



# **ORGANISED BY**

Landscape Architecture Program, College of Built Environment Universiti Teknologi MARA Selangor Branch Puncak Alam Campus

# **CO-ORGANISED BY**

Landscape Architecture Program,
Department of Built Environment Studies and Technology
College of Built Environment
Universiti Teknologi MARA Perak Branch
Seri Iskandar Campus

05 February 2025 Semester October 2024 - February2025

# **PUBLISHED**

31 March 2025

© Unit Penerbitan UiTM Perak, 2025 e ISBN 978-967-2776-49-9



Unit Penerbitan UiTM Perak (online)

All rights reserved. No part of this publication may be reproduced, copied, stored in any retrieval system or transmitted in any form or by any means; electronic, mechanical, photocopying, recording or otherwise; without permission on writing from the director of Unit Penerbitan UiTM Perak, Universiti Teknologi MARA, Perak Branch, 32610 Seri Iskandar Perak, Malaysia.

Cover Design: Zawanie Fatini Mohd Jamzury

## **ORGANISING COMMITTEE**

Chairman: Assoc. Prof. Ts. Dr. Siti Rasidah Md Sakip

# MAIN SECRETARIAT

Project Leader:Muhammad Zulfikry Jaafar Sidek
Editorial Team:Nur Sazliana Pitderi
Nazmi Najiha Azmi
Nur salwani Mohd Rosle
Marketing and Promotion: Qamarina Izzati NikHim
Jihan Tsara Mohd Fadzly
Nurul Husna Abd Rahim
Design & Promotion Team: Zawanie Fatini Mohd Jamzury

Nur Raudhatul Athirah Nor Fauzi
Siti Syazana Sapuan
Certificate:Nur Adlin Saipudin
Atiqah Balqis Redzuan Teoh

Technical Support Team:Muhammad Luqman Hakim Sharuddin Muhammad Nazmy Ashary Mohd Nazry

## E-PROCEEDING EDITORS

Assoc. Prof. Ts. Dr. Siti Rasidah Md Sakip

# **LIST OF REVIEWER**

Assoc. Prof. Ts. Dr Norhafizah Abdul Rahman LAr. Ca. Dr Helmi Hamzah IDr. Dr Nadiyanti Mat Nayan LAr. Dr Norizan Mt Akhir LAr. Dr Zulkefle Hj Ayob Ts. Dr Izham Ghani Dr Atikah Fukaihah Amir Dr Huzeima Mohd Hussain Dr Nor Izana Mohd Shobri Dr Suriati Ahmad Dr Wan Nor Anira Hj Wan Ali @ Yaacob LAr. Ahmad Zamil Zakaria LAr. Azran Mansor LAr. Atikah Raihanah Amir LAr. Ruwaidah Borhan Mdm. Norasikin Hassan

Miss Siti Syamimi Omar



# INVESTIGATING STRATEGIES FOR PRESERVING CULTURAL HERITAGE AT IPOH, PERAK

Muhammad Luqman Hakim Sharuddin<sup>1</sup> & Norasikin Bt Hj Hassan<sup>2\*</sup>
\*Corresponding

<sup>1,2</sup>Programme of Landscape Architecture Department of Built Environment Studies and Technology College of Built Environment Studies, Universiti Teknologi MARA Perak Branch Campus Seri Iskandar, 32610 Bandar Seri Iskandar, Perak, Malaysia

Published: 31 March 2025

#### **ABSTRACT**

Cultural heritage is the legacy of physical artefacts and intangible attributes from previous generations, reflecting a group or society's identity, values, and history. Cultural heritage is vital as it preserves identity, enriches education, drives economic growth, celebrates diversity, supports sustainability, empowers communities, and safeguards the legacy of the past for future generations. This study explores strategies for preserving cultural heritage in Ipoh, Perak, a city distinguished by its colonial architecture and historical significance from Malaysia's tin mining era. As rapid urbanisation accelerates, Ipoh's unique heritage faces mounting threats, with new infrastructure and commercial developments encroaching on historically significant sites. This research aims to identify the key challenges faced in preserving cultural heritage in Ipoh. The study also assesses the preservation strategies implemented, such as the adaptive reuse of heritage buildings and the improvement of heritage tourism programs. It uses a qualitative approach, and the research focuses on a content analysis of urban planning policies and conservation reports related to heritage sites. Based on the findings, recommendations are made to expand heritage tourism initiatives and integrate green technology into heritage sites.

**Keywords:**Cultural Heritage Preservation, Urbanization, Conservation Strategies, Adaptive Reuse, Collaboration

## INTRODUCTION

Preserving cultural and historical landscapes is essential in maintaining the identity and heritage of cities, especially amidst rapid urbanisation. Cities worldwide face similar challenges as they try to balance heritage preservation with urban development, a tension observed in various regions (Abebe & Madda Gatisso, 2023; Shafaghat et al., 2017). Ipoh, the capital of Perak, Malaysia, grew rapidly after the discovery of tin deposits in the 1880s (The Wandering Juan, 2014). A major fire in 1892 allowed the city to be rebuilt with a more organised grid pattern, making it the second-largest city in the Federated Malay States by 1895 (EHM, n.d.). Ipoh gained municipal status in 1962 and was declared a city in 1988 (XYZ Asia, n.d.). In the late 19th and early 20th centuries, Indian workers, mainly Tamils, were brought to Malaya to work on rubber plantations and develop infrastructure to balance the rapidly growing Chinese population (EHM, 2013). the Chinese began migrating to Malaya as early as the 15th century, with larger waves occurring in the 19th and 20th centuries due to opportunities in tin mining and rubber plantations and British policies that facilitated their entry (DPE2S1, 2019). Ipoh is particularly significant in this context due to its rich colonial past and tin mining heritage. Known for its unique architectural style and historical landmarks, Ipoh embodies the cultural narratives of Malaysia's colonial history (Ahmad & Jones, 2013). However, the rapid pace of urban growth in Ipoh threatens to overshadow its historical identity, echoing global issues where modern infrastructure overshadows cultural heritage (Younus, Al-Hinkawi, & Lafta, 2023). This study addresses a critical question: What are the most effective strategies to preserve Ipoh's historical identity while promoting economic growth? Understanding how development pressures impact heritage conservation is essential for sustainable urban planning (Said, Aksah, & Ismail, 2013). This research aims to identify the key challenges faced in preserving cultural heritage in Ipoh. The study also assesses the preservation strategies that have been implemented.

## LITERATURE REVIEW

This study considered several aspects essential to understanding the need to preserve cultural heritage in the study area. Preservation is vital for

maintaining a society's identity, fostering pride, encouraging sustainable tourism, and enhancing social cohesion. It also contributes to a deeper understanding of a community's history and promotes cultural diversity.

# **Cultural and Historical Landscapes as Identity Preservers**

Cultural and historical landscapes reflect the complex relationship between communities and their environments, embodying layers of cultural practices, historical events, and architectural styles. These landscapes act as "repositories of collective memory" and are critical in maintaining societal identity amidst the pressures of modernisation (Abebe & Madda Gatisso, 2023). Preserving them is vital for aesthetic reasons and sustaining the historical and cultural essence of cities threatened by urban expansion. In this context, cultural landscapes serve as tangible and intangible links between the past and present, preserving historical legacies while promoting sustainable tourism and local economies (Bakri et al., 2015a). In the case of Ipoh, maintaining these landscapes requires finding a balance between modern development and preserving historical authenticity.

## Global and Local Approaches to Heritage Preservation

Cities globally have navigated the balance between heritage preservation and development. Cities like Venice and Kyoto have successfully protected historical sites while accommodating tourism through policies integrating heritage conservation and economic development (Aysegul, 2016). Similarly, cities such as Hoi An in Vietnam have implemented community-driven initiatives and adopted the Hoi An Protocols for best conservation practices in Asia, emphasising sustainable tourism, local crafts, and community participation in conservation efforts (A., 2009). These frameworks align with UNESCO's sustainable development guidelines, which promote active community involvement in heritage conservation (de Paolis et al., 2022). However, rapid urbanisation remains a significant threat to heritage sites, as infrastructure expansion and commercial priorities may overshadow cultural conservation, risking the neglect or loss of historically significant areas (Navarrete-Hernandez, Urrutia, & Mellouki, 2024). Stakeholder collaboration is key to preserving cultural assets in rural landscapes, as demonstrated in Ethiopia and Italy (Abebe & Madda Gatisso, 2023; Sardaro et al., 2021).

In Malaysia, cities such as George Town and Melaka showcase effective heritage management through stringent regulations and adaptive reuse of historical sites, allowing heritage buildings to remain relevant while preserving their original character. Recognised as UNESCO World Heritage Sites, these cities demonstrate how urban planning can integrate heritage conservation without hindering modern development. The National Heritage Act 2005 has been pivotal in protecting historical buildings and promoting adaptive reuse (Adabiah Mustafa & Chua Abdullah, 2013). Shafaghat et al. (2017) highlight that "preserving cultural landscapes requires a holistic approach that considers social, economic, and environmental factors" (p. 144). Ipoh can adopt similar strategies to enhance the preservation of its colonial architecture and tin mining legacy while adapting to urbanisation.

# Challenges and Opportunities for Heritage Preservation in Ipoh

Ipoh faces challenges similar to other cities undergoing rapid modernisation. Its colonial architecture, including landmarks such as the Ipoh Railway Station, Birch Memorial Clock Tower, and Old Town shophouses, showcases its rich cultural heritage but is increasingly at risk due to urban sprawl and redevelopment. Inadequate promotion, poor maintenance, and the encroachment of modern infrastructure threaten the preservation of these historical sites (Rani et al., 2018). Nonetheless, opportunities exist in revitalising and repurposing these buildings, as seen with the successful revitalisation of Concubine Lane, which demonstrates the potential of transforming heritage sites into vibrant cultural and economic hubs (Ismail & Mohd-Ali, 2011). Leveraging adaptive reuse strategies can offer a balanced approach to preserving cultural landscapes while supporting urban growth (Ahmad & Jones, 2013; Penića, Svetlana, & Murgul, 2015). Technological advancements such as Historic Building Information Modeling (HBIM) have revolutionised the documentation and preservation of cultural landscapes. HBIM allows for detailed digital documentation of heritage buildings, enabling their restoration while accommodating modern needs. Cities like Istanbul have successfully employed HBIM to restore historic structures (Kopuz & Bal, 2023). This digital approach can also assist Ipoh in integrating conservation efforts within urban development frameworks, helping maintain historical identity (Younus, Al-Hinkawi, & Lafta, 2023). Integrating green technology in heritage conservation aligns with the global shift toward sustainable development. Circular economy

strategies, such as adaptive reuse, reduce environmental impacts and enhance heritage sites' economic viability (Foster, 2020). In Sharjah and Southern Italy, cities have effectively incorporated renewable energy and sustainable practices into heritage management (Trusiani & D'Onofrio, 2024; Sardaro et al., 2021). Ipoh can address environmental challenges by adopting similar strategies while preserving its cultural assets and aligning them with global sustainability trends.

## RESEARCH METHODOLOGY

This study employs a qualitative research approach focusing on content analysis to explore strategies for preserving cultural heritage in Ipoh, Perak. By systematically reviewing key planning documents the research aims to identify challenges, opportunities, and best practices for heritage conservation, particularly within urban development pressures. The selected documents include Rancangan Kawasan Khas - Pekan Ipoh - Bandar Warisan Bijih Timah 2020 and Draf Rancangan Tempatan Bandaraya Ipoh - Penggantian 2035. These documents provide a framework for assessing the effectiveness of Ipoh's existing policies and strategies. Using Atlas. Ti software's content analysis is structured around key themes, including policy implementation and governance, adaptive reuse and sustainable practices, community involvement, and development control guidelines (Foster, 2020; Shafaghat et al., 2017). The research systematically examines overlaps, gaps, and differences across these documents, identifying recurring challenges such as weak policy enforcement, limited stakeholder engagement, and urbanisation pressures threatening heritage assets (Shamsuddin et al., 2019; Sardaro et al., 2021). Primary focus sites include the Ipoh Railway Station, Birch Memorial Clock Tower and old shophouses along Jalan Panglima, representing significant cultural and historical landmarks in Ipoh. This methodology aims to comprehensively understand the challenges and strategies for preserving cultural heritage in the context of urban development in Ipoh.



Figure 1. Show the Location of Research

# FINDING AND ANALYSIS

# **Challenges in Heritage Preservation**

The analysis revealed several challenges in preserving the cultural heritage at Ipoh, Perak.



Figure 2. Display the Challenges in Preserving Cultural Heritage at Ipoh,
Perak





Figure 3. Show Lack of Maintenance

# Lack of Maintenance and Preservation of Heritage Buildings

The inconsistent maintenance of heritage buildings, coupled with the pressure of urban development, threatens the authenticity and sustainability of these structures. Although most heritage buildings remain in good condition, a lack of integrated strategies often jeopardises this balance. The competing priorities between heritage preservation and new development underscore the need for a more holistic approach to maintaining historical authenticity while accommodating urban growth. (2:5p104, 2:6p104, 1:9p32, 2:4p103, 1:5p32, 4:68p43, 4:27p39, 4:72p43)



Figure 4. Show Building Effect by Environmental Issue

## **Economic and Environmental Pressures**

Economic constraints, such as high rental costs in commercial areas, create barriers to utilising upper-floor spaces in heritage shophouses for residential purposes, particularly for low- and middle-income groups. Furthermore, environmental factors—such as chemical pollution, structural vibrations, and humidity fluctuations—exacerbate the deterioration of these buildings. A lack of consistent maintenance further contributes to structural vulnerabilities, endangering long-term sustainability.(4:33p39, 4:28p39, 4:29p39, 1:126p44, 4:107p27, 1:8p32, 1:4p32, 2:7p105, 4:30p39, 1:7p32)

# Lack of Attraction to Heritage Tourism

Heritage tourism in Ipoh has struggled to gain significant traction due to ineffective promotion and a limited range of unique activities. This issue is further exacerbated by tourism agencies that fail to engage local communities or convey the city's historical and cultural richness. These shortcomings result in a lack of authentic and immersive experiences for visitors, particularly at the international level. (2:22p77, 2:24p77, 2:2p77, 2:25p77, 2:21p77, 2:26p77, 2:20p77, 2:1p33)



Figure 5. It Shows Unfriendly Pedestrians

# Heritage Routes, Infrastructure, and Supporting Facilities

While the Ipoh Heritage Trail offers potential as a tourist attraction, various issues hinder its effectiveness. Traffic congestion, insufficient pedestrian-friendly pathways, and unattractive supporting facilities—such as food courts and children's playgrounds—diminish its appeal. Additionally,



inadequate streetlights, public parks, and wayfinding signage fail to meet tourists' needs. The lack of key urban design elements, such as gateways and distinct streetlamps, further prevents the city from presenting a cohesive and authentic identity.(1:128p44, 2:5p104, 2:28p103, 1:6p32, 2:10p106, 2:8p105, 1:27p44, 2:27p103, 2:23p77)

## **Lack of Modern and Digital Integration**

Efforts to integrate modern digital technologies into developing Ipoh as a Heritage Smart City remain limited. Physical landmarks are still relied upon as primary navigational references, restricting opportunities for digital enhancements that could enrich the tourist and resident experience. Greater adoption of digital tools is essential to support sustainable heritage tourism and urban development. (2:3p103, 2:9p106).

# Strategies Preservation Strategies In Ipoh

Analysing existing preservation strategies in Ipoh helps identify practical approaches to protect its cultural heritage, ensuring sustainability, local engagement, and tourism growth.

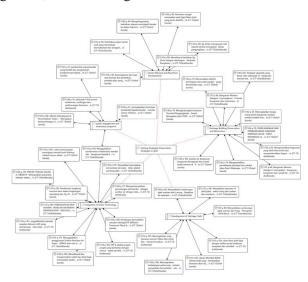


Figure 6. Display Preservation Strategies in Ipoh, Perak

## **Development of Heritage Trails**

Ipoh's heritage trails aim to conserve the city's history and promote cultural tourism by connecting significant heritage sites and developing themed commercial malls. Efforts to revitalize Pekan Baru Ipoh focus on culinary and shopping attractions, supported by improvements in infrastructure such as pedestrian pathways, shaded seating, lighting, and heritage-inspired designs. These initiatives aim to energize activities, celebrate local culture, and safeguard Ipoh's heritage. (1:63p80,1:66p80,1:67p80,1:134p105, 1:135p105, 1:136p106, 1:137p106).

# **Green Network and Riverfront Development**

Enhancing urban areas and preserving heritage require the use of natural features into Ipoh's urban architecture, particularly along Sungai Kinta. As a historically significant transportation route, the riverfront offers substantial potential for transformation into a dynamic hub for social, cultural, and tourism-related activities. Key initiatives such as consistent design, shaded walkways, rickshaw-friendly lanes, and strategically placed street furniture will create a welcoming and cohesive atmosphere. Revitalizing the riverfront as part of a larger green network will celebrate Ipoh's heritage while promoting ecological sustainability, serving as a model for heritage-rich urban development (1:140p90, 1:41p90, 1:42p90, 1:144p90, 1:145p90).

# **Heritage Building Preservation**

Ipoh has to 14 Category 1 heritage buildings, protected by various heritage acts, and 785 Category 2 buildings with significant architectural and historical value. This underscores the importance of preservation to maintain Ipoh's status as a Tin Mining Heritage City. Efforts to revitalize areas such as Jalan Dato' Maharaja Lela, Jalan Panglima, and Jalan Bijih Timah focus on creating pedestrian-friendly spaces, promoting heritage-themed tourism, and ensuring the adaptive reuse of heritage buildings for economic sustainability. Activities like heritage tours, boat rides along Sungai Kinta, cultural performances, food trails, and shopping help enhance the area's appeal while preserving Ipoh's historical legacy. (1:49p65, 1:51p66, 1:53p66, 1:56p79, 1:60p79, 1:61p79, 1:62p79, 1:132p65, 1:138p103).



## Integration of Green Technology

The integration of green technology in Ipoh's urban infrastructure enhances sustainability and efficiency. Key initiatives include replacing iron water pipes with HDPE pipes, installing fire hydrants in densely developed areas, and upgrading the Sg. Kinta outlet to improve water quality. Environmentally friendly drainage systems, such as the MSMA pilot project along Sg. Kinta manages wastewater through natural infiltration. The use of floating rubbish booms and the A20 treatment method helps improve waste management. Additionally, the installation of rainwater harvesting systems and solar energy projects in new developments, alongside the expansion of free Wi-Fi services, contributes to sustainable energy solutions and ICT growth, fostering a greener and more efficient urban environment. (1:113p158, 1:114p158, 1:115p169, 1:120p171, 1:149p160, 1:150p160, 1:151p161, 1:152p165, 1:153p167, 1:154p175, 1:155p177, 1:156p179).

## **Public Engagement and Awareness Program**

The success of Ipoh's urban transformation hinges on active public engagement and collaboration with stakeholders such as local authorities, residents, NGOs, and developers. Key initiatives include cultural performances, like on-street shows, that strengthen community ties and pride. Locations such as Jalan Mustapha Al Bakri and Jalan Datuk Tahwil Azar host Chinese cultural events, fostering a deeper connection with local heritage. These efforts help promote a sense of belonging, encourage local investment, and support the city's branding as a heritage destination, ultimately contributing to a vibrant and sustainable urban environment (1:113p158, 1:139p108, 1:146p14, 1:147p21, 1:148p21).

## CONCLUSION

This study aimed to achieve two primary objectives. First, the challenges in preserving cultural heritage in Ipoh will be identified, and the implemented preservation strategies will be evaluated. The findings revealed several key challenges, including the lack of maintenance and preservation of heritage buildings, economic and environmental pressures, insufficient attraction to heritage tourism, and issues related to heritage routes, infrastructure, and supporting facilities. Despite these challenges, approaches such as

the adaptive reuse of heritage buildings, heritage tourism initiatives, and community engagement programs have effectively addressed these issues. The study highlighted that adaptive reuse strategies, such as those implemented in Concubine Lane and Old Town Ipoh, successfully integrate heritage elements with modern needs. Initiatives like the Ipoh Heritage Trail not only enhance visitor experiences but also make a significant contribution to the local economy. However, shortcomings in integrating modern technology and limited community participation remain critical issues that require further attention. This research provides valuable strategic guidance for local authorities and stakeholders in addressing cultural heritage challenges amid urban development pressures. The findings suggest actionable solutions, including more effective tourism promotion, improved accessibility, and stricter enforcement of preservation policies to address site-specific issues. The study encountered several constraints, including limited access to certain official documents, outdated data on the structural conditions of heritage buildings, and challenges in obtaining comprehensive input from various community groups. Future research should prioritise integrating innovative technologies for heritage site preservation, expand studies on heritage tourism strategies' social and economic impacts, and explore collaborative approaches between governments and communities, drawing inspiration from successful models such as Hoi An and Penang. Additionally, there is a need to address the limited involvement of the private sector in preservation initiatives. In conclusion, this study underscores the importance of preserving Ipoh's cultural heritage to safeguard its historical identity and enhance its urban resilience against development pressures. By combining effective strategies, fostering community engagement, and enforcing comprehensive policies, Ipoh can become a model city for balancing modernization with heritage preservation. These efforts will ensure that cultural heritage remains relevant and accessible for future generations.

## REFERENCES

A., E. Richard. (2009). *Hoi An Protocols for best conservation practice in Asia*. UNESCO.

Abebe, A. H., & Madda Gatisso, M. (2023a). The conservation and

- TALKS 4.0 ultural
- preservation challenges and threats in the development of cultural heritage: The case of the Kawo Amado Kella Defensive Wall (KAKDW) in Wolaita, Southern Ethiopia. *Heliyon*, *9*(9). https://doi.org/10.1016/j. heliyon.2023.e18839.
- Abebe, A. H., & Madda Gatisso, M. (2023b). The conservation and preservation challenges and threats in the development of cultural heritage: The case of the Kawo Amado Kella Defensive Wall (KAKDW) in Wolaita, Southern Ethiopia. *Heliyon*, 9(9). https://doi.org/10.1016/j. heliyon.2023.e18839.
- Adabiah Mustafa, N., & Chua Abdullah, N. (2013). Preservation Of Cultural Heritage In Malaysia: An Insight Of The National Heritage Act 2005.
- Ahmad, S., & Jones, D. (2013). Investigating the Mining Heritage Significance for Kinta District, the Industrial Heritage Legacy of Malaysia. *Procedia Social and Behavioral Sciences*, 105, 445–457. https://doi.org/10.1016/j.sbspro.2013.11.047.
- Aysegul, K. T. (2016). Method for Assessment of the Historical Urban Landscape. *Procedia Engineering*, 161, 1697–1703. https://doi.org/10.1016/j.proeng.2016.08.648
- Bakri, A. F., Ibrahim, N., Ahmad, S. S., & Zaman, N. Q. (2015a). Public Perception on the Cultural Significance of Heritage Buildings in Kuala Lumpur. *Procedia Social and Behavioral Sciences*,202,294–302. https://doi.org/10.1016/j.sbspro.2015.08.233
- Bakri, A. F., Ibrahim, N., Ahmad, S. S., & Zaman, N. Q. (2015b). Valuing Built Cultural Heritage in a Malaysian Urban Context. *Procedia Social and Behavioral Sciences*, 170, 381–389. https://doi.org/10.1016/j.sbspro.2015.01.048.
- De Paolis, L. T., Chiarello, S., Gatto, C., Liaci, S., & De Luca, V. (2022). Virtual reality for the enhancement of cultural tangible and intangible heritage: The case study of the Castle of Corsano. *Digital Applications in Archaeology and Cultural Heritage*, 27. https://doi.org/10.1016/j. daach.2022.e00238.

- Department of the Interior, U., & Park Service, N. (n.d.). *Technical information on the the National Register of Historic Places: survey, evaluation, registration, and preservation of cultural resources Guidelines for Evaluating and Documenting Rural Historic Landscapes.*
- Fadzila Zahari1, N., Affina, A., Ghani2, A., Khazli, M., Khalid3, A., Kamarudin4, H., Robiah, &, Rashid5, A., & Author, C. (2024). STRATEGIC FACILITIES MANAGEMENT (FM) FOR HERITAGE BUILDINGS IN MALAYSIA. *In Malaysian Journal of Sustainable Environment Special issue*.
- Foster, G. (2020). Circular economy strategies for adaptive reuse of cultural heritage buildings to reduce environmental impacts. *Resources, Conservation and Recycling*, 152. https://doi.org/10.1016/j.resconrec.2019.104507.
- Garcia-López, M.-À., & Viladecans-Marsal, E. (2024). The role of historic amenities in shaping cities. *Regional Science and Urban Economics*, 109, 104042. https://doi.org/10.1016/j.regsciurbeco.2024.104042
- HERITAGE LANDSCAPE Heritage Landscapes Policy, Planning and Design Dilemma. (n.d.).
- Ismail, S., & Mohd-Ali, N. A. (2011). The imaging of heritage conservation in Historic City of George Town for city marketing. *Procedia Engineering*, 20, 339–345. https://doi.org/10.1016/j.proeng.2011.11.175
- Kırmızı, Ö., & Karaman, A. (2021). A participatory planning model in the context of Historic Urban Landscape: The case of Kyrenia's Historic Port Area. *Land Use Policy*, 102. https://doi.org/10.1016/j. landusepol.2020.105130.
- Kopuz, A. D., & Bal, A. (2023). The conservation of modern architectural heritage buildings in Turkey: İstanbul Hilton and İstanbul Çınar Hotel as a case study. *Ain Shams Engineering Journal, 14*(4). https://doi.org/10.1016/j.asej.2022.101918
- Lian, J., Nijhuis, S., Bracken, G., Wu, X., Wu, X., & Chen, D. (2024).

- Conservation and development of the historic garden in a landscape context: A systematic literature review. *In Landscape and Urban Planning* (246). Elsevier B.V. https://doi.org/10.1016/j.landurbplan.2024.105027.
- Navarrete-Hernandez, P., Urrutia, J. P., & Mellouki, K. (2024). Preserving enough? A randomised controlled trial approach to determine relevant urban planning regulations for small touristic towns A case of Chiloé, Chile. *Habitat International*, 146. https://doi.org/10.1016/j. habitatint.2024.103033
- Obed Livingstone Banda, L., Victoria Banda, C., Thokozani Banda, J., & Singini, T. (2024). Preserving Cultural Heritage: A Community-Centric Approach to Safeguarding the Khulubvi Traditional Temple Malawi. *Heliyon*, e37610. https://doi.org/10.1016/j.heliyon.2024.e37610
- Ornelas, C., Sousa, F., Guedes, J. M., & Breda-Vázquez, I. (2023). Monitoring and Assessment Heritage Tool: Quantify and classify urban heritage buildings. *Cities*, 137. https://doi.org/10.1016/j.cities.2023.104274
- Penića, M., Svetlana, G., & Murgul, V. (2015). Revitalization of historic buildings as an approach to preserve cultural and historical heritage. *Procedia Engineering*, *117*(1), 883–890. https://doi.org/10.1016/j. proeng.2015.08.165.
- Pourzakarya, M., & Fadaei Nezhad Bahramjerdi, S. (2019). Friction and Lifetime of Laser Surface-Textured and MoS2-Coated Ti6Al4V Under Dry Reciprocating Sliding. *Land Use Policy*, 89. https://doi.org/10.1016/j.landusepol.2019.104218.
- Rani, W. N. M. W. M., Tamjes, M. S., & Wahab, M. H. (2018). Governance of heritage conservation: Overview on Malaysian practice. *Journal of Social Sciences Research*, 2018(Special Issue 6), 847–851. https://doi.org/10.32861/jssr.spi6.847.851
- Said, S. Y., Aksah, H., & Ismail, E. D. (2013). Heritage Conservation and Regeneration of Historic Areas in Malaysia. *Procedia Social and Behavioral Sciences*, 105, 418–428. https://doi.org/10.1016/j.

- sbspro.2013.11.044
- Sardaro, R., La Sala, P., De Pascale, G., & Faccilongo, N. (2021). The conservation of cultural heritage in rural areas: Stakeholder preferences regarding historical rural buildings in Apulia, southern Italy. *Land Use Policy*, 109. https://doi.org/10.1016/j.landusepol.2021.105662
- Shafaghat, A., Mir Ghasemi, M., Keyvanfar, A., Lamit, H., & Ferwati, M. S. (2017). Sustainable riverscape preservation strategy framework using goal-oriented method: Case of historical heritage cities in Malaysia. *International Journal of Sustainable Built Environment*, 6(1), 143–159. https://doi.org/10.1016/j.ijsbe.2017.03.003
- The Burra Charter: the Australia ICOMOS charter for places of cultural significance 2013. (2013). Australia ICOMOS Incorporated. The historic urban landscape approach explained New life for historic cities United Nations Educational, Scientific and Cultural Organization. (n.d.).
- Trusiani, E., & D'Onofrio, R. (2024). Urban Guidelines and Strategic Plan for a UNESCO World Heritage Candidate Site: The Historical Centre of Sharjah (UAE). *Sustainability*, *16*(17), 7461. https://doi.org/10.3390/su16177461.
- Younus, I., Al-Hinkawi, W., & Lafta, S. (2023). The role of historic building information modeling in the cultural resistance of liberated city. *Ain Shams Engineering Journal*, *14*(10). https://doi.org/10.1016/j. asej.2023.102191.

