul (Source: The Istanbul Metropolitan Municipality, 2023)

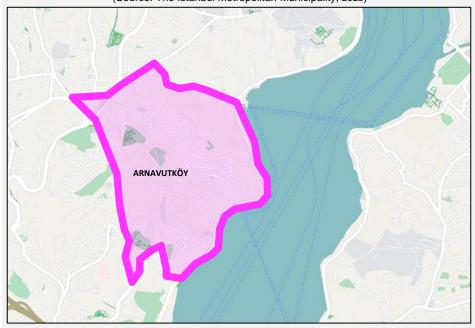


Figure 6: Location Plan of Arnavutkoy, Istanbul (Source: Google Maps, 2023)

Arnavutköy is culturally, historically, and architecturally significant. The following is a summary of Arnavutköy significance, showing its cultural and historical significance, as well as its architectural heritage:

Historical Significance

Arnavutköy has a long and rich history dating back centuries. The neighbourhood got its name from Albanian immigrants who moved there during the Ottoman Empire. It means "Albanian village" in Turkish. Its historical significance stems from its well-preserved traditional Ottoman residential building, which reflects the past's lifestyle and cultural heritage.

Cultural Significance The cultural significance of Arnavutköy is heavily anchored in its historical legacy and diversified community. Various ethnic and religious groups have lived in the neighbourhood over the years, adding to its eclectic character. The local food, traditional crafts, and dynamic social fabric reflect this diversity, making Arnavutköy a melting pot of cultures and traditions.

Architectural Heritage Arnavutköy is well-known for its architectural legacy, which includes traditional Ottoman wooden houses and stone structures. The appeal of the neighbourhood originates from its tiny alleyways, colorful buildings, and elegant wooden balconies. These architectural elements demonstrate the Ottoman era's craftsmanship and architectural styles.

Diagram 6: Summary of Arnavutköy significance.



Figure 7: Preserved Residential Buildings in Arnavutköy, Istanbul (Source: Authors, 2023)

# **FINDINGS**

# SITE PROFILE

#### George Town, Penang

George Town, located in the Malaysian state of Penang, is a lively and culturally diverse city with a rich history. George Town has been designated a UNESCO World Heritage Site since 2008 for its well-preserved architectural legacy, multicultural atmosphere, and lively street art scene. Its location on the northeastern shore of Penang Island along the edge of Malacca Straits is strategic, serving as an important trading hub and gateway to Southeast Asia. The Penang Island City Council (MBPP) governs George Town. The MBPP oversees the city's governance, planning, and development, as well as its heritage protection.



Figure 8: Districts in Pulau Penang (Source: Dreamtrooper, 2021)



Figure 9: Location Plan of George Town, Penang (Source: Google Maps, 2023)

George Town is culturally, historically, and architecturally significant. The following is a summary of George Town's significance:

World Heritage Site George Town was designated a UNESCO World Heritage Site in 2008, recognizing its global importance as a testament to the Straits of Malacca's mixed past, urban development, and architectural legacy.

Cultural Significance George Town is a melting pot of nationalities, resulting in a wide range of cultures, dialects, faiths, and cuisines, which are celebrated through festivals, religious activities, and cultural places.

Architectural Heritage George Town's architectural legacy is well-preserved, featuring Chinese shophouses, colonial-era structures, clan houses, mosques, and temples, symbolizing the city's historical growth and cosmopolitan past.

Economic Center

Penang's principal economic center is George Town due to its strategic location. The city has a robust business community, with businesses like as finance, manufacturing, tourism, and technology growing.

Diagram 7: Summary of George Town's significance.



Figure 10: Preserved Commercial Buildings in George Town, Penang (Source: Google Images, 2021)

# **FINDINGS**

#### **LEGAL DOCUMENTS FOR URBAN RESTORATION**

## **TÜRKIYE**

In Türkiye, urban restoration legislation includes a variety of laws and regulations concerning historical conservation, urban planning, and development. The following are some major legislation and laws that may be applicable to Turkish urban rehabilitation projects:

Law on the Conservation of Cultural and Natural Heritage
(No. 2863)

As a fundamental legislative component, this law preserves, restores, and conserves cultural and natural heritage areas in Turkey, including historic metropolitan districts.

Law on the Transformation of Areas under Disaster Risk (No. 6306)

This law intends to renew and rehabilitate disasterprone areas, especially metropolitan areas, by improving building safety and resilience.

Zoning Law (No. 3194)

Türkiye Zoning Law governs land use, urban development, construction, and urban design, ensuring compliance with regulations.

Law on Urban Renewal (No. 5366) This law focuses on urban renewal, transformation, infrastructure upgrades, seismic safety, and restoration projects.

Regulation on Urban Design (published in Official Gazette No. 27665)

This law outlines Türkiye urban planning guidelines, focusing on preserving historical and cultural assets, architectural style, building density, and open spaces.

Conservation
Implementation Plans:

The Ministry of Culture and Tourism and local authorities develop restoration plans for historic sites, outlining methods, standards, and measures.

Diagram 8: Türkiye legal documents.

It should be noted that certain cities and provinces in Türkiye may have their own extra legislations and norms regarding urban restoration. These can differ in breadth and requirements. Therefore, it is critical to study the individual legislation applicable to the restoration project's region.

#### **MALAYSIA**

In Malaysia, urban restoration legislation primarily falls under the broader umbrella of urban planning and heritage conservation laws. Here are some key acts and regulations that may be relevant to urban restoration projects in Malaysia:

Town and Country Planning Act 1976 (Ac 172) The act governs Malaysia's urban planning and development, establishing a legal framework for land use planning, development control, and urban conservation.

National Heritage Act 2005 (Act 645)

The act aims to preserve and restore Malaysia's national heritage, including urban areas with historical, cultural, or architectural significance, establishing authorities' roles and responsibilities.

Street, Drainage, and Building Act 1974 (Act 133) This act regulates urban building construction, maintenance, restoration, focusing on building codes, safety standards, and development project requirements.

Environmental Quality Act 1974 (Act 127) While not specific to urban restoration, this act regulates urban building construction, maintenance, restoration, focusing on building codes, safety standards, and development project requirements.

National Physical Plan (NPP)

The National Physical Plan is a crucial framework for Malaysian urban development and restoration, providing long-term spatial planning and policies for sustainable development and urban restoration.

Diagram 9: Malaysia legal documents.

It is vital to keep in mind that various states in Malaysia might have additional rules, laws, and policies pertaining to cultural preservation and urban restoration. It's important to study the exact regulations that apply to the state where the restoration project is being conducted because these can differ in their scope and requirements.

# URBAN RESTORATION PROCESSES IN GEORGE TOWN, MALAYSIA AND ARNAVUTKOY, TÜRKIYE

The urban restoration processes in these two place are just the same, following a structured approach guided by heritage conservation guidelines and regulations. Here is the urban restoration processes in George Town and Arnavutköy:

Identification and Documentation

To identify heritage buildings or areas in need of restoration.

Heritage Conservation Policies and Guidelines

George Town has specific heritage conservation policies and guidelines in place to guide restoration efforts.

Planning and Design

Planning and design involve developing a comprehensive restoration plan that outlines the objectives, scope, and strategies for the project.

**Approvals and Permits** 

Approvals and permits need to be obtained from relevant authorities' ore commencing restoration work.

**Funding and Financing** 

Tax incentives or heritage conservation grants may be available to support restoration efforts

Quality Control and Monitoring

This include structural repairs, conservation of architectural elements, restoration of decorative features, and integration of modern utilities while preserving the building's historical integrity.

Restoration and Rehabilitation

Continuous monitoring and quality control measures are implemented throughout the restoration process to ensure adherence to restoration standards and guidelines.

Public Engagement and Awareness

Public consultations, educational campaigns, exhibitions, and guided tours are conducted to promote awareness of heritage conservation and foster community ownership and support.

Maintenance and Sustainable Management Proper maintenance plans, periodic inspections, and adherence to heritage conservation guidelines are put in place to safeguard the restored structures from deterioration and damage.

Integration with Urban Development Urban restoration projects in George Town are integrated with urban development plans to ensure compatibility and sustainability.

Diagram 10: Urban restoration processes in Malaysia and Türkiye.

It is important to note that the specific processes and approaches may vary depending on the location, scale, and complexity of the restoration projects in George Town. Local regulations, heritage significance, and stakeholder involvement also influence the restoration process in this unique context.

# CHALLENGES OF URBAN RESTORATION PROCESSES IN GEORGE TOWN, MALAYSIA

George Town, located in the state of Penang, Malaysia, is a UNESCO World Heritage Site renowned for its well-preserved historic buildings and multicultural heritage. However, urban restoration on heritage buildings in George Town also faces several challenges.

Deterioration and Decay

Many heritage buildings in George Town have suffered from years of neglect, resulting in decay and deterioration. Weathering, inadequate maintenance, and structural issues contribute to the deterioration of the buildings.

Urban Development Pressure George Town experiences urban development pressure due to its prime location and growing tourism industry. The demand for land and modern infrastructure often clashes with the need to preserve the historic character of the city.

Lack of Technical Expertise

This demands specialized technical expertise in areas such as architectural conservation, structural engineering, and heritage management. A shortage of skilled professionals can present challenges in implementing restoration projects.

Climate Change and Natural Disasters George Town is vulnerable to the impacts of climate change, including rising sea levels and extreme weather events. Heritage buildings may be at risk from flooding and other natural disasters.

Diagram 11: Challenges of urban restoration in George Town.

# CHALLENGES OF URBAN RESTORATION PROCESSES IN ARNAVUTKOY, TÜRKIYE

Arnavutköy is historical neighborhoods in Istanbul, Turkey, known for their rich heritage and traditional architecture. Urban restoration on heritage buildings in these areas faces several challenges which includes:

Urban Pressure and Development

Arnavutköy located along the Bosphorus, which makes it attractive for urban development. The pressure of modernisation, population growth, and commercialisation can pose challenges to the preservation of heritage buildings.

Limited Space and Access Constraints Arnavutköy have narrow streets and limited space for construction and restoration activities. This poses challenges in terms of logistics, transportation of construction materials, and access to the buildings for restoration work.

Deterioration and Neglect

Some heritage buildings in Arnavutköy may have suffered from neglect, decay, and inadequate maintenance over the years. This can result in structural damage, loss of original features, and weakened foundations.

Encroachment and Unauthorized Alterations Encroachment and unauthorized alterations to heritage buildings pose significant challenges. In some cases, buildings may have undergone inappropriate modifications, such as additions or alterations that did not conform to the original architectural style or historical context.

Diagram 12: Challenges of urban restoration in Arnavutköy.

# **RECOMMENDATIONS**

Improving urban restoration in Malaysia and Türkiye requires a holistic approach that may involves various stakeholders, including government authorities, urban planners, conservation experts, communities, and developers. Some recommendations to enhance urban restoration efforts in Malaysia and Türkiye is as follows:

Strengthen Legal Framework

Review and update urban restoration legislation to ensure comprehensive, practical, and aligned with global best practices. Encourage community involvement in restoration projects, sustainable development, and adaptive reuse of historic structures.

Integrated Planning and Policy

Encourage integrated urban planning with heritage conservation as core elements, promoting sustainable development and preserving cultural and historical assets. Foster coordination among government agencies for a cohesive approach to urban restoration.

Heritage Inventory and Mapping

Conduct thorough surveys and inventories of historically significant structures, cultural sites, and urban environments. Create a comprehensive database and mapping system to aid in informed decision-making, prioritise restoration efforts, and identify vulnerable locations.

Public Awareness and Education

Raising public appreciation for heritage conservation and urban restoration through awareness campaigns and educational programs, fostering community ownership and pride, and encouraging active involvement in restoration initiatives.

Financial Incentives and Funding Mechanisms Introduce financial incentives, tax benefits, and grants to encourage private sector investment in urban restoration projects and explore public-private partnerships for sustainable restoration of heritage buildings.

Capacity Building and Expertise

Invest in capacity building programs for architects, engineers, urban planners, and conservation professionals, offering specialised training in heritage restoration techniques, conservation principles, and sustainable urban design.

Community Engagement and Participatory Approach Involve local communities, citizens, and stakeholders in urban restoration decision-making. Encourage collaboration and conversation among government agencies, experts, developers, and communities to ensure that restoration initiatives reflect local needs, ambitions, and cultural values.

Monitoring and Enforcement

Implement thorough monitoring measures to verify that restoration requirements and regulations are followed. Adopt strict enforcement efforts to prohibit unlawful activities, unauthorised changes, and neglect of heritage structures and urban areas.

International Collaboration and Knowledge Exchange Encourage collaborations with international organisations, specialists, and institutions to exchange knowledge, experiences, and best practices in urban restoration. Attend conferences, workshops, and networks to stay updated on global trends and methods.

Sustainable Development Considerations Integrate sustainability elements, such as energy efficiency, green infrastructure, and the use of ecologically friendly materials, into urban restoration projects. Incorporate sustainable transport and mobility solutions to reduce urban environmental impact and build a more livable and resilient city.

Diagram 13: Recommendations of improving urban restorations.

These ideas attempt to improve the efficacy, sustainability, and community involvement in Malaysian and Turkish urban restoration programmes. Implementing a comprehensive strategy that takes these factors into account can help to preserve Malaysia and Türkiye's cultural heritage while also creating dynamic and sustainable urban settings.

## CONCLUSION

In conclusion, the comparison of urban restoration of heritage buildings in Arnavutköy, Istanbul, and George Town, Penang, reveals both similarities and differences in the approaches and challenges faced in preserving and restoring these historical areas.

Both Arnavutköy and George Town are renowned for their rich heritage and traditional architecture, attracting local and international attention. The urban restoration processes in these areas involve several common steps, including identification and documentation, heritage conservation policies and guidelines, planning and design, approvals and permits, funding and financing, restoration and rehabilitation, quality control and monitoring, public engagement and awareness, maintenance and sustainable management, and integration with urban development.

However, there are also distinct characteristics and challenges in each location. Arnavutköy faces pressures from urban development due to its prime location along the Bosphorus, while George Town experiences similar challenges due to its growing tourism industry. Deterioration, encroachment, unauthorised alterations, and limited resources are common challenges in both areas. Funding and financial support, public awareness and participation, technical expertise, regulatory compliance, and climate change resilience are critical factors that need to be addressed in both Arnavutköy and George Town.

Despite these challenges, both locations have made significant efforts to address the preservation and restoration of their heritage buildings. Strong heritage conservation policies, collaboration among stakeholders, public engagement, and integration with urban planning have played vital roles in achieving successful restoration projects.

In Arnavutköy, the restoration processes aim to maintain the traditional character of the area while accommodating sustainable urban development. Whereas in George Town, the restoration efforts focus on preserving its multicultural heritage and integrating it into the urban fabric.

In summary, the comparison highlights the importance of heritage conservation, community involvement, and sustainable development in urban restoration. The experiences and lessons learned from Arnavutköy, Istanbul, and George Town, Penang, can serve as valuable examples for other cities and regions facing similar challenges in preserving and restoring their heritage buildings. By balancing development pressures, maintaining historical authenticity, and engaging stakeholders, urban restoration can contribute to the preservation of cultural heritage, sustainable urban growth, and the promotion of local identity and pride.

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